

BIDDING DOCUMENTS



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Procurement's name: Providing the spare parts in order to maintain for loading arms at Jetty Unit according to PR No. 0097/1100003321/ĐH-BDSC-W

Issued on:

Purchaser



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ABBREVIATIONS

PR	Binh Son Refining and Petrochemical Joint Stock Company Procurement Regulations, issued under Decision No. 1402/QĐ-BSR dated April 22, 2025
BSR	Binh Son Refining and Petrochemical Joint Stock Company
BOD	Board of Directors
ITB	Instructions to Bidders
BDS	Bid Data Sheet
CC	Contract Conditions
VND	Vietnamese Dong
Bid Closing Date	The official date and time at which bid submission is closed

Part 1. BIDDING PROCEDURES
Chapter I. Instructions to Bidders.
A. GENERAL

Section 1. Scope of Bid

1. The Purchaser, as specified in the Bid Data Sheet (BDS), issues these Bidding Documents for the supply of Goods and Related Services incidental thereto as specified in **Part 2 - Supply Requirements**, in compliance with the Procurement Regulations (QCMS) of Binh Son Refining and Petrochemical Joint Stock Company (BSR), issued under Decision No. 1402/QĐ-BSR dated April 22, 2025.

2. The name and number of lots (if the procurement is divided into independent lots) of the procurement are provided in the BDS.

3. The contract execution period shall be specified in the BDS.

Section 2. Sources of Funds

Sources of Funds to be used for the procurement are specified in the BDS.

Section 3. Fraud and Corruption

1. Corrupt practice.

2. Take advantage of positions, powers aiming to interfere illegally in a procurement process or the execution of a contract.

3. Collusive practice, including the following acts:

a) Arranging, conspiring, or coercing one party or parties to prepare or withdraw bidding documents so that one party may win bid;

b) A bidder who meets the technical and experience requirements deliberately refrains from submitting evidence of their qualifications when requested by the Procuring Entity to facilitate another bidder's selection.

4. Fraudulent practice, including the following acts:

a) Forging or falsifying information or documents during bid submission;

b) Intentionally providing untruthful or biased information or documents in the Bid Submission to distort the Bid Evaluation Result.

5. Interference, including the following acts:

a) Destroying, cheating, changing, hiding proof or reporting contrary to the truth; threatening, or suggesting with any Bidder with the aim to prevent the clarification of corrupt, fraudulent or conclusive practice with authorities in charge of supervisions, inspections and audit;

b) Obstructing the Purchaser or Bidders during the contractor selection process;



c) Obstructing authorized agencies from supervising, inspecting, auditing the contractor selection process;

d) Deliberately lodging false complaints, accusations, or petitions to hinder the contractor selection process;

6. Inequality and intransparency, including the following acts:

a) The Purchaser makes a Bid as a Bidder or perform tasks of a Bidder for its own Invitation for bids;

b) Formulating and assessing the Bidding Documents of the same procurement;

c) Engaging in evaluation of the Bidding Documents and assessing the results of Bidder selection of the same procurement;

d) Any individual of the Purchaser, Expert Group, or Appraisal Committee participates in the Bidder selection process, where the bidder or legal representative of the bidding entity has a family relationship (his or her natural parent, parent-in-law, spouse, natural child, adopted child, son or daughter-in-law or sibling);

e) Any individual makes a bid in his/her name for the procurement of a project whose Company is his/her workplace within 12 months, from the date on which he/she quits his/her job from such workplace;

g) A supervision consultant also concurrently acting as an independent verification consultant for the same package.

7. Disclosing documents or information regarding the Bidder selection process prior to the official announcement or issuance as prescribed, or disclosing other documents determined to contain state secrets under the law.

8. Bid transfer, including the following acts:

a) Any Bidder transfers to another Bidder more than 10% of the contract value (after deducting the value of designated subcontractors or special subcontractors)..

b) The Purchaser approves such assignment as specified in point (a), except in justified cases approved by the Competent person during contractor selection result approval.

Section 4. Eligible Bidders

1. A bidder that is an organization shall be considered legally eligible if it satisfies all of the following conditions:

a) **For domestic bidders:** the bidder must be an enterprise, cooperative, union of cooperatives, cooperative group, public service unit, or an economic organization with foreign-invested capital, duly established and operating in accordance with the laws of Vietnam; **For foreign bidders:** the bidder must be duly established and operating in accordance with the laws of the country of its incorporation;

b) The Bidder is keeping independent accounting records;



c) The Bidder is not in the process of dissolution or subject to revocation of its enterprise registration certificate, cooperative registration certificate, union of cooperatives registration certificate, or cooperative group registration certificate; and it is not undergoing insolvency or bankruptcy proceedings in accordance with applicable laws on bankruptcy;

d) The Bidder is not currently subject to any ban from participating in bidding as per the PR;

e) The Bidder is not under criminal investigation or prosecution;

g) The Bidder is listed on the Shortlist (applicable in cases where a shortlist is used).

2. A bidder that is a household business shall be considered legally eligible if it satisfies all of the following conditions:

a) The bidder holds a valid household business registration certificate in accordance with applicable laws;

b) The bidder is not in the process of ceasing operations or having its registration certificate revoked; and the owner of the household business is not under criminal investigation or prosecution;

c) The bidder meets the conditions specified in Points d and g, Clause 1 of this Section.

3. A bidder that is an individual shall be considered legally eligible if he/she satisfies all of the following conditions:

a) The bidder has full legal capacity in accordance with the laws of the country of which he/she is a citizen;

b) The bidder holds a relevant professional certificate where required by law;

c) The bidder meets the conditions specified in Points d and e, Clause 1 of this Article.

Section 5. Contents of Bidding Documents

1. The Bidding Documents consist of the following Parts in conjunction with any Addendum issued in accordance with ITB Section 7, (if any):

Part 1. Bidding Procedures - Chapter I. Instructions to Bidders (ITB);

- Chapter II. Bid Data Sheet (BDS);

- Chapter III. Evaluation and Qualification Criteria;

- Chapter IV. Bidding Forms.

Part 2. Supply requirements - Chapter V. Scope of supply.

Part 3. Conditions of Contract and Contract Forms:

- Chapter VI. Contract;

- Chapter VII. Contract Forms.



Part 4: Evaluation Criteria and Instruction for Online Submission.

1. The Invitation to Bid (for open bidding) or the Letter of Invitation (for restricted bidding) issued or provided by the Purchaser shall not form part of the Bidding Documents.
2. The Purchaser shall not be held responsible for the accuracy or completeness of the Bidding Documents, any clarifications thereto, pre-bid meeting minutes (if any), or amendments issued pursuant to Section 7 of the ITB, if such documents are not provided directly by the Purchaser .
3. The Bidder is required to study all instructions, forms, scope of supply requirements, and other conditions specified in the Bidding Documents to prepare their Bids.

Section 6. Clarification of Bidding Documents

1. A prospective Bidder requiring any clarification of the Bidding Documents shall contact the Purchaser in writing or ask questions in the pre-bidding convention (if any). The Purchaser will respond in writing to any request for clarification, provided that such request is received no later than a given days prior to the bid closing time as specified in BDS. The Purchaser shall forward copies of its response to all those who have acquired the Bidding Documents directly from it, including a description of the inquiry but without identifying its source. Should the Purchaser deem it necessary to amend the Bidding Documents as a result of a clarification, it shall do so following the procedure under ITB Section 7.

2. The Purchaser may hold a pre-bidding convention to discuss any clarification required by Bidders where necessary. The discussion shall be recorded by the Purchaser in writing, made in the form of Clarification of Bidding Documents and forward to every Bidder that acquires the Bidding Documents. Should the Purchaser deem it necessary to amend the Bidding Documents as a result of a pre-bidding convention, it shall do so following the procedure under ITB Section 7, the minutes of the pre-bidding convention is different from the addendum of Bidding Documents. Absence from the pre-bidding convention is not a reason for disqualifying the Bidder.

Section 7. Amendment of Bidding Documents

1. At any time prior to the bid closing time, the Purchaser may amend the Bidding Documents by issuing addendum.

2. Any addendum issued shall be part of the Bidding Documents and shall be communicated in writing to all who have obtained the Bidding Documents directly from the Purchaser and shall be published on the BSR website (<http://www.bsr.com.vn>).

3. Each addendum shall be sent to all Bidders who have obtained the Bidding Documents directly from the Purchasers within a given time as specified in the BDS. To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, the Purchaser may extend the bid closing time,



pursuant to ITB Section 21.2. The Bidder must notify the Purchaser of the receipt of the addendum in writing, by post, by fax or email.

Section 8. Cost of Bidding

The Invitation to Bid shall be published on the website of BSR (<http://www.bsr.com.vn>) and on the National Bidding Network System. The Bidder shall bear all costs associated with the preparation and submission of its bid. The Purchaser shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

Section 9. Language of Bid

The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Purchaser, shall be written in English or English and Vietnamese. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages into English/Vietnamese. In case of absence of the translation, the Purchaser may request the Bidder to supplement when necessary..

Section 10. Documents comprising the Bid The Bid shall comprise the following:

1. Bid Submission Form, in accordance with ITB Section 11.
2. Joint venture agreement (for any Bidder in a joint venture) using form No. 03 Chapter IV - Bidding Forms.
3. Bid Security, in accordance with ITB Section 18.
4. Documentary evidence in accordance with ITB Section 16 establishing the Bidder's qualifications to perform the contract if its bid is accepted.
5. Technical Proposal and Related documentary evidence in accordance with ITB Section 15.6. Alternative Technical Proposal, in accordance with ITB Section 12;
7. Price Schedules and Tables, in accordance with ITB Section 11 and Section 13.
8. Any other document specified in the **BDS**.

Section 11. Bid Submission Form and Tables

The Bidder shall submit the Bid Submission Form and equivalent Tables using the forms furnished in Chapter IV - Bidding Forms..

Section 12. Alternative Technical Proposal

1. If the Bidder may make Alternative Technical Proposal as prescribed in the BDS of the Bidding Documents, the new Proposal shall be considered.

2. The Alternative Technical Proposal shall only be considered if it satisfies requirements and the Bidder is ranked the first. In this event, the Bidder must provide all essential information about: description, drawings, technical specifications, delivery schedule and other relevant information in order the Purchaser to evaluate the Alternative Technical Proposal. The evaluation of Alternative Technical Proposal in the Bid shall



comply with Section 5 of Chapter III - Evaluation and Qualification Criteria.

Section 13. Bid Prices and Discounts

1. Bid price means the price to be quoted in the Bid Submission Form, including the total price of the bid (excluding any discounts offered), in accordance with Part 2 – Supply requirements.

The Bid Price quoted by the Bidder shall include all taxes, fees and charges (if any) determined at 28 days prior the bid closing time. In case the Bid Price is not inclusive of taxes, fees and charges (if any), the Bid of the Bidder shall be rejected..

2. The Bidder shall submit the Bid with all lots and items specified in ITB Section 1 and the Bid unit price and amount of all lots and items using the forms prescribed in Chapter IV – Bidding forms.

In case Good or Service is not priced (leave blank or insert “0”) in the columns “Unit Price” and “Total Price”, it’s price deem to be allocated to another Good or Service of the procurement.

3. Discount offered by the Bidder shall be written on a separate Letter of Discount. The Bidder shall specify the discounting method and discounted items mentioned in the scope of work. If discounting method is not specified, it will be understood all items mentioned in the scope of work receive equal discounts. The Letter of Discount may be submitted separately or together with the Bid as long as it is received by the Purchaser before the bid closing time. Any Letter of Discount separately submitted shall comply with ITB Sections 20.2 and 20.3. The Letter of Discount shall be preserved as part of the Bid and opened together with the Bid at the bid opening.

4. In case the Bid contains abnormal unit prices, the Purchaser may request the Bidder to clarify these unit prices in accordance with ITB Section 26.5. In the event that the procurement is divided into independent lots and each lot is eligible for bid, the Bidder may make a Bid for one or multiple lots of the procurement. If the Bidder proposes a discount, the discounting method and discounted items shall be specified in accordance with ITB Section 13.5.

6. If the Bidder detect the inaccuracy in quantity of the items mentioned in the tables under Section IV. Bidding Forms in comparison with the requirements prescribed in Section 1 of Part 2 – Supply Requirements, the Bidder may notify the Purchaser of making a separate Price Schedule of the inaccurate quantity which may not be included in the Bid Price.

Section 14. Bid currency and Payment currency payment

The Bid currency is USD for foreign bidder and VND for domestic bidder.

The Payment currency payment is USD for foreign bidder and VND for domestic bidder, or another currency in accordance with applicable laws.

The bidding price shall be converted to USD for purpose of financial evaluation and ranking, at the selling rate of JOINT STOCK COMMERCIAL BANK FOR FOREIGN TRADE OF VIET NAM (Vietcombank) announced as of bid closing time.

Section 15. Documents Establishing the Conformity of the Goods and



Related Services

1. To establish the conformity of the Goods and Related Services to the Bidding Documents, the Bidder shall furnish as part of its Bid the documentary evidence that the Goods conform to the technical specifications and standards specified in Chapter V – Scope of Supply.

2. The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed item by item description of the essential technical and performance characteristics of the Goods and Related Services, demonstrating substantial responsiveness of the Goods and Related Services to the technical specification, and if applicable, a statement of deviations and exceptions to the provisions of Chapter V - Scope of Supply.

3. Standards for workmanship, process, material, and equipment, as well as references to brand names or catalogue numbers specified by the Purchaser in Chapter V - Scope of Supply, are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality, brand names, and/or catalogue numbers, provided that it demonstrates, to the Purchaser's satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in Chapter V - Scope of Supply.

Section 16. Documents Establishing the Qualifications of the Bidder 1. The Bidder shall fill essential information in the forms mentioned in Chapter IV – Bidding Forms to establish the Bidder's qualifications to perform the contract in accordance with Chapter III - Evaluation and Qualification Criteria. The Bidder shall prepare original documents for verification at the request of the Purchaser.

2. Documentary evidence of the Bidder's qualifications to perform the contract if its bid is accepted shall comply with the BDS.

Section 17. Period of Validity of Bids

1. Bids shall remain valid for the period which is not shorter than the period specified in the BDS. A bid valid for a shorter period shall be rejected by the Purchaser as non responsive.

2. In exceptional circumstances, prior to the expiration of the bid validity period, the Purchaser may request bidders to extend the period of validity of their bids. If a Bid Security is requested, it shall also be extended for a corresponding period (equivalent to the extended validity period plus 30 days). If the Bidder refuse the request, its Bid shall not be kept considering and the Bid Security shall be returned. The Bidder accepting the request may not change any content of the Bid. The request and the responses shall be made in writing.

Section 18. Bid Security

1. When submitting a bid, the Bidder shall furnish a Bid Security before the bid closing time in the form of either a deposit or a letter of credit or a bank guarantee from a bank or credit institution or a foreign bank branch lawfully operating in Vietnam. The bank guarantee shall comply with form No. 04(a) and 04 (b) of Chapter VI – Bidding



Forms. In the event that the validity period of the bid is extended as prescribed in ITB Section 18.2, the Bid Security is also extended with the same validity period.

If a joint venture make a bid, it may perform the Bid Security following one of two methods below:

a) Every member in joint venture may perform separate Bid Security provided that total value of the Bid Security is not lower than that mentioned in ITB Section 18.2; if the Bid Security is not valid, the Bid of the joint venture shall be rejected as non-responsive. If any member in joint venture violates law on bidding leading its Bid Security is not returned as prescribed in ITB Section 18.5, and the Bid Security of all members in joint venture shall not be returned.

b) If all joint venture members conclude an agreement in which one member will be responsible for its Bid Security or for Bid Security of other members in joint venture. The Bid Security shall be in the name of the joint venture or the joint venture member in charge provided that the total value is not lower than that mentioned in ITB Section 18.2.

2. Value, currency and validity period of the Bid Security shall be specified in the BDS.

3. A Bid Security shall be not considered valid if it does not comply with the Bid Security Form prescribed in Section IV – Bidding Forms and falls under any of the following cases: have lower value, shorter validity period as required in ITB Section 18.2, inaccurate the Purchaser's name (beneficiary), non-original paper and Issued before the date of issuance of the Bidding Documents or accompanied by conditions that are disadvantageous to the Purchaser.

4. The unsuccessful Bidder shall be either returned or released the Bid Security within the deadline as prescribed in the BDS, from the date on which the notification of the Bidder selection is sent. With regard to the successful Bidder, the Bid Security shall be returned or released after the Contract becomes effective, except for cases stipulated in ITB Section 18.5.

5. The Bid Security shall not be returned in one of the following cases:

a) The Bidder withdraws the Bid or issues a written refusal to perform one or more of the works proposed in the Bid as required by the Bidding Documents after the bid closing date and during the validity period of the Bid;

b) The Bidder violates the PR leading to contract cancellation as prescribed in ITB Section 33;

c) The successful Bidder fails to provide the performance security as required in ITB Section 38;

d) The Bidder does not proceed or refuses to proceed with contract finalization within 20 days from the date of receiving the invitation notice to finalize the contract from the Purchaser, or having finalized the contract but refuses to sign the contract finalization minutes, except in cases of force majeure;

e) The Bidder fails to sign the contract within the timeframe specified in the Purchaser's Notice of Award from the date of contract finalization completion, except



in cases of force majeure.

Section 19. Format and Signing of Bid

1. The Bidder shall prepare one original of the documents comprising the bid as described in ITB Section 10 and a number of photocopies of the Bid as prescribed in the BDS. The cover of the documents comprising the bid shall be clearly marked “ORIGINAL” OR “COPY”.

If there any is amendments to or replacement for the Bid, the Bidder shall prepare one original and a number of photocopies of the Bid as prescribed in the BDS. The cover of documents shall be clearly marked “ORIGINAL MODIFICATION”, “COPY MODIFICATION”, “ORIGINAL SUBSTITUTION”, and “COPY SUBSTITUTION”.

If there is an Alternative Technical Proposal in the Bid as prescribed in ITB Section 12, the Bidder shall prepare one original and a number of photocopies of documents as prescribed in the BDS. The cover of documents shall be clearly marked “ORIGINAL OF ALTERNATIVE TECHNICAL PROPOSAL”, “COPY OF ALTERNATIVE TECHNICAL PROPOSAL”..

2. The Bidder shall be responsible for the discrepancy between the original and the copies. In the event of any discrepancy between the original and the copies which does not affect the rank of the Bidder, the original shall prevail. In the event of any discrepancy between the original and the copies which does not affect the rank of the Bidder, the Bid shall be rejected.

3. The original of the bid shall be typed or written in indelible ink and have page numbers. Bid Submission Form, Letter of Discount (if any), additional documents, clarifying documents, Price Schedule and other forms prescribed in Chapter IV - Bidding Forms must bear the signature and seal of the Bidder’s legal representative or authorized representative (if any). The authorized representative must obtain a Power of Attorney using form No. 02 of Chapter IV – Bidding Forms or a copy of the Company Charter, a certified Decision on Establishment of branch or other documents proving the competence of the authorized representative, and it shall be submitted together with the bid.

4. If the Bidder is a joint venture, the Bid must bear the signatures of legal representatives or all joint venture members or the member that represents the joint venture according to the joint venture agreement. In order to ensure that all joint venture members are legally bound, the joint venture agreement must bear the signatures of legal representatives of all joint venture members.

5. Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

Section 20. Sealing and Marking of Bids

1. The bid envelope contain the original and the copies and clearly mark it “BIDS”.

If there is any revision or replacement of the bid, the modified or alternative documents (including the original and the copies) shall be put into separate envelopes and clearly mark it “MODIFICATION”, “SUBSTITUTION”.



If the Bidder has an alternative Technical Proposal which conclude technical proposal and price proposal, it shall be put into a separate envelope and clearly mark it “ALTERNATIVE TECHNICAL PROPOSAL”.

These envelopes, including Bid, Modification, Substitution (if any); Alternative Technical Proposal (if any), shall be sealed. The sealing of envelopes shall comply with regulations provided by the Bidder.

2. The outer envelopes shall:

- a) Bear the name and address of the Bidder;
- b) be addressed to the Purchaser in accordance with ITB;
- c) bear the name of the procurement in accordance with ITB.

3. If the envelopes are not sealed or the seals thereof are lost during the process they are transferred to the Purchaser, or they are not marked as required in ITB Sections 19.1. and 19.2, the Bidder shall be responsible for those violations. The Purchaser will assume no responsibility for the confidentiality of the bid if the Bidder fails to comply with above regulations.

Section 21. Deadline for the submission of bids

1. Bids must be received by the Purchaser at the address or via the Purchaser’s bidding system and no later than the bid closing time specified in the BDS. The Purchaser shall receive Bids of all Bidders submitted before the bid closing time, including those who have bought or received the Bidding Documents from the Purchaser. Any Bidder that has not bought the Bidding Documents must pay the Purchaser an amount equal to the selling price for a set of Bidding Documents before their Bid envelopes are received (For the Bidding Documents issued with a fee).

2. The Purchaser may extend the bid closing time by amending the Bidding Documents in accordance with ITB Section 7, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

Section 22. Late Bids Any bid received by the Purchaser after the deadline for submission of bids shall be declared late, rejected and returned unopened to the Bidder.

Section 23 Withdrawal, Substitution, and Modification of Bids

1. A Bidder may withdraw, substitute, or modify its Bid after it has been submitted by sending a written notice, duly signed by a legal representative or an authorized representative, and shall include a copy of the Power of Attorney in accordance with ITB Section 19.3. The corresponding substitution or modification of the bid must accompany the respective written notice. All notices must be:

a) submitted in accordance with ITB Sections 19 and 20, and in addition, the respective envelopes shall be clearly marked “MODIFICATION”, “SUBSTITUTION”, or “WITHDRAWAL”; and b) received by the Purchaser prior to the deadline prescribed for submission of bids, in accordance with ITB Section 21.

2. Bids requested to be withdrawn in accordance with ITB Section 23.1 shall be



returned unopened to the Bidders.

3. No bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Bid Submission Form or any extension thereof.

Section 24. Bid Opening 1. Except for cases prescribed in ITB Sections 22 and 23, the Purchaser shall conduct the public bid opening at the time and place specified in the **BDS**, in the presence of representatives of Bidders attending the bid opening ceremony and representatives of related agencies and organizations, regardless of the attendance or absence of the Bidders' representatives. The Purchaser open each Bid and read aloud the information specified in ITB Section 24.3 of all Bids received before the bid closing time as regulated in ITB Section 21.1.

2. First, envelopes marked "WITHDRAWAL" shall be opened and read out and the corresponding bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at the bid opening.

Next, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding substitution Bid being substituted. The substituted Bid shall not be opened but returned to the Bidder. No Bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at the bid opening.

Envelopes marked "MODIFICATION" be opened and read out with the corresponding Bid. No Bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at the bid opening. Only envelopes that are opened and read out at the bid opening shall be considered further.

3. The bid opening shall be conducted to every Bid according to the alphabet order of the Bidders' names and following procedures:

a) Request the Bidder's representative (if present) to confirm whether there is a Letter of Discount included with their Bid;

b) The seals shall be checked;

c) All other envelopes, including original, modified or substituted bid (if any) shall be opened and reading out: the name of the Bidder, the number of the original and the copies, the Bid Prices mentioned in the Price Schedule, discount value in the Letter of Discount (if any), bid validity period, the performance period of procurement and the value and validity period of the Bid Security and other details as the Purchaser may consider appropriate. If the procurement is divided into independent lots, the information for each part shall be read as for a procurement not divided into parts. Only discounts read out at Bid opening shall be considered for evaluation;

d) The representative of the Purchaser shall countersign original copy of Bid Submission Form, Bid Security, Price schedule, Power of attorney (if any), Letter of



Discount (if any), and Joint Venture Agreement (if any). No Bid shall be rejected at Bid opening except for late bids, in accordance with ITB Section 22.

4. The Purchaser shall prepare a record of the Bid opening that shall include prescribed in ITB Section 24.3. The record of Bid opening shall be countersigned by the representative of the Ministry of Trade and the Bidders participating in the Bid opening. If any signature of the Bidders is left in the record, it shall be invalid. A copy of the record shall be distributed to all Bidders who participate in the bid opening.

Section 25. Confidentiality

1. Information relating to the evaluation of bids, and recommendation of contract award, shall not be disclosed to bidders or any other persons not officially concerned with such process until publication of the Contract Award. No information mentioned in the bid of the successful Bidder is disclosed to any other bidders, except for information disclosed at the bid opening.

2. Except for case of the bid clarification prescribed in ITB Section 26, the Bidder is not permitted to contact to the Purchaser on any matter related to its bid and the procurement from the bid opening time until the publication of Contract Award.

Section 26 Clarification of Bids

1. After opening the bid, the Bidder is responsible for clarifying the bid at the request of the Purchaser. Any request for clarification of the Purchaser and any response of the Bidder shall be in writing. In the event that there is no documentary evidence establishing the Bidder's qualifications (including the sale permit issued by the Producer or the certification of joint venture relationship or any other equivalent documents, if required by the Bidding Documents) in the Bidding Documents, the Purchaser shall request the Bidder to clarify and supplement that documentary evidence. Regarding technical and financial proposals mentioned in the Bid, the clarification may not change essential information about the Bidder, bid and bid price. The Bidder shall notify the Purchaser of the receipt of the request for clarification of the Bid by one of the following means: in writing (delivered by hand or post), by fax, or by e-mail. .

2. The Clarification of Bids between the Bidder and the Purchaser shall be conducted either directly or indirectly.

3. In case, after bid closing, there is no documentary evidence establishing the Bidder's qualifications in the Bidding Documents, the Bidder may supplement that documentary evidence. The Purchaser shall receive the Clarification of Bids sent by the Bidder; documentary evidence establishing the Bidder's qualifications shall be an integral part of the Bid. The Purchaser shall notify of receipt of Clarification of Bids in writing (delivered by hand or post), by fax or email.4. The Clarification of Bids shall only be made between the Bidder and the Purchaser having the bid that needs clarifying. The contents of the Clarification of Bids shall be treated as an integral part of the Bid by the Purchaser. Regarding clarification in terms of the Bidder's qualification, technical requirements or financial requirements, if the deadline for



clarification expires, but the Bidder fails to send any clarification or the clarification does not satisfy requirements of the Purchaser, the Purchaser shall evaluate the Bid sent prior to the bid closing time by the Bidder.

Section 27 Determination of Responsiveness

1. The Purchaser shall determine a bid's responsiveness as prescribed in ITB.

2. A substantially responsive bid means one that it passes the technical evaluation in accordance with the technical evaluation criteria specified in Section III – Evaluation Criteria.

3. If a bid is not substantially responsive to the requirements of the Bidding Documents, it shall be rejected shall not be further evaluated. The Bidder shall not be permitted to amend the Bid in order to make it substantially responsive.

Section 28. Nonmaterial Nonconformities

1. Provided that a bid is substantially responsive, the Purchaser may accept minor, non-material deviations or errors in the Bid.

2. Provided that a bid is substantially responsive, the Purchaser may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the bid related to documentation requirements. Requesting information and documentation on such nonconformities shall not be related to any aspect of the price of the bid. Failure of the Bidder to comply with the request may result in the rejection of its bid.

3. Provided that a bid is substantially responsive, the Purchaser shall rectify nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only on the same basis, to ensure the consistency of the Bid Price, to reflect the price of a missing or nonconforming item or component.

Section 29. Subcontractor

1. The Contractor is entitled to enter into agreements with subcontractors mentioned in the list as prescribed in Form No. 12 of Chapter IV – Bidding Forms. There is no change to the responsibilities of the primary Contractor in spite of employment of any subcontractor The Contractor shall be responsible for quantity, quality, schedule and other responsibilities performed by the subcontractor. The subcontractor's qualifications shall not be considered during the contractor's bid evaluation. The Contractor is required to meet all qualification requirements (not considering qualification of subcontractors).

If the Contractor does not propose any subcontractor for any task, the whole procurement shall under responsibilities of the Contractor.

2. In the event of being awarded the contract, during the contract execution, the Contractor shall not use subcontractors for any work other than those declared in the bid submission; any replacement or addition of subcontractors beyond the list stated in the bid shall only be carried out with justified and reasonable reasons and with the approval of the Purchaser.



Section 30. Bid Evaluation Before evaluating the Bid, the number of original and copy bids must be checked, along with the components of the Bid as stipulated in ITB Section 10, including administrative documents, legal documents, and documents proving qualifications and experience, such as: Bid Submission Form; Joint Venture Agreement (if any); Power of Attorney for signing the Bid Submission Form (if any); Bid Security; Documents proving eligibility; documents proving qualifications and experience.

The evaluation of Bids shall be conducted based on the Bid Evaluation Criteria stipulated in Chapter III – Bid Evaluation Criteria, following the sequence below:

1. Inspection and evaluation the validity of the Bids:

a) The validity of the Bids shall comply with Section 1 of Chapter III - Evaluation and Qualification Criteria;

b) The bidders having valid Bids shall be considered further.

2. Qualification evaluation:

a) The evaluation of Bidder's qualification shall comply with Section 2 of Chapter III - Evaluation and Qualification Criteria;

b) The bidders satisfying qualification requirements shall be considered further.

3. Technical evaluation:

a) The Technical evaluation shall comply with Section 3 of Chapter III - Evaluation and Qualification Criteria;

b) The bidders satisfying technical evaluation shall be considered further.

4. Price evaluation:

a) The Price evaluation shall comply with Section 4 of Chapter III - Evaluation and Qualification Criteria, for ranking the Bidders.

5. If the procurement is divided into independent lots as prescribed in ITB Section 13.5, the bid evaluation shall comply with Section 6 of Chapter III - Evaluation and Qualification Criteria equivalent to the lot in which the Bidder participates.

Section 31. Correction of Errors and Adjustment of Deviations

Corrections and adjustments shall be performed only for Bids that have passed the technical evaluation, including:

1. Correction of Errors refers to the rectification of mistakes in the Bid, including arithmetic errors and other errors, conducted under the following principles:

a) Arithmetic Errors include errors in addition, subtraction, multiplication, or division when calculating the Bid price. In case the Bidding Documents require detailed unit price analysis, the data in the detailed unit price breakdown shall be the basis for correcting arithmetic errors. In case of inconsistencies between the unit price and the extended amount, the unit price shall be the basis for correction; however, if



the unit price exhibits abnormal deviations due to decimal system errors (e.g., factors of 10, 100, or 1,000), then the extended amount shall be the basis for correction. If the unit price or the extended amount column is left blank or marked as “0,” it shall be considered that the Bidder has allocated the price of this item to other items within the contract package. The Bidder shall be responsible for completing these works as required in the Bidding Documents and shall not be paid by the Purchaser during contract execution.

b) Other Errors:

- If the extended amount column is filled but the unit price is missing, the unit price shall be supplemented by dividing the extended amount by the quantity; if the unit price is filled but the extended amount is blank, the extended amount shall be supplemented by multiplying quantity by unit price; if both unit price and extended amount are filled but quantity is missing, quantity shall be supplemented by dividing the extended amount by the unit price. If the supplemented quantity differs from the quantity specified in the Bidding Documents, such difference shall be regarded as a deviation in scope of supply and adjusted accordingly as per this Section;

- Errors in units inconsistent with the Bidding Documents shall be corrected to comply with the Bidding Documents;

- Errors in punctuation (using “,” comma instead of “.” period or vice versa) shall be corrected according to Vietnamese writing standards. If the Purchaser considers that the comma or period in the bid price is misplaced, the extended amount shall be decisive and the unit price corrected accordingly;

- If errors are found in totaling amounts, the total amount shall be corrected based on the item amounts;

- In case of discrepancies between technical and financial proposals, the technical proposal shall be the basis for correction.

- If there is a discrepancy between numerical figures and words, the words shall be taken as the legal basis for correction. If the words are incorrect or meaningless, the figures shall be used.

2. Adjustment of Deviations

a) If deviations in scope of supply are identified compared to the requirements in Part 2 of the Bidding Documents, the bid price shall be increased by the value of the missing portion and decreased by the value of the excessive portion at the corresponding unit prices in the Bid containing the deviation;

If the Bid with deviations does not include unit prices, the highest unit price for that item among other technically qualified Bids shall be used for adjustment; if none of the technically qualified Bids include unit prices, the unit price forming the contract package price shall be used as a basis for adjustment;



If there is only one Bid passing the technical evaluation, the adjustment shall be made using the unit prices from that Bid; if the Bid does not include unit prices, the unit prices forming the contract package price shall be used;

b) If a Bidder with an adjusted Bid ranks first but the Bid lacks unit prices for deviations, when determining the proposed winning price, the highest unit price among other technically qualified Bids shall be used for excessive deviations, and the lowest unit price among other technically qualified Bids shall be used for missing deviations.

After corrections and adjustments are made as prescribed, the Purchaser shall notify the Bidder in writing of the corrections and adjustments to their Bid. Within 03 working days from receipt of such notice, the Bidder shall notify the Purchaser in writing of their acceptance of the corrections and adjustments. If the Bidder does not accept the corrections and adjustments, their Bid shall be rejected.

Section 32. Conditions for successful bidder

A bidder shall be proposed for contract award when following conditions are satisfied:

1. The bidder has a valid bid as prescribed in Section 1 of Chapter III - Evaluation and Qualification Criteria;
2. The bidder is qualified as required in Section 2 of Chapter III - Evaluation and Qualification Criteria;
3. The bidder has a satisfactory technical proposal as prescribed in Section 3 of Chapter III - Evaluation and Qualification Criteria;
4. The shortfall deviations is not more than 10% of the bid price;
5. The Bid ranked first as prescribed in Section 4 of Chapter III – Evaluation and Qualification Criteria;
6. The successful bid (including taxes, fees and charges (if any)) does not exceed the approved procurement price.

Section 33. Bidding cancellation

The bidding cancellation shall be carried out in the following cases:

1. All Bids fail to meet requirements mentioned in the Bidding Documents.
2. The Purchaser changes objectives and scope of work result in alterations to the volume of work or evaluation criteria specified in the Bidding Documents.
3. Bidding Documents fail to comply with the PR leading the nonsatisfaction of the successful bidder.
4. The Bidder commits a prohibited act as specified in Article 69 of the PR.
5. An organization or individual, other than the Bidder, commits a prohibited act as specified in Article 69 of the PR, resulting in a distortion of the bid evaluation outcome.
6. Bid cancellation shall be carried out during the period from the issuance date of



the Bidding Documents until before the signing of the Contract/Framework Agreement.

Section 34. Publishing of bidder selection result

1. Before the deadlines prescribed in the BDS, the Purchaser shall send notifications of bidder selection result to related bidders by post or fax and post it on BSR's bidding network (<https://www.bsr.com.vn>).

2. Regarding bidding cancellation prescribed in Point a ITB Section 33, the explanation for the bidding cancellation shall be provided in the notification of bidder selection result.

Section 35. Change in quantity of Goods and Services

Before contract signing, based on the scale and nature of the package, the Purchaser may increase or decrease quantity of the relevant scope of work mentioned in Chapter V, Part 2 – Scope of Supply provided that it does not exceed the rate specified in the BDS and there is no change to unit price, other conditions or terms of the Bidding Documents or the Bid.

Section 36. Notification of Contract Award

Together with the notification of bidder selection result, the Purchaser shall send a Notice of Award to the winning Bidder, including requirements pertaining to performance security, time for completion and conclusion of contract prescribed in form No. 14 of Chapter VII – Contract Forms. In the event that the successful bidder fails to complete and conclude the contract before the deadline mentioned in the Notification of Contract Award, such bidder shall be rejected without Bid Security return as prescribed in Point e ITB Section 19.5.

Section 37. Conditions for signing of contract

1. The Bid of the Bidder shall remain valid at the time of signing of contract.

2. At the time of signing of contract, the successful Bidder shall be determined to have technical and financial qualification to perform the contract. In case the Bidder is no longer qualified as prescribed in the Bidding Documents, the Purchaser shall refuse to conclude the contract with the Bidder. Then, the Purchaser shall cancel the decision on approval for bidder selection result and send the Notification of Contract Award to the next ranked bidder.

Section 38. Performance Security

1. Before signing the contract or before the contract becomes effective, the successful bidder shall furnish a Performance Security issued by a bank, or credit institution, or a foreign bank branch lawfully operating in Vietnam with a value equal to 5% of the contract value. The Bidder shall, if applicable, use the Bank Guarantee form prescribed in form No. 15 of Chapter VII - Contract Forms (or in the Contract) or another form which is approved by the Purchaser.

2. The Bidder shall be not be returned the Performance Security in one of the following cases:



- a) Refuse to perform the contract on the effective date of the contract;
- b) Violate terms and conditions of the contract;
- c) Perform the contract behind the schedule and refuse to extend the validity period of the Performance Security.

Section 39. Handling complaints in bidding

Bidders are entitled to file complaints against the bidder selection progress (prior to the announcement of the selection result) and result to the Purchaser, the Competent person for review and resolution, at the address prescribed in the BDS when they found their lawful rights and interests are infringed.

Section 40. Monitoring bidder selection progress

When any act or content unaccordant with the PR, the Bidder shall notify organizations or individuals of monitoring bidder selection progress as prescribed in the BDS.



Chapter II. BID DATA SHEET (BDS)

ITB 1.1	The Purchaser is: Binh Son Refining and Petrochemical JSC
ITB 1.2	The procurement's name: Providing the spare parts in order to maintain for loading arms at Jetty Unit according to PR No. 0097/1100003321/ĐH-BDSC-W.
ITB 1.3	The maximum contract implementation period is: 15 months from the contract signing date, including the delivery time is 14 months from the contract signing date and 01 month for acceptance of material.
ITB 2	Sources of Funds: Operation cost of BSR
ITB 6.1	The Purchaser shall receive the request for Clarification of Bidding Documents not later than 3 working days before the bid closing time.
ITB 7.3	The Purchaser shall send Amendment of Bidding Documents to all bidders received the Bidding Documents from the Purchaser before the bid closing time at least 5 working days. In case the time for sending Amendment of Bidding Documents does not comply with above regulations, the Purchaser shall extend the corresponding deadline for the submission of bids.
ITB 12.1	Alternative Technical Proposal <i>shall not be</i> considered.
ITB 13.5	Parts of the package: <i>Not applicable.</i>
ITB 16.2	Documentary evidence of the Bidder's qualifications to perform the contract if its bid is accepted contains: as detail Chapter III. Evaluation and qualification criteria.
ITB 17.1	The bid validity period shall be: ≥ 120 days from the bid closing time.



ITB 18.2	Contents of the Bid Security: - Value and currency of the Bid Security: For foreign bidders: 17,600.00 USD (in words: Seventeen thousand and six hundred US Dollars). For domestic bidders: 460.000.000 VND (In words: Four hundred sixty million Vietnamese Dong). - The validity period of the Bid Security shall be: ≥ 150 days, from the bid closing time.
ITB 18.4	The unsuccessful bidders may be either returned or released their Bid Security within 14 days, from the date on which the bidder selection results are approved.
ITB 19.1	The number of copies of the Bid is: 01. The number of copies of the Bid and the number of copies of modified or substituted Bid or Alternative Technical Proposal are the same. In addition to the number of copies specified above, the Bidder shall attach one USB containing scanned files of the entire Bid Submission Documents as instructed in Point (a), Section I – Chapter IX – INSTRUCTIONS FOR SUBMITTING BIDS THROUGH THE BIDDING DOCUMENT SYSTEM, along with the Excel file of the bid price schedule.
ITB 21.1	For bid submission purposes, the Purchaser's address is: Attention: Binh Son Refining and Petrochemical Joint Stock Company. Address: No. 208 Hung Vuong Avenue, Nghia Lo Ward, Quang Ngai Province, Vietnam. Telephone: 0255 – 3825825 Fax: 0255 - 3825826 Bid closing time is: AM,/...../2025 (GMT+7)
ITB 25.1	The bid opening shall take place at: AM (GMT+7),/...../2025, at Tender Opening Room, Binh Son Refining and Petrochemical Joint Stock Company, No. 208 Hung Vuong Avenue, Nghia Lo Ward, Quang Ngai Province, Vietnam.
ITB 26.3	The Bidder may send request for Clarification of Bids (proving legal status, capacity, and experience) to the Purchaser within 3 working days from the bid closing date.
ITB 34.1	Time limit for sending notification of results of bidder selection is 5 working days, from the date on which the bidder selection result is approved by the Purchaser.



Chapter III. EVALUATION AND QUALIFICATION CRITERIA

Section 1. Evaluation criteria of validity of the Bid

A Bid is considered valid when all of the conditions below are satisfied: The Bidder shall be deemed **Responsive** if all evaluation criteria are assessed as “**Responsive**.”, The Bidder shall be deemed **Non-Responsive** if any evaluation criterion is assessed as “**Non-Responsive**.”

Details are as follows:

No	Content	Satisfied	Not Satisfied	Notes
1	There is an original Bid or the Bid Submission Documents submitted via BSR's e-bidding system.			
2	There is an original Bid Submission Form signed and stamped (if applicable) by the legal representative of the Bidder as required by the Bidding Documents; The Bid Submission Form must be signed after the issuance date of the Bidding Documents; the Bid must not contain multiple bid prices or include any conditions that are unfavorable to the Purchaser Regarding joint venture, the Bid Submission Form shall be signed and stamped (if applicable) by legal representative of every joint venture member or signed by the member authorized on behalf of the joint venture in accordance with the joint venture agreement.			
3	The validity period of the Bid satisfies requirements in ITB.			
4	A valid original Bid Security is required (in terms of value, validity period, beneficiary, and the signatory must be the legal representative of a domestic credit institution or a branch of a foreign bank legally operating in Vietnam).			
5	The Bidder shall not have its name included in multiple Bids as an independent Bidder or a joint venture member for the same procurement.			
6	There is a valid original Joint Venture Agreement. The agreement shall clearly specify detailed tasks and value thereof performed by each joint venture member. The division of work must be based on the items listed in the Bid Price Schedule.			



7	The Bidder's status is valid as prescribed in Article 4 of the PR.			
8	Within 03 years prior to the bidding closing date, the Contractor has no personnel (who signed a labor contract with the Contractor at the time the personnel committed the violation) convicted by the Court of violating bidding regulations causing serious consequences according to the provisions of criminal law with the aim of allowing that Contractor to win the Bid. (The Bidder shall include a written statement/document of commitment with the Bid).			
	Kết luận			

*** For Bidders submitting their Bids via BSR's e-bidding system, the criteria for evaluating the validity of the Bid shall be applied in accordance with Part 4 – Evaluation Criteria and Instruction for Online Submission.**

Section 2. Qualification criteria

Qualification of a joint venture provided that each member is qualified to perform their tasks in the joint venture; if any member is not qualified to perform their tasks in the joint venture, the joint venture shall be considered not qualified. Regarding the procurement being divided into independent lots, the Bidder's qualification shall be evaluated in proportion to the lot for which it make a bid.

The Bidder (whether an independent Bidder or a member of a joint venture) must independently meet the Evaluation Criteria for Qualification as specified in Section 2 – Evaluation Criteria for Capacity and Experience. The Qualification of subcontractors or nominated subcontractors (if any) shall not be considered as a substitute for the Qualification of the Bidder.

In case of application of the prequalification, if there is any change to the information about the Bidder's qualification between the Bid and the application for prequalification, the new information shall be updated; if not, the Bidder shall issue a commitment to satisfy all the procurement's criteria.

In case of non-application of the prequalification, the Bidder's qualification shall be evaluated as follows, the qualified Bidder is the one satisfying all criteria; then the Bid will be further considered and evaluated technically.



2.1. Qualification criteria:

The evaluation of qualification shall be conducted according to the following “Table of Qualification criteria”:

The evaluation criteria for the Bidder’s Qualification shall be applied using the ratings “Pass” or “Fail.” The Bidder must receive a “Pass” rating for all items listed in the table below to be considered as meeting the qualification requirements.

If any item below is rated as “Fail” or “Non-Responsive,” the remaining items will not be considered.

TABLE OF QUALIFICATION CRITERIA

Criterion			Requirement			Required document
No	Description	Requirement	Independent bidder	Joint venture bidder		
				All joint venture members	Each venture member	
1	Tax obligation fulfillment	Fulfilled the tax obligations for the most recent fiscal year (year 2024) as of the bid closing date.	Satisfied	Not applicable	Satisfied	Commitments stated in the Bid Form and supporting documents to prove them (as noted in the remarks section below)
2	Financial capacity					
2.1	Financial outcome	The Bidder’s net asset value in the most recent fiscal year as of the bid closing date must be positive. (Net asset value = Total assets – Total liabilities)	Satisfied	Not applicable	Satisfied	Form No. 11 and attached supporting documents as instructed in this form



Criterion			Requirement			Required document
No	Description	Requirement	Independent bidder	Joint venture bidder		
				All joint venture members	Each venture member	
2.2	Annual average revenue from business (excluding VAT)	The Bidder's average annual revenue (excluding VAT) for the 03 most recent fiscal years (2022 to 2024) as of the bid closing date must be at least 26.000.000.000 VND (Inwords: Twenty six billion Vietnames Dong) for domestic bidders or 985,595.00 USD (In words: Nine hundred eighty five thousand, five hundred ninety five US Dollars) for foreign bidders.	Satisfied	Satisfied	Satisfied (equivalent to their tasks performed)	Form No. 11 and attached supporting documents as instructed in this form
3	Experience to perform contracts of provision of similar Goods and Services	The Bidder has completed at least 01 similar contract as a main contractor (independent or joint venture member) or subcontractor during the period from 01 January 2022 to the deadline for submission of bids. In which similar contracts are: - Similar properties: Contracts for the supply of materials, spare parts in industry field. - Completed with minimum scale (value): 492,798.00 USD (In words: Four hundred ninety two	Satisfied	Satisfied	Satisfied (equivalent to their tasks performed)	Form No. 07 and attached supporting documents (Contracts, Completion Certificates/Acceptance Minutes/Settlement Minutes, Invoices, etc.)



Criterion			Requirement			Required document
No	Description	Requirement	Independent bidder	Joint venture bidder		
				All joint venture members	Each venture member	
		thousand seven hundred ninety eight US Dollars) for foreign bidders or 13.000.000.000 VND (in words: Thirteen billion Vietnamese Dong) for domestic bidders.				
4	Documents proving the origin of goods	The Bidder shall provide at least one of the following documents/documents to prove: - A license or authorization letter for sales issued by the manufacturer or the manufacturer's representative or the manufacturer's authorized distributor/dealer; or - The manufacturer's or manufacturer's representative's or manufacturer's official distributor/agent's official and direct quotation to the Bidder. In case the Bidder is a manufacturer, this criterion does not apply.	Satisfied	Satisfied	Satisfied (equivalent to their tasks performed)	Attached supporting documents



Criterion			Requirement			Required document
No	Description	Requirement	Independent bidder	Joint venture bidder		
				All joint venture members	Each venture member	
5	Qualification in warranty, maintenance, repair, provision of spare parts or other after-sale services	The Bidder must demonstrate the capability to perform warranty, maintenance, upkeep, repair, supply of spare parts, or provision of after-sales services by one of the following methods: • The Bidder commits to having the capacity to directly carry out warranty, maintenance, upkeep, repair, supply of spare parts, or provision of after-sales services as required by the Bidding Documents. • The Bidder signs a framework contract/agreement with an entity capable of performing the warranty, maintenance, upkeep, repair, supply of spare parts, or provision of after-sales services as required by the Bidding Documents.	Satisfied	Satisfied	Satisfied (equivalent to their tasks performed)	Commitment of the Bidder or framework contract/agreement



Notes:

The most recent financial year is determined based on the date of issuance of the Bidding Documents (BD). If the BD is issued after March 31, the most recent financial year is the year adjacent to the bid closing year. If the BD is issued on or before March 31, the most recent financial year is the year prior to the year adjacent to the bid closing year.

For bidders who are household businesses, they are not required to submit financial statements but must provide documents proving revenue within the period required by the BD.

For joint venture bidders, the average annual revenue requirement is based on the value (corresponding to the volume of work) assigned to each member according to the Joint Venture Agreement.

Bidders must provide documents proving fulfillment of tax declaration and payment obligations for corporate income tax (or personal income tax for household business bidders) for the most recent financial year relative to the bid closing date, to be verified if invited to do so (if necessary). Tax declaration and payment obligations must be completed before the bid closing date. Tax payment obligations refer to the payment of tax corresponding to the declared tax rate, taxable income, and taxable revenue on the electronic tax system (the amount of tax paid corresponds to the amount of tax due). In cases of delayed tax payment, tax exemption, or tax reduction under State policies, these regulations apply accordingly.

The bidder shall submit the following documents:

- ✓ Tax declaration (or tax payment notice from the tax authority for household businesses) and payment receipt certified by the tax authority, printed from the electronic tax system; or
- ✓ Tax declaration (or tax payment notice from the tax authority for household businesses) and certification from the tax authority confirming fulfillment of tax obligations.

In case the contract value stated in similar contracts, payment confirmation by the project owner for goods or services supply contracts performed, tax declarations, or other relevant documents proving the bidder's capacity and experience are not in VND, the bidder must convert these amounts to VND when preparing the Bid. The conversion shall be based on the selling exchange rate of Vietcombank on the date of signing the similar contract.

2.2. Key Personnel Evaluation Criteria: Not applicable.

Depending on the scale and nature of the bidding package, the bidder may be required to propose key personnel for certain important tasks of the package as specified in Chapter 5: Scope of Supply.

In this case, the Bidding Documents must specify the key personnel requirements for the bidder to propose in the Bid. The bidder must demonstrate that they have sufficient personnel for the key positions meeting the following requirements:



No.	Position	Quantity	Years of experience in similar jobs (at least ____years)	Qualification (Minimum qualification ____)
1				
2				
3				
4				
5				
...				

The Bidder shall provide detailed information about the key personnel according to Forms 08, 09, and 10 in Chapter IV – Bid Forms.

If the Bidding Documents (BD) require key personnel, the Bidder must demonstrate the ability to mobilize the proposed key personnel. Key personnel may be either permanent employees of the Bidder or mobilized by the Bidder.

If the key personnel declared in the Bid are found not to meet the requirements or the Bidder cannot demonstrate the ability to mobilize them (including cases where the key personnel are already engaged in other contracts with overlapping work periods), the Purchaser shall allow the Bidder to supplement or replace the personnel.

The Bidder is only permitted to supplement or replace key personnel once per position within a reasonable timeframe, but not less than 03 working days from the date of receiving the clarification request from the Purchaser.

If the Bidder does not have replacement key personnel meeting the BD requirements, the Bidder shall be disqualified.

In all cases, if the Bidder dishonestly declares key personnel, no replacement personnel will be allowed, the Bid shall be rejected, and the Bidder will be considered to have committed fraud in accordance with the Procurement Regulations (PR).

Section 3. Technical evaluation criteria

Evaluation criteria using the pass/fail method:

Bids that pass the capability and experience evaluation step will be further evaluated on technical criteria using pass/fail.

Specifically:

Technical evaluation criteria for bidders are applied using "Pass" or "Fail". The bidder must pass all items listed in the table below to be considered technically



compliant. If any single criterion is marked Fail, subsequent criteria will not be considered.

Bids that pass all the listed criteria will be evaluated as meeting the technical requirements.

No	Review content	Request content	Evaluation criteria	
			PASS	FAIL
I	Scope of Supply	✓ Follow to requirements in Chapter V- Scope of Work ✓ Provide expert certified by Manufacturer to supervise installation and commissioning	Satisfied	Not Satisfied
II	Characteristics and technical specifications of the goods	✓ In accordance with the requirements of each part specified in Chapter V – Scope of Supply. ✓ The list of goods offered must state: Manufacturer's name, country of origin, technical information, model code (model, serial number, or Part number (P/N)), and be accompanied by technical documents (Data sheet/manual, etc.). ✓ For goods offered with a change in model code (change of P/N) compared to the Bidding Documents, a confirmation letter from the current manufacturer must be provided. ✓ In case of equivalent offers: - The marine loading arm to be installed into existing system without any modification; - The BIDDER must provide dossiers/documents (Minimum includes documents attached to the order, including a comparison table) proving that the bidder's materials are compatible with BSR's existing system, and have construction/features/technical specifications equal to or higher than the requirements for the Employer's evaluation; - Design life of the equipment is 20 years and have experience in successful application (with submission past contracts) on	Satisfied	Not Satisfied



No	Review content	Request content	Evaluation criteria	
			PASS	FAIL
		similar equipment .		
V	Other Requirements		Satisfied	Not Satisfied
1	Type of Contract	Lump sum. (The Contractor may include this information in the Bid)	Satisfied	Not Satisfied
2	Contract implementation period	Contract implementation period is 15 months, below included: - Delivery time: 14 months from the contract signing date; - Expected acceptance time: 01 month.	Satisfied	Not Satisfied
3	Warranty Period	Minimum 12 months from the date of installation and service or 18 months from the date of acceptance of the goods	Satisfied	Not Satisfied
4	Delivery Location	Warehouse, Dung Quat Refinery, Binh Son Petroleum Refining Joint Stock Company, Van Tuong commune, Quang Ngai province.	Satisfied	Not Satisfied
5	Documents upon Delivery	The Contractor shall confirm in writing that all delivery documents are provided, specifically: - Certificate of Origin (C/O) issued by the manufacturer or competent authority of the manufacturing/exporting country (original/copy); - Certificate of Quality (C/Q) issued by the manufacturer (original/copy); - Warranty letter issued by the Contractor (original). - Manufacturing report (original/copy); - Manufacturing quality control records (at least including: material certificate, Hydrostatic test, Leak test, NDT for welding,...) (original/copy); - FAT (Factory acceptance test, balance report) (original/copy);	Satisfied	Not Satisfied
6	Condition and Quality of Goods	The Contractor affirms/confirms (with attached written documents in the Bid Submission Document): Goods supplied are 100% new,	Satisfied	Not Satisfied



No	Review content	Request content	Evaluation criteria	
			PASS	FAIL
		unused, and guaranteed to meet the manufacturing standards of the manufacturer.		

Section 4. Price Evaluation Criteria (for Ranking Bidders)

The method to determine the lowest bid price:

The method to determine the lowest bid price is conducted as follows:

Step 1: Determine the bid price.

Step 2: Correct errors (according to Clause 1, Section 31 of the ITB).

Step 3: Adjust deviations (according to Clause 2, Section 31 of the ITB).

Step 4. Determine the bid price after error correction and deviation adjustment, minus any discounts (if any):

Step 5. Ranking of bidders:

The bid with the lowest price after error correction, deviation adjustment, and deducting discounts (if any) shall be ranked first.

Section 6. The procurement is divided into independent lots (if any)

If the procurement is divided into independent lots as prescribed in ITB Section 31.6, the procedures below shall be followed:

1. The Bidding Documents shall specify: conditions of bid; measures for and value of Bid Security applied to each lot or multiple lots; standards and methods for evaluating each lot or multiple lots in order for bidders to make a plan for bid within their qualifications;

2. The evaluation of bids and approval for successful bid shall be carried out according to Clause 3, Article 39 of the PR.

3. If there a lot or a number of lots in the procurement to which there is no contractor making a bid or satisfying the Bidding Documents' requirements, Purchaser shall request the competent person to divide such lot(s) into separate procurement(s); regarding lots to which there are contractors making bids, the bidder selection and technical evaluation shall be carried out in conformity with the evaluation rules as prescribed in Clause 2 of this Section; 4. In case there is only one successful bidder for all the lots, the procurement shall have one contract. In case there are multiple successful bidders for different lots, the procurement shall have multiple contracts.



Chapter IV. BIDDING FORMS

Form No. 01(a). Bid Submission Form

Form No. 02. Power of Attorney

Form No. 03. Joint venture agreement.

Form No. 04 (a). Bid Security applicable to independent bidders

Form No. 04 (b). Bid Security applicable to joint venture

Form No. 05. Table of bid price

Form No. 05 (a). Table of bid price of Goods of domestically-produced and processed Goods

Form No. 05 (b). Table of bid price of overseas-produced and processed Goods

Form No. 05 (c). Table of bid price of overseas-produced and processed Goods that are imported and sold in Vietnam

Form No. 05 (d). Table of bid price for Related Services (if any)

Form No. 06 (a). Declarations of bidder information.

Form No. 06 (b). Declarations of joint venture members' information

Form No 07. Similar contracts.

Form No. 08. Table of proposed key employees

Form No. 09. Curriculum Vitae of key employees.

Form No. 10. Working experience

Form No. 11. Financial situation of bidder

Form No. 12. Scope of work items performed by subcontractors

Form No. 13. Scope of work items performed by special subcontractors



BID SUBMISSION FORM ⁽¹⁾

Date: ____*[insert date of signing of Bid Submission Form]*

Procurement's name: ____*[insert the procurement's name according to the Invitation to Bid]*

Invitation to Bid No. ____*[insert the number of the Invitation to Bid regarding selective bidding]*

To: ____*[insert the complete and accurate name of the Purchaser]*

After carefully studying the Bidding Documents and revisions thereof number ____*[insert the number of the revisions (if any)]*, we, ____*[insert the name of the independent Bidder/the name of the Joint Venture Bidder as stated in the Joint Venture Agreement]*, pledge ourselves to perform ____*[insert the procurement's name]* in accordance with the Bidding Documents with the total amount ____*[insert the amount in figures, in words, and currency]* ⁽²⁾ together with the Table of bid price.

Contract execution period is ____*[insert period of time for performing all tasks required by the procurement]* ⁽³⁾.

Contract type: ____ *[to be specified in accordance with the requirements of the Bidding Documents]*.

We hereby declare that:

1. We only participate in this Bid as primary bidder.
2. We are not undergoing dissolution process, are not thrown into bankruptcy, and do not incur bad debts as prescribed by law.
3. Not to engage in any prohibited acts as prescribed in the PR (1402).
4. We are not involved in corrupt, fraudulent or conclusive practice and other violations against law on bidding.
5. Every information provided herein is truthful to be best of our knowledge.

If the our Bid is accepted, we shall provide the Performance Security as prescribed in Instructions to Bidders of the Bidding Documents.

This Bid takes effect within ____⁽⁴⁾ days, from _____*[date]*⁽⁵⁾.

Legal representative of bidder

(Independent Contractor/Representative of the Joint Venture under the Joint Venture Agreement)

[Full name, position, signature and seal]⁽⁶⁾

Ghi chú:



(1) Bidder must provide sufficient and accurate information including names of the Purchaser and the Bidder, effective period of the Bid, which bears the signature and seal (if any) and of the bidder's legal representative.

(2) The Bid Price mentioned in the Bid Submission Form must be detailed, in number and words, and in conformity with the total Bid Price mentioned in the Table of Bid Price, there is only one Bid Price which does not cause any disadvantage condition to the Investor or the Purchaser. In case the procurement is divided into independent lots, the Bidder shall provide bid price for each lot and total bid price for the lots for which the Bidder make bids.

In case the Bidder offers a discount separately in the Letter of Discount.

(3) The contract implementation period stated in the Bid shall be consistent with the technical proposal and the completion schedule specified in the Bid. It shall be calculated from the effective date of the contract until the date the parties sign the final acceptance certificate confirming that the Contractor has completed all contractual obligations, excluding warranty obligations (if any)..

(4) Effective period of the Bid is from the bid closing time to its expiration date as prescribed in the Bidding Documents. The period of time from the deadline time for the submission of bids to 24:00 of the deadline date is considered 01 day.

(5) Insert the deadline date as prescribed in Section 21.1 of the BDS.

(6) If the bidder's legal representative authorizes his/her subordinate to sign the Bid Submission Form, a Power of Attorney (Form No. 2 provided in this Chapter) must be enclosed. If the company's charter or another document permits such subordinate to sign the Bid Submission Form, such document shall be enclosed (In this case, the Power of Attorney is not required). Regarding joint venture, the Bid Submission Form shall be signed by legal representative of every joint venture member, unless the head of the joint venture may sign the Bid Submission Form according to the joint venture agreement as mentioned in Form No. 03 of this Chapter. Each venture member may give authorization similarly to an independent bidder. If the successful bidder must present certified true copies of these documents to the Investor before contract conclusion. If information provided is found inaccurate, the bidder will be considered fraudulent as prescribed in ITB Section 3.

Form No. 02

POWER OF ATTORNEY ⁽¹⁾

Hôm nay, ngày ____ tháng ____ năm ____, tại ____

[Location and date]_____

I am _____[insert name, ID/passport number, position of bidder's legal



representative], the legal representative of _____ [insert name of bidder/ name of the Company if it is a member of a Joint Venture] at _____ [insert address of bidder/the Company if it is a member of a Joint Venture] hereby authorizes _____ [insert name, ID/passport number, position of authorized person] to perform the following tasks during the participation in the process of bidding for _____ [insert name of the procurement] of _____ [insert name of the project] held by _____ [insert name of the Purchaser]:

[- Sign the Bid Submission Form;

- Sign the Joint venture agreement (if any);

- Sign documents with the Purchaser during the short listing processing, including the request for Clarification of Bidding Documents and Bids; sign requests for bid withdrawal, modification or substitutions;

- Participate in contract negotiation and conclusion;

- Sign complaint letter (if any);

- Sign contract with the Investor if the bidder is successful] (2).

The authorized person only performs the tasks within the area of competence of a legal representative of _____ [insert name of bidder/ name of the Company if it is a member of a Joint Venture]. _____ [insert name of bidder's legal representative/ name of the Company if it is a member of a Joint Venture] is totally responsible for the tasks performed by _____ [name of authorized person] within the authorization scope.

The Power of Attorney is effective from _____ [date] to _____ [date]⁽³⁾ and is made into _____ copies with equal value. _____ copies are kept by the authorizer, and _____ copies are kept by the authorized person.

Authorized person

[Full name, position, signature and seal (if any)]

Authorizer

[Full of the legal representative of the Contractor/ of the Company (if a member of the joint venture), position, signature and seal of the legal representative]

Notes:

(1) The original copy of the Power of Attorney shall be sent to the Purchaser in conjunction with the Bid Submission Form as prescribed in ITB Section 20.3. The Bidder's legal representative may authorize their deputies, subordinates, directors of branches, and heads of representative offices of the Bidder to perform the tasks on behalf of the Bidder. The authorized person may use the seal of the Bidder or their seal. The authorized person may not authorize another person.

(2) The area of competence of authorization shall include one or multiple tasks above.



(3) Insert the effective date and expiration date of the Power of Attorney in conformity with the bidding process.

Form No. 03

JOINT VENTURE AGREEMENT ⁽¹⁾

[Location and date]_____

Procurement: _____[insert name of the procurement]

In response to Bidding Documents for _____ [insert name of procurement] dated _____ [insert date written on the Bidding Documents];

Representatives of signatories to the joint venture agreement include:

Name of joint venture member ____[insert name of each joint venture member]

Mr./Ms.

Position:

Address:

Phone number:

Fax:

Email:

Account:

TIN:

Power of Attorney No. _____ dated _____ (in case of authorization).

The members have reached a consensus on entering into a joint venture agreement with the following contents:

Article 1. General rules

1. Members voluntarily establish this joint venture to participate in the process of bidding for _____ [insert name of procurement].

2. Official name of the joint venture used in every transaction related to the procurement: _____ [insert the agreed name of the joint venture].

3. Every member is committed not to unilaterally participate or establish a joint venture with another member to participate in this procurement. If awarded the contract, no member is entitled to refuse to fulfill the duties and obligations prescribed in the contract. Any member of the joint venture that refuses to perform their duties as agreed must:

- Pay damages to other parties in the joint venture;
- Pay damages to the Purchaser as prescribed by the contract;



- Incur other disciplinary actions _____ [specify the action].

Article 2. Assignment of duties

All members unanimously to undertake joint and separate responsibility to execute _____ [insert name of procurement] as follows:

1. Head member of the joint venture:

All parties unanimously authorize _____ [insert name of a party] as the head member of the joint venture who represents the joint venture to perform the following tasks ⁽²⁾:

[- Sign the Bid Submission Form;

- Sign documents with the Purchaser during the short listing processing, including the request for Clarification of Bidding Documents and Bids; sign requests for bid withdrawal, modification or substitutions;

- Provide Bid Security for the joint venture;

- Participate in contract negotiation and conclusion;

- Sign complaint letter (if any);

- Perform other tasks except for contract conclusion: _____ [specify other tasks (if any)].

2. Tasks of joint venture members are specified in the table below⁽³⁾:

No.	Name	Tasks	Proportion of total bid
1	Name of head member	- ____ - ____	- ____% - ____%
2	Name of second member	- ____ - ____	- ____% - ____%
....			
Total		All tasks of the procurement	100%

(1) Only divided according to the main work of the bid package specified in Chapter 5 – Scope of Supply Requirements

Article 3. Effect of Joint venture agreement

1. The Joint venture agreement takes effect from the day on which it is signed.

2. The Joint venture agreement expires in the following cases:

- All parties have fulfilled their duties and finalize the contract;

- The agreement is unanimously terminated by all parties;
- The joint venture is not awarded the contract;
- The bidding for _____ [insert name of the procurement] of _____ [insert name of the project] is cancelled as notified by the Purchaser.

The joint venture agreement is made into _____ copies with equal legal value, each party keeps _____ copies.

LEGAL REPRESENTATIVE OF HEAD MEMBER

[Full name, position, signature and seal]

LEGAL REPRESENTATIVE OF JOINT VENTURE MEMBER

[Full name, position, signature and seal of each member]

Notes:

(1) According to the scope and nature of the procurement, this Joint venture agreement may be amended. If the procurement is divided into independent lots, the Joint venture agreement shall specify names and numbers of lots in which the joint venture participates, and clarify common and private responsibilities of every joint venture member.

(2) Area of authorization includes one or multiple tasks above.

(3) The Bidder shall specify detailed tasks and estimate equivalent value of tasks performed by every joint venture member, common and private responsibilities of member, including the head member.

Mẫu số 04 (a)

BID SECURITY ⁽¹⁾

(applicable to independent bidder)

Beneficiary: ____ *[insert name and address of the Purchaser]*

Date of issue: ____ *[insert date of issue]*

BID GUARANTEE No. ____ *[insert number of the Bid Guarantee]*

Guarantor: ____ *[insert name and address of issuing bank, if it is not written in the title]*

We have been informed that _____ [name of the Bidder] (hereinafter called "the Bidder") has submitted to participate in the bid for the



execution of _____ [name of procurement] under Invitation to Bid No. [number of the Invitation to Bid].

We hereby act as a guarantee for the Bidder to participate in the bid for this procurement with an amount of _____ [amount in figures, in words and currency].

This Guarantee takes effect within ____⁽²⁾ days, from _____ [date]₍₃₎.

At the request of the Bidder, we, as the Guarantor, hereby undertake to pay you any sum or sums not exceeding in total an amount of _____ [amount in figures] (_____) [amount in words] upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s), because the Bidder:

1) The Bidder withdraws the Bid or issues a written refusal to perform one or more of the works proposed in the Bid as required by the Bidding Documents after the bid closing date and during the validity period of the Bid;

2) The Bidder violates the PR leading to contract cancellation as prescribed in ITB Section 33;

3) The successful Bidder fails to provide the performance security as required in ITB Section 38;

4) The Bidder does not proceed or refuses to proceed with contract finalization within 20 days from the date of receiving the invitation notice to finalize the contract from the Purchaser, or having finalized the contract but refuses to sign the contract finalization minutes, except in cases of force majeure;

5) The Bidder fails to sign the contract within the timeframe specified in the Purchaser's Notice of Award from the date of contract finalization completion, except in cases of force majeure.

If the Bidder has option: this Guarantee shall expire when the Bidder conclude the contract and furnish the Performance Security to the beneficiary as agreed.

If the Bidder has no option: this Guarantee shall expire upon our receipt of a photocopy of notification of bidder selection result sent by the beneficiary; within 30 days after the expiration of the Bidder's Bid.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

Legal representative of Bank

[Full name, position, signature and seal]

Notes:

(1) Applicable to Bid Security in the form of Bid Guarantee issued by a credit institution or a branch of foreign bank established under Vietnamese law.

(2) Insert as prescribed in Section 18.2 of the BDS.

(3) Insert the deadline date as prescribed in Section 21.1 of the BDS.



BID SECURITY ⁽¹⁾

(applicable to joint venture)

Beneficiary: ____ [insert name and address of the Purchaser]

Date of issue: _____ [insert date of issue]

BID GUARANTEE No. ____ [insert number of the Bid Guarantee]

Guarantor: ____ [insert name and address of issuing bank, if it is not written in the title]

We have been informed that _____ [name of the Bidder]⁽²⁾ (hereinafter called "the Bidder") has submitted to participate in the bid for the execution of _____ [name of procurement] under Invitation to Bid [number of the Invitation to Bid].

We hereby act as a guarantee for the Bidder to participate in the bid for this procurement with an amount of _____ [amount in figures, in words and currency].

This Guarantee takes effect within ____⁽³⁾ days, from _____ [date]⁽⁴⁾.

At the request of the Bidder, we, as the Guarantor, hereby undertake to pay you any sum or sums not exceeding in total an amount of _____ [amount in figures] (_____) [amount in words] upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s), because the Bidder:

1) The Bidder withdraws the Bid or issues a written refusal to perform one or more of the works proposed in the Bid as required by the Bidding Documents after the bid closing date and during the validity period of the Bid;

2) The Bidder violates the PR leading to contract cancellation as prescribed in ITB Section 33;

3) The successful Bidder fails to provide the performance security as required in ITB Section 38;

4) The Bidder does not proceed or refuses to proceed with contract finalization within 20 days from the date of receiving the invitation notice to finalize the contract from the Purchaser, or having finalized the contract but refuses to sign the contract finalization minutes, except in cases of force majeure;

5) The Bidder fails to sign the contract within the timeframe specified in the Purchaser's Notice of Award from the date of contract finalization completion, except in cases of force majeure.

If any member in the _____ [insert complete name of the joint venture] violates regulations of law leading ineligible for Bid Security return as prescribed in Section 19.5 –Instructions to Bidder, the Bid Security of all joint venture members shall not be returned.

If the Bidder has option: this Guarantee shall expire when the Bidder conclude the contract and furnish the Performance Security to the beneficiary as agreed.



If the Bidder has no option: this Guarantee shall expire when the Bidder receives the photocopy of notification of bidder selection result sent by the beneficiary; within 30 days after the expiration date of the Bid.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

Legal representative of Bank
[Full name, position, signature and seal]

Notes:

(1) Applicable to Bid Security in the form of Bid Guarantee issued by a credit institution or a branch of foreign bank established under Vietnamese law.

(2) The Bidder may have one of the following names:

- Name of the joint venture, for example A bidder and B bidder enter into a joint venture to make a bid, their name shall be “Nhà thầu liên danh A + B” (“A + B joint venture”);

- Name of the member in charge of the Bid Security for the joint venture or for other members of the joint venture. For example, A + B joint venture makes a bid, if their joint venture agreement assign A bidder to furnish Bid Security for the joint venture, the joint venture’s name shall be stated as: ...[insert name of member A] (on behalf of Joint Venture A + B);

- Name of every joint venture member separately furnishing the Bid Security.

(3) Insert as prescribed in Section 18.2 of the BDS.

(4) Insert the deadline date as prescribed in Section 21.1 of the BDS.



TABLE OF BID PRICE

No.	Content	Bid Price
1	Goods	(M)
2	Related Services	(I)
	Total bid price <i>(Transfer to Bid Submission Form)</i>	(M) + (I)

Legal representative of Bidder

*(Independent Contractor/Representative of the
Joint Venture under the Joint Venture Agreement)
[full name, position, signature and seal]*



TABLE OF BID PRICE
(FOR LOCALLY MANUFACTURED OR FABRICATED GOODS)

1	2	3	4	5	6	7
No.	List of Goods	Physical unit	Quantity	Origin, symbol, label	Unit Price	Total price (Col. 4x6)
1	First Good					M1
2	Second Good					M2
						
n	N th Good					Mn
Total bid price of Goods including taxes, fees and charges (if any) (Transfer to Table of bid price - Form No. 05)						M=M1+M2+... +Mn

Legal representative of Bidder

(Independent Contractor/Representative of the Joint
Venture under the Joint Venture Agreement)
[full name, position, signature and seal]

Notes:

Columns (1), (2), (3) and (4): the Purchaser insert information in accordance with the provisions of Part 2 – Supply requirements; columns (5), (6), and (7): the Bidder insert information.

The Unit Price in the column (6) includes essential costs for provision of Goods at the request of the Purchaser, including taxes, fees and charges (if any). When participating in a bid, the Bidder is responsible for learning, calculating and quoting adequate taxes, fees and charges (if any) with rates thereof at 28 days prior the bid closing time as prescribed. If the Bidder declares that the Bid Price does not include taxes, fees and charges, its Bid shall be rejected.



For contracts with adjustable unit prices, the total value of taxes, fees, and charges (if any) shall not be considered during the evaluation process for comparison and ranking of bidders. The successful Bid Price, the awarded contract price, and the Contract Price shall include taxes, fees and charges (if any).



TABLE OF BID PRICE
(FOR OVERSEAS-PRODUCED GOODS)

1	2	3	4	5	6	7	8
No.	List of Goods	Physical unit	Quantity	Origin, symbol, label	Unit Price	Total price (Col. 4x6)	Taxes, fees and charges (if any)
1	First Good					A1	T1
2	Second Good					A2	T2
							
n	N th Good					An	Tn
Total bid price of Goods excluding taxes, fees and charges (if any)						A=A1+A2+...+An	
Total value of taxes, charges, and fees (if any)							T=T1+T2+...+Tn
Total bid price of Goods including taxes, fees and charges (if any) (Transfer to Table of bid price - Form No. 05)						M ₁ =A+T	

Legal representative of Bidder

(Independent Contractor/Representative of the Joint
Venture under the Joint Venture Agreement)
[full name, position, signature and seal]

Notes:

Columns (1), (2), (3), and (4): the Purchaser shall insert information in accordance with the provisions of Part 2 – Supply requirements .

Columns (5), (6), (7) and (8): the Bidder insert information. The Unit Price in the column (6) prescribed in Section 13.2 of the BDS includes essential costs for provision of Goods at the request of the Purchaser, excluding taxes, fees and charges (if any) in the Column (8) and excluding costs of Related Services prescribed in Form No. 5(d).

Column (8) includes all taxes, fees and charges (if any). When participating in a bid,



the Bidder is responsible for learning, calculating and quoting adequate taxes, fees and charges (if any) with rates thereof at 28 days prior the bid closing time as prescribed. If the Bidder declares that the Bid Price does not include taxes, fees and charges, its Bid shall be rejected.

For contracts with adjustable unit prices, the total value of taxes, fees, and charges (if any) shall not be considered during the evaluation process for comparison and ranking of bidders. The successful Bid Price, the awarded contract price, and the Contract Price shall include taxes, fees and charges (if any).

Form No. 05(c)

**TABLE OF BID PRICE OF DOMESTICALLY-PRODUCED GOODS OR
OVERSEAS-PRODUCED GOODS WHICH ARE IMPORTED AND SOLD IN
VIETNAM**

1	2	3	4	5	6	7	8
No.	List of Goods	Physical unit	Quantity	Origin, symbol, label	Unit Price	Total price (Col. 4x6)	Taxes, fees and charges (if any)
1	First Good					A1	T1
2	Second Good					A2	T2
							
n	N th Good					An	Tn
Total bid price of Goods excluding taxes, fees and charges (if any)						A=A1+A2+...+An	
Total value of taxes, fees and charges (if any)							T=T1+T2+...+Tn
Total bid price of Goods including taxes, fees and charges (if any) (Transfer to Table of bid price - Form No. 05)						M ₂ =A+T	

Legal representative of Bidder

(Independent Contractor/Representative of the Joint
Venture under the Joint Venture Agreement)
[full name, position, signature and seal]

Notes:



Columns (1), (2), (3), and (4): the Purchaser shall insert information in accordance with the provisions of Part 2 - Supply requirements. Columns (5), (6), (7) and (8): the Bidder insert information. The Unit Price in the column (6) includes essential costs for provision of Goods at the request of the Purchaser.

Column (8) includes all taxes, fees and charges (if any). When participating in a bid, the Bidder is responsible for learning, calculating and quoting adequate taxes, fees and charges (if any) with rates thereof at 28 days prior the bid closing time as prescribed. If the Bidder declares that the Bid Price does not include taxes, fees and charges, its Bid shall be rejected.

For contracts with adjustable unit prices, the total value of taxes, fees, and charges (if any) shall not be considered during the evaluation process for comparison and ranking of bidders. The successful Bid Price, the awarded contract price, and the Contract Price shall include taxes, fees and charges (if any).

Form No. 05 (d)

TABLE OF BID PRICE FOR RELATED SERVICES
(if any)

1	2	3	4	5	6	7	8
No.	Description	Quantity	Physical unit	Place where Services are performed	Finish date	Unit Price	Total price (Col. 3x7)
Total bid price of Related Services including taxes, fees and charges (if any) <i>(Transfer to Table of bid price - Form No. 05)</i>							(I)

Legal representative of Bidder

(Independent Contractor/Representative of the Joint
Venture under the Joint Venture Agreement)
[full name, position, signature and seal]

Notes:

Columns (1), (2), (3), (4), (5) and (6): the Purchaser insert information in conformity with the List of Related Services (if any) prescribed in Part 2 - Supply requirements.

Columns (7) and (8): the Bidder insert information.



BIDDER INFORMATION FORM

Date: _____

Number and name of procurement: _____

Bidder's name: ____ [insert Bidder's name (the independent contractor or the joint venture)]
In case of joint venture, name of each party: ____
Place of business registration and operation: ____ [insert province/city where the Bidder registers and operate business. For joint ventures, indicate the lead member], trường hợp là Nhà thầu liên danh thì ghi cho thành viên đứng đầu]
Year of establishment: ____ [insert year of establishment. For joint ventures, indicate the lead member].
Bidder's legal address: ____ [insert the registered address] [For joint ventures, indicate the lead member]
Bidder's legal representative information. For joint ventures, indicate the lead member. Name: _____ Address: _____ Telephone/Fax: _____ Email Address: _____
Notes: 1. Attached are copies of original documents of: Certificate of Enterprise registration, Establishment Decision or equivalent documents issued by competent agencies in the country where the Bidder operates. 2. Diagram of organizational structure of the Bidder [For joint ventures, indicate the lead member].



JOINT VENTURE PARTNER INFORMATION FORM

Date: _____

Number and name of procurement: _____

Bidder's name:
JV's Party name:
JV's Party Country of Registration:
JV's Party Year of Establishment:
JV's Party Legal Address in Country of Registration:
JV's legal representative information Name: _____ Address: _____ Telephone/Fax: _____ Email Address: _____
Notes: 1. Attached are copies of original documents of: Certificate of Enterprise registration, Establishment Decision or equivalent documents issued by competent agencies in the country where the Bidder operates. 2. Diagram of organizational structure.



SIMILAR CONTRACTS PERFORMED BY BIDDER⁽¹⁾

[Location and date] _____

Bidder's name: _____ [insert name of the Bidder]

Required information of each contract :

Name and number *[complete name and number of the contract]*Date of signing *[insert date]*Finish date *[insert date]*

Contract Price	<i>[insert total Contract price in contractual amount and currency]</i>		Equivalentt _____ VND
Regarding joint venture member, insert value of contract in charge	<i>[insert rate of contract price in the total contract price]</i>	<i>[insert contractual amount and currency]</i>	Equivalentt _____ VND

Investor's name (Purchaser): *[complete name of the Investor (Purchaser)]*Address: *[complete address of the Investor (Purchaser)]*Phone number/Fax: *[insert phone number, fax including, zip code, email address]*

Email:

Description of similar characteristics prescribed in Section 2.1 of Chapter III - Evaluation and Qualification Criteria⁽²⁾.1. Type of Good *[suitable information]*2. Value *[amount in VND]*

3. The value of the completed contract (3)	<i>[actual value of works performed, based on acceptance and contract liquidation]</i>
--	--

4. Scope *[scope of contract]*5. Other characteristics *[insert other characteristics if necessary]*

The Bidder shall enclose photocopies of related literature and documents on those contracts (certified that those contracts are completed in conformity with the above requirements by the Investor/Purchaser; acceptance minutes, contract liquidation documents, invoices in accordance with legal regulations, etc.).

Notes:

- (1) A similar contract shall mean a contract that has been completed and accepted.
In the case of a joint venture, each member shall fill out this form separately.
- (2) The bidder shall only declare the components that are similar to the requirements of the bidding package.
- (3) In cases where the contract value is not denominated in Vietnamese Dong (VND), it shall be converted into VND based on the exchange rate specified in Section 2.1, Chapter III for evaluation purposes.

Form No. 08

TABLE OF PROPOSED KEY EMPLOYEES

The Bidder shall declare key employees having qualifications satisfying requirements prescribed in Section 2.2 of Chapter III - Evaluation and Qualification Criteria and be ready to perform the procurement; The bidder shall ensure that, upon contract signing (if awarded), the proposed employees are not in charge of another procurement with the same working time is declared in this Table.

1	Position: <i>[detailed position in the procurement in charge]</i>
	Name: <i>[insert name of key employee]</i>
2	Position: <i>[detailed position in the procurement in charge]</i>
	Name: <i>[insert name of key employee]</i>
3	Position
	Name
4	Position
	Name
5	Position
	Name



....	Position
	Name

Form No. 09

CURRICULUM VITAE OF KEY EMPLOYEES

The Bidder shall provide adequate information required below and enclose certified true photocopies of relevant qualifications.

Position		
Information of employee	Name	Date of birth:
	Qualifications	
Present position	Name of employer	
	Address of employer	
	Phone number:	Contact person (Chief/officer in charge of personnel)
	Fax	E-mail
	Position	Years of experience working for present employer



WORK EXPERIENCE OF KEY EMPLOYEES

Detailed working experience in management of specific procurements. Summary of work experience in sequence from the current time backwards.

From	To	Company/Project/Position/Relevant work and management experience

FINANCIAL SITUATION OF BIDDER ⁽¹⁾

Bidder's name *[Independent bidder or joint venture]*:

Date: _____

Name of joint venture member (if any): _____

Financial figures in the last 3 years ⁽²⁾ [VND]		
First year:	Second year:	Third year:



Information about the Balance sheet

Total assets			
Liabilities			
Net asset value			
Short-term assets			
Short-term liabilities			
Working capital			

Information about income statement

Total revenues			
Annual average revenue from business⁽³⁾			
Pre-tax profits			
Post-tax profits			

Enclose photocopies of financial statements (the Balance sheets including relevant description, income statements) in the last 3 years ⁽⁴⁾, which satisfy the following conditions:

1. The financial statement only includes financial situation of the Bidder or joint venture members (regarding joint venture) but not of an associate entity such as parent company or subsidiary companies or associate companies and the Bidder or joint venture members.
2. Financial statements must be complete and adequate as prescribed.
3. Financial statements must be complete corresponding to the accounting periods. Attached are certified true photocopies of one of the following documents:
 - Inspection record of tax declaration;
 - Tax self-declaration (VAT and enterprise income tax) whose time of submitting certified by tax authority;
 - Documentary evidence on electronic tax declaration by the Bidder;



- Certification of tax liability issued by the tax authority (certifying amount paid in the whole year);
- Audited financial report;
- Other documents;

Notes:

(1) Regarding joint venture, each joint venture member shall declare information using this Form.

(2), (4) The period of time above is the same of the period of time prescribed in Section 2.1 of Chapter III - Evaluation and Qualification Criteria.

(3) Annual average revenues from business shall be determined by dividing total revenue from the mentioned years by the number of years.

Form No. 12

SCOPE OF TASKS PERFORMED BY SUBCONTRACTOR⁽¹⁾

No.	Name of subcontractor⁽²⁾	Scope of tasks⁽³⁾	Quantity of tasks⁽⁴⁾	Estimated rate (%)⁽⁵⁾	Contract or agreement concluded with subcontractor⁽⁶⁾
1					
2					
3					
4					
...					

Notes:

(1) This Form is used in case of employment of subcontractors.

(2) The Bidder specifies names of subcontractors. In case names of subcontractors are not determined, this column may be leaved blank and only the column “Scope of tasks”, “Quantity of tasks”, “Estimated rate” is filled. Any subcontractor who is selected to perform the tasks shall be approved by the Investor.

(3) The Bidder specifies names of work items performed by subcontractors.

(4) The Bidder specifies quantities of work items performed by subcontractors.



(5) The Bidder specifies ratio of tasks performed by the subcontractor to the bid price.

(6) The Bidder specifies number of contracts or agreements, enclose with original copies or certified true photocopies of those documents.

Form No. 13

LIST OF SPECIAL SUBCONTRACTORS⁽¹⁾

No.	Names of special subcontractors⁽²⁾	Scope of tasks⁽³⁾	Quantity of tasks⁽⁴⁾	Estimated rate (%)⁽⁵⁾	Contract or agreement concluded with subcontractor⁽⁶⁾
1					
2					
3					
4					
...					

Ghi chú:

To be used only if the Bidding Documents permit the engagement of a specialized Subcontractor prescribed in Chapter 5 – Scope of Supply. In case the Contractor engages a specialized Subcontractor, this Form shall be completed.

The specialized Subcontractor shall be subject to evaluation by the Purchaser regarding its qualifications and experience, as specified in Chapter III – Evaluation and Qualification Criteria.



Part 2. SCHEDULE OF REQUIREMENTS

Chapter V. SCOPE OF SUPPLY

This Chapter constitute the foundation for the preparation of the Bid and the completion of the forms stipulated in Chapter IV – Bidding Forms.

Section 1. Scope of supply of Goods Description of the requirements of the bidding package regarding the scope of supply, related services, and technical specifications.

SCOPE OF WORK AND DETAILED SPECIFICATIONS

MATERIAL/ SPARE PART/SERVICE DATA					UoM	Quantity
No	Item Code	Tag No.	Short Description	Long Description		
1	6158550023	LA-8111/12/13/14/21/22/23/24	LOADING ARMS,MLA 260,	LOADING ARMS ; TYPE : MLA 260 ;; ADDITIONAL INFO: SIZE: 12" 8000 X 8500 X 10500 MM; ;; DATA SHEET: 8474L-081-SP-4026-051; ; DRAWING: A1-P062032B10; ; MATERIAL: A-106GRB; ; RIGHT HAND DESIGN; ; ELECTRIC-HYDRAULICALLY OPERATED WITH HYDRAULIC QC/DC; ; INCLUDE SENSORS, PENDANT, JBS, HYDRAULIC SOLENOIDS, HYDRAULIC SYSTEM ON THE LOADING ARM; ; EXCLUDE CONTROL SYSTEM: PLC, HYDRAULIC POWER UNIT ON BERTH (PUMP, OIL RESERVOIR,FILTER,ACCUMULATOR,...) ;	SET	1
2	6158550043	LA-8131/33/34/35/41/43/44/45	LOADING ARMS,MLA 260,	LOADING ARMS ; TYPE : MLA 260 ;; ADDITIONAL INFO: SIZE: 10" 6000 X 8500 X 10500 MM; ;; DATA SHEET: 8474L-081-SP-4026-051; ; DRAWING: A1-P062032I10; ; MATERIAL: A-106GRB; ; LEFT HAND DESIGN; ; ELECTRIC-HYDRAULICALLY OPERATED WITH HYDRAULIC QC/DC; ; INCLUDE SENSORS, PENDANT, JUNCTION BOX, HYDRAULIC SOLENOIDS, HYDRAULIC SYSTEM ON THE LOADING ARM; ; EXCLUDE CONTROL SYSTEM: PLC SYSTEM, HYDRAULIC POWER UNIT ON BERTH (PUMP, OIL RESERVOIR,FILTER,ACCUMULATOR,...) ;	SET	1

Note: Detailed technical specification for material, drawings and technical data of existing equipment are attached.



Part 3. CONTRACT AND CONTRACT FORMS

Chapter VI. CONTRACT

		BINH SON REFINING AND PETROCHEMICAL JS				
		208 Hung Vuong Avenue, Nghia Lo ward, Quang Ngai Province - Viet Nam				
Tel: (84-255) 3825 825 Fax: (84-255) 3825 826						
PURCHASE ORDER (...../ĐH-.....)						
To supplier:	[company name]		P.O No.	-20.../PO-BSR-....		
	[address]		Order date	/ /20....		
	Tel : Fax :		Requested by	BSR		
			Page	(including this cover page)		
Bill to:	Binh Son Refining & Petrochemical JSC					
	208 Hung Vuong Avenue, Nghia Lo ward Quang Ngai Provice Vietnam					
Supplier No.	Payment term			Terms of Delivery	Shipped via	
	Payment term: Document to be provided upon delivery for goods acceptance:....			DDP Dung Quat Refinery, Van Tuong commune, Quang Ngai Province, Viet Nam (Incoterm 2010)		
Confirm to /Telephone						
Mr/Ms. Mobile:, email:.....						
Line	Part Number/Description of Good/Service	Good/Service Receipt date	Quantity	UOM	Unit Price (USD)	Total (USD)
A		Details as per attachment 1	1,00	package	as per attachment 01	as per attachment 01
The material list, Technical Specification and detail price as per the attachment 01						
The term and condition as per Attachment 2						

B	Bank information for LC issuing:					
	- Beneficiary : ; - Bank name : ; - Bank address : ; - SWIFT code/BIC code/IBAN No. (preferably):					

For Supplier

For BSR



ATTACHMENT 1: SCOPE OF SUPPLY, SPECIFICATION AND DETAILED PRICE

(Attached to Po No.: -20.../PO-BSR-..... dated/...../20.....)

No.	Discription	Quantity	UOM	Unit Price (USD)	Total (USD)
1					0,00 -
	Total Price				0,00
In words: US dollars only.					

ATTACHMENT 2: TERMS AND CONDITIONS

(Attached to Po No.: -20.../PO-BSR-..... dated/...../20.....)

1. DEFINITIONS

- 1.1. "BSR" shall mean BINH SON REFINING AND PETROCHEMICAL CO., LTD
- 1.2. "The Supplier" shall mean the person, firm or company to whom the Purchase Order is issued.
- 1.3. The word 'Goods' include all goods and the word "Services" includes all services and/or performance of works, covered by the Purchase Order.
- 1.4. The term 'Purchase Order' shall mean Buyer's Purchase Order, to which these Terms and Conditions shall apply.
- 1.5. 'Terms and Conditions' shall mean the Clauses No. 1 to 21 detailed herein, which shall be binding on both parties and only amended by an authorized signatory.
- 1.6. 'The Contract' shall mean the contract between BSR and the Supplier consisting of the Purchase Order, these Purchase Terms and Conditions and any other documents (or parts thereof) specified in the Purchase Order.

2. QUALITY

- 2.1. In the absence of a specification or sample, all goods supplied shall be supplied to normal industry standards. All Services shall be carried out in a good and workmanlike manner.
- 2.2. All goods supplied shall be supplied with but limited to following documents:
 - CO/CQ;
 - Instruction for use and maintenance is in English/Vietnamese.
 - Other documents specified in Appendix 2- Technical Documents Requirement.

3. DELIVERY DATE

The date of delivery of the Goods or of the commencement of Services shall be that specified in the Purchase Order unless agreed otherwise between BSR and the Supplier. The Supplier shall furnish such programs of manufacture and delivery of Goods, or such descriptions and schedules of Services as BSR may reasonably require and the Supplier shall give notice to BSR as soon as practicable if such programs or schedules are or are likely to be delayed.

4. INCORRECT DELIVERY

All goods must be delivered at the delivery point specified in the Purchase Order. If goods are incorrectly delivered, the Supplier will be held responsible for any additional expense incurred in delivering them to their correct destination. Services shall be carried out at the location specified in the Purchase Order. Whilst on BSR premises, the Supplier's personnel, agents and subcontractors shall at all times conduct themselves in full compliance with BSR site, safety and security regulations that are brought to their notice and shall immediately report to BSR any accidents in which they are involved.

5. PASSING OF PROPERTY AND RISK TO BUYER

The title and risk in the Goods shall remain in the Supplier until they are delivered at the point specified in the Purchase Order and transferred to BSR's possession, at which time title and risk in the goods shall transfer to BSR. The intellectual property in all commissioned Services shall belong to BSR unless otherwise agreed in the Contract referred to in the Purchase Order. Supplier agrees to

- carry out all formalities to legally vest ownership of intellectual property rights in BSR at BSR's expense and request.
6. **TAXES AND DUTIES**
Unless otherwise stated in the Purchase Order,
- 6.1. Supplier shall bear all taxes, duties and the like outside Vietnam related to performance of the Contract/ Purchase Order.
- 6.2. BSR shall bear all taxes, duties and the like inside Vietnam related to performance of the Contract/ Purchase Order (including Value Added Tax and Imported Tax).
7. **TERMS OF PAYMENT**
- 7.1. Unless otherwise stated in the Purchase Order, payment will be made within 30 days from date of invoice providing BSR receives the Supplier's correct and valid invoice, and provided the Goods have been correctly delivered or the Services have been properly performed and BSR has accepted them.
- 7.2. If the Goods are not correctly delivered or BSR has not accepted the Services, the invoice shall be paid after 30 days following the date when the discrepancy is corrected to BSR's satisfaction.
- 7.3. Value Added Tax, where applicable, shall be shown separately on all invoices that must comply with local regulatory requirements.
8. **LOSS OR DAMAGE OF GOODS IN TRANSIT**
- 8.1. BSR shall advise the Supplier and the carrier (if any) in writing, otherwise than by a qualified signature on any Delivery Note, of any loss or damage or defect within the following time limit:
- 8.1.1 Partial loss, damage, defects or non-delivery of any separate part of a consignment shall be advised within 14 days of date of delivery of the consignment or part consignment. Supplier will advise of any total loss within 7 days.
- 8.2. Supplier shall make good free of charge to BSR any loss of or damage to or defect in the Goods where BSR gives notice in compliance with this warranty provision.
9. **ACCEPTANCE**
BSR shall have the right, without prejudice to any other right which BSR may have against the Supplier to reject the Supplier's supplies of Goods or Services within a reasonable time of their delivery or completion and to cancel this Purchase Order if they are not in conformity with the contract or the terms and conditions of the Purchase Order. The making of payment shall not prejudice BSR's right of rejection.
10. **VARIATIONS**
- 10.1 The Supplier shall not alter or vary the Goods or Services, except as directed in writing by BSR. BSR shall have the right, from time to time during the execution of the Contract, by notice in writing, to direct the Supplier to add to or to omit, or otherwise vary, the Goods or the Services. Where the Supplier receives any such direction from BSR which would occasion an amendment to the Contract price the Supplier shall, with all possible speed, advise BSR in writing to that effect giving the amount of any such amendment, ascertained and determined at the same level of pricing as that contained in the Supplier's tender or quotation.
- 10.2 Provided BSR accepts in writing any variation in price given in accordance with clause 9.1 or any alteration to the delivery or performance schedule, the Supplier shall carry out such variations and be bound by the same conditions, so far as applicable, as though the said variations were stated in the Contract/ Purchase Order.
- 10.3 If, in the opinion of the Supplier, any such direction is likely to prevent the Supplier from fulfilling any of its obligations under the Contract/ Purchase Order it shall so notify BSR and BSR shall decide with all possible speed whether or not the same shall be carried out and shall confirm its instructions in writing and modify the said obligations to such an extent as may be justified. Until BSR confirms its instructions, the Supplier shall act as if the instructions had not been given.
11. **INTELLECTUAL PROPERTY RIGHTS**
The Supplier will fully indemnify BSR against any claim for infringement of intellectual property rights in connection with any Goods or Services supplied by Supplier to BSR and against any and all costs, expenses and damages which BSR may incur or become liable for such infringement. BSR shall give to the Supplier prompt notice in writing of any claim being made or action threatened or brought against BSR and will permit the Supplier, at Supplier's own expense, to conduct any litigation that may ensue and all negotiations for a settlement of the claim.
12. **FORCE MAJEURE**
Neither party shall be liable for failure to perform its obligations under the Contract/PO if such failure results from circumstances, which are beyond the party's reasonable control.
13. **ASSIGNMENT AND SUB-CONTRACTING**
The Contract shall not be assigned by the Supplier nor subcontracted as a whole. The Supplier shall not subcontract or assign any part of the Services without BSR's written consent, which shall not be unreasonably withheld, but the restriction contained in this clause shall not apply to subcontracts for materials, for minor details, or for any part of which the makers are named in the Contract. The Supplier shall be responsible for all Services and Goods supplied by subcontractors.
14. **COPIES OF SUBCONTRACTS**
When BSR has consented to the placing of subcontracts, copies of each subcontract shall be sent by the Supplier to BSR immediately upon signing and prior to commencement of work by the subcontractor.
15. **HAZARDOUS GOODS**
- 15.1. Hazardous Goods must be marked by the Supplier with International Danger Symbol(s) and display the name of the material in English/Vietnamese. Transport and other documents must include declaration of the hazard and name of the material in English/Vietnamese. Goods must be accompanied by emergency information in English/Vietnamese in the form of written instructions, labels or markings. The Supplier shall observe the requirements of EU and local laws and regulations relating to the packing, labeling, carriage and disposal of hazardous Goods.
- 15.2. All information held by, or reasonably available to, the Supplier regarding any potential hazards known or believed to exist in the transport, handling or use of the Goods to be supplied or to the provision of Services shall be promptly communicated to BSR.
16. **WARRANTY AND INDEMNITY**

- 16.1. The Supplier shall as soon as reasonably practicable repair or replace all Goods without additional cost to BSR which are or become defective during the Period of 12 months from delivery, or if appropriate putting into service, whichever is the later, where such defects occur under proper usage and are due to faulty design, the Supplier's erroneous instructions as to use or erroneous use data, or faulty materials or workmanship, or any other breach of Supplier's warranties, expressed or implied, statutory or otherwise. Repairs and replacements shall themselves be subject to the foregoing obligations for a period of 12 months from the date of delivery, reinstallation or passing of tests (if any) whichever is appropriate after repair or replacement. Supplier shall further be liable in damages in respect of each Purchase Order. The Supplier shall remedy at no charge to BSR any defects in Services that were not due to BSR that appear within 12 months from the completion of the Services. Neither the above nor anything contained in these Terms and Conditions shall limit or impair any statutory or any other rights that BSR may have.
- 16.2. The Supplier will indemnify BSR against all losses liabilities, claims, costs and expenses that may result from loss of or damage to any property, or injury to or the death of any person that may arise out of any act or omission or negligence of the Supplier in connection with the Purchase Order or the Supply.
- 16.3. Goods submitted by BSR to the Supplier for servicing or repair or any works shall be at the Supplier's sole risk in regard to any loss or damage or personal injury.
- 16.4. Warranty and indemnity shall be done at Supplier site.
17. **INSOLVENCY AND BANKRUPTCY**
If the Supplier becomes insolvent or bankrupt or (being a Company) makes an arrangement with its creditors or has an administrative receiver or administrator appointed or commences to be wound up (other than for the purpose of amalgamation or reconstruction), BSR may, without prejudice to any other of his rights, terminate the Contract forthwith by notice to the Supplier or any person in whom the Contract may have become vested.
18. **GENERAL CONDITIONS IN THE TENDER**
No conditions submitted or referred to by the Supplier when tendering, shall form part of the Contract unless otherwise agreed to in writing by both parties.
19. **CONFIDENTIALITY**
- 19.1. The Supplier undertakes that it and the Supplier's, personnel, agents and subcontractors will fully respect the confidentiality of BSR's internal business affairs. The Supplier hereby undertakes to treat as confidential all information obtained from BSR or communicated to the Supplier pursuant to this Purchase Order (or through discussions or negotiations prior to the Purchase Order being placed) or acquired in the performance of the Purchase Order, and will not divulge such information to any person (except to its own employees and then only to employees who need to know the same) and will use such information solely in connection with performing its obligations under this the Purchase Order and not for its own benefit or for the benefit of any third party, provided that this Clause shall not extend to information:
- a) Which is rightfully in its possession prior to the commencement of the negotiations resulting in the Contract; or
 - b) Which is already public knowledge or becomes so at a future date (other than as a result of breach of this Clause); or
 - c) Which is communicated or disclosed to the Supplier by a third party lawfully in possession thereof and entitled so to disclose it.
20. **CONSTRUCTION OF CONTRACT**
- 20.1. The Contract shall be governed by and construed in accordance with Vietnamese Law and the parties submit to the jurisdiction of the Courts of Vietnam.
- 20.2. The Purchase Order shall override and take precedence over any other terms and conditions express or implied and its provisions shall not prejudice or affect any other right or remedy for breach of Contract or otherwise to which BSR may be entitled.
- 20.3. No amendment to the Purchase Order or the supply of goods shall be of effect unless agreed in writing by BSR.
- 20.4. Notices hereunder shall be in writing addressed to the parties as stated, or to their last known addresses, and shall be effective on delivery.
- 20.5. Failure of BSR to enforce compliance with any term or condition of the Purchase Order shall not constitute a waiver of such term or condition.
- 20.6. If any provision of the Purchase Order is determined invalid, unlawful or unenforceable to any extent such provision shall be severed from the body of the Purchase Order and the remainder thereof shall continue to be valid and enforceable to the fullest extent permitted by law.
21. **COMPLIANCE TO HEALTH, SAFETY AND ENVIRONMENTAL**
- 21.1. Supplier is responsible to perform the works in full compliance with all regulations of BSR and especially all Vietnamese and local environment rules and to provide all requested permits, certificates, authorization required for work.
- 21.2. Supplier shall at all time conduct all operations under this Contract/ Purchase Order in a manner to avoid the risk of endangering health or causing bodily harm to persons or damage to property. Supplier shall, in accordance with Supplier's established practices, have sole responsibility for implementing its safety and health program, taking all safety and health precautions necessary and continuously inspecting all equipment, materials and work to discover, determine and correct any conditions which might result in any of the aforementioned risks.
- 21.3. Supplier shall comply with Jobsite HSE and security requirements and at all times conduct operations under this Contract/ Purchase Order in a manner to avoid the risk of loss, thief, or damage by vandalism, sabotage or any other means to any work, materials, equipment or other property. Such compliance with these HSE and security requirements shall not relieve Supplier of its responsibility for maintaining proper HSE and security for the above noted items, nor shall it be construed as limiting in any manner Supplier's obligation with respect to all applicable laws and regulations and to undertake reasonable action to establish and maintain secure conditions at the Jobsite.

Chapter VII. CONTRACT FORMS

This Chapter includes the forms that are integral parts of the Contract upon completion:

Form No. 14: Notification of Award Form No. 15. Performance Security

Form No. 16. Bank guarantee for Advance payment



NOTIFICATION OF AWARD

____, day ____ month ____ year ____

To: *[Insert name and address of the successful Bidder, hereinafter referred to as the “Bidder”]*

Subject: Notification of Award

Pursuant to Decision No. ____ dated ____ month ____ year ____ of the Purchaser *[insert name of the Purchaser, hereinafter referred to as the “Purchaser”]* approving the bid award results for the package: ____ *[insert name and code of the package]*, the Purchaser *[insert name of the Purchaser]* hereby notifies that the Bidder *[insert name of the Bidder]* has been awarded the contract to execute the package *[insert name and code of the package]*. In case the package is divided into multiple parts, specify the name and code of the part awarded to the Bidder *[insert name and code of the part awarded to the Bidder]* with the awarded bid price of: ____ *[insert the awarded bid price as per the bid award approval decision]* and the contract implementation period of: ____ *[insert the actual contract duration as per the bid award approval decision]*.

The legal representative of the Bidder is requested to proceed with contract finalization and signing with the Purchaser according to the following schedule:

- Contract finalization deadline: ____ *[insert contract finalization deadline]*, at the location *[insert location of contract finalization]*;
- Contract signing date: ____ *[insert contract signing date]*; at the location *[insert contract signing location]*. The draft contract documents are enclosed.

The Bidder is requested to provide the performance security according to Form No. 15 in Chapter VII. Contract Forms of the Bidding Documents with the amount of ____ and validity period of ____ *[insert the corresponding amount and validity period as required by the Bidding Documents]*.

This document is an integral part of the Contract Documents. Upon receipt of this notification, the Bidder must send a written acceptance and proceed to finalize and sign the contract and provide the performance security as required above. At the same time, the Bidder must confirm that its current capacity remains unchanged. The Purchaser reserves the right to refuse contract finalization and signing if it discovers that the Bidder’s current capacity no longer meets the contract requirements.

If by ____ day ____ month ____ year ____ (1), the Bidder does not finalize and sign the contract or refuses to do so, or does not provide the performance security as required above, the Bidder will be disqualified and its bid security will not be refunded.



Legal Representative of the Procuring Entity

[Insert name, title, signature, and seal]

Attachments: Draft contract documents including Contract and Contract Appendices.

Note:

(1) Insert the deadline consistent with the validity period of the Bidder's bid bond.



PERFORMANCE SECURITY

[Location]_____,[Date]_____

To: _____[insert the Purchaser's name]

(hereinafter referred to as the Purchaser)

At the request of the Supplier [insert name of Supplier] (hereinafter referred to as Supplier) has been the successful Bidder of the procurement _____[the procurement's name] and commit to enter into contract of good supply for the aforesaid procurement (hereinafter referred to as contract); ⁽²⁾

According to the Invitation for Bid (or contract), the Bidder must give a Performance Guarantee issued by a bank with a given amount to ensure the their duties and obligations in the performance of the contract;

We, _____[insert name of the bank], locates in _____[insert name of country or territory], have registered headquarters at _____[the bank's address⁽³⁾] (hereinafter referred to as "Bank"), to undertake to guarantee the performance of the contract by the Supplier with an amount of _____[insert equivalent value in figures and words and currency as specified in the Invitation for Bid]. We hereby unconditionally and irrevocably under take to pay you any sum(s) not exceeding _____[insert amount(s) in figures and words] upon receipt by us of your first demand in writing declaring the Supplier to be in default within the effective period of the performance security.

This guarantee comes into effect from the issue date until _____[date] ⁽⁴⁾.

Legal representative of the Bank

[Full name, position, signature and seal]

Notes:

(1) Applies only in cases where the performance security is in the form of a bank guarantee or financial institution guarantee.

(2) If the guaranteeing bank requires a signed contract before issuing the guarantee letter, the Bidder shall report to the Purchaser for consideration and decision. In this case, the above paragraph may be amended as follows:

"Upon the request of _____ [insert Bidder's name] (hereinafter referred to as the Bidder), the successful Bidder of the package _____ [insert package name] has signed Contract No. ____ [insert contract number] dated ____ day ____ month ____ year ____ (hereinafter referred to as the Contract)."

(3) Bank address: clearly specify the address, telephone number, fax number, and e-mail for contact.

(4) Specify the duration in accordance with the requirements stipulated in the draft contract.



BANK GUARANTEE FOR ADVANCE PAYMENT⁽¹⁾

[Location]_____,[Date]_____

To: _____[insert the Purchaser's name]
(hereinafter referred to as the Purchaser)

[The name and number of the Contract Agreement]

According to conditions of SCC in the Contract, _____*[insert name and address of the Supplier] (hereinafter referred to as the Supplier)* is required a Bank Guarantee for advance payment to ensure the proper use of an advance of _____*[insert amount(s) in figures and numbers and currency]* by the Supplier;

We, _____*[insert name of the bank]*, located in _____*[insert name of country or territory]*, have registered headquarters at _____*[the bank's address⁽²⁾] (hereinafter referred to as "Bank")*, at the request of the Purchaser, hereby unconditionally and irrevocably to pay you any sum or sums not exceeding in total an amount of _____*[insert amount(s) in figures and words as specified in SCC Section 15.1 of the Invitation for Bid]*.

In addition, we hereby agree that any change, supplement or adjustment to the conditions of the Contract or any relevant document entered into between the Supplier and the Purchaser shall not change any our duty or obligation under this guarantee.

The value of this guarantee shall gradually decrease in proportion to the advance that the Purchaser recovers through payment periods prescribed in the provisions of Contract together with the certification of advance recovery issued by the Purchaser.

This Guarantee shall remain valid and in full effect from the date of the advance payment received by the Supplier under the Contract until _____*[insert date]* ⁽³⁾ or upon the full recovery of the advance, whichever is sooner.

Legal representative of the Bank
[Full name, position, signature and seal]



Notes:

(1) Based on the specific conditions of the contract package, stipulate requirements in accordance with the provisions of the Contract.

(2) Bank address: clearly specify the address, telephone number, fax number, and e-mail for contact.

(3) Enter the expiration date of the Advance Payment Guarantee in accordance with Article 8 – Terms and Conditions of the Contract.

In case the Bidder does not use the Advance Payment Guarantee template provided by the Purchaser, the Bidder may use the template of the Bank designated to receive payment/advance payment under the contract; however, the content of the Guarantee must still meet the requirements as set forth in Appendix 03 of the Contract.

In case an extension of the contract implementation period is necessary, the Purchaser may require the Bidder to extend the validity period of the advance payment guarantee accordingly.



Part IV. Evaluation Criteria and Instruction for Online Submission
Chapter VIII. Validity Checking and Evaluation Criteria for Adjusted Bids
Submitted via E-Procurement System

No.	Contents according to Bidding Documents for direct submission	Contents according to Bidding Documents for Online submission
1	Check for consistency between original and scanned copies	Not applicable for bids submitted for Online submission.
2	Must have original bid documents	Must have original bid documents or scanned copies successfully uploaded to BSR's electronic bid submission/receipt system before the bid closing time. Detailed guidance is in Chapter IX of the Bidding Documents.
3	Bid submission letter signed and sealed by the authorized representative of the Bidder as required. For joint ventures, each member's authorized representative must sign and seal the letter, or the lead member signs on behalf of the JV per the JV agreement	Same as direct submission. For electronic bids, the bid submission letter must be a scanned color copy, signed (electronic signature is allowed if the Bidder uses it), sealed as required. Bidder must provide email and phone number of the legal representative for the evaluation team to confirm authenticity.
4	Valid bid security with original copy	Valid bid security with original letter, bank transfer to BSR's account, or electronic bank guarantee sent to a bank notified by the Procuring Entity. In all cases, BSR must receive the bid security before the bid closing time. Other evaluation criteria for bid validity remain unchanged compared to direct submission.

The remaining contents regarding the evaluation of the validity of the Bidding Documents (BDS) shall be maintained as in the direct submission method.



CHAPTER IX: INSTRUCTIONS FOR BID SUBMISSION THROUGH BSR SYSTEM

I. INSTRUCTIONS ON HOW TO SUBMIT BIDS VIA BSR SYSTEM

BSR's invitation for bids is posted at: <https://bsr.com.vn/vi/moi-thau>

Bidders complete purchase of Bidding Documents and contact BSR's bid document sales personnel to receive the documents via email.

If the Bidder cannot submit the Bid directly or by mail by the deadline, the Bidder may submit bids electronically via BSR's system at: <https://dauthau.bsr.com.vn>

Requirements for preparing and submitting electronic bids:

a. Preparation Steps for Electronic Bid Submission

Prepare bid documents according to the rules and adjustments in Appendix 02: Criteria for Validity Evaluation of Electronic Bids;

Convert all bid contents into *pdf format*, set security to read-only or apply electronic signature;

Separate bid proposal documents into individual *.pdf files*, numbered and named as follows:

- ✓ Bid submission letter and price schedule (*);
- ✓ Discount letter (if any) (**);
- ✓ Bid security;
- ✓ Documents proving eligibility;
- ✓ Experience and capability documents;
- ✓ Technical proposal;
- ✓ Other related documents.

Note:

- For single-stage two-envelope bids, (*) and (**) are financial proposal files, compressed and password-protected separately, password only provided to the evaluation team at the financial proposal opening stage.
- Compress the files into a *.rar* or *.zip* archive, password protect the archive; password is given to the evaluation team only at bid opening. Strong password recommended (at least 8 characters including uppercase, lowercase, numbers, special characters).

Important:



- Bidder is responsible for safeguarding the password and only discloses it at bid opening; failure to provide password at bid opening leads to bid being considered late.
- File name format: BidderName-Bid-BSROrderNumber-ProcurementDeptCode (e.g., “ABCCompany-Bid-ĐH270-21-1980-TMDV”).

b. Steps to Submit Bid via System

Notify BSR’s bid document sales personnel at least 48 working hours before bid closing about intent to submit electronically;

Sales personnel will create bidder account credentials (username, password) for submission at <https://dauthau.bsr.com.vn>;

Bidder logs in via provided link, uploads files, and after successful submission, the system automatically sends a confirmation email;

Notes:

- Bidder is responsible for the confidentiality of login credentials and may change the password;
- Bidder must safeguard the archive password and disclose it only at bid opening; failure to provide password means bid is late.

II. INSTRUCTIONS REGARDING BID SECURITY

Bidders may choose one of three forms of bid security when submitting electronically:

1. Electronic bank guarantee;
2. Bank transfer to BSR’s account;
3. Bank guarantee issued by a bank;

Content, value, and validity period of the bid security must comply with the Bidding Documents.

For electronic bank guarantee, before issuing the official guarantee, bidders should request the bank to send a draft for BSR to review the guarantee’s conditions ensuring smooth claim procedures.

Electronic bank guarantees must be sent to one of the designated banks listed below:

No.	Bank	SWIFT Code
1	Vietcombank – Quang Ngai Branch	BFTVVNVX027
2	Vietinbank – Quang Ngai Branch	ICBVVNVX520



3	BIDV – Quang Ngai Branch	BIDVVNVX
4	PVcomBank – Quang Ngai Branch	WBVNVNVX
5	Techcombank - Quang Ngai Branch	VTCTB VNVX
6	Ngân hàng Liên Việt - Quang Ngai Branch	LVBKVVNVX

- **Beneficiary Name:** Bình Sơn Refining & Petrochemical Joint Stock Company
- **Address:** 208 Hung Vuong Boulevard, Nghia Lo Ward, Quang Ngai City.
- **Bidders should instruct their bank to include the following information for easy tracking:** "[Bidder's Name] + bid security for package + [order number] + BSR + purchasing department code."
- **Example:** "ABC Company - bid security for package - ĐH270-21-1980-BSR-TMDV."

Note: To avoid delays in notifying BSR, bidders are encouraged to print the bank's guarantee notification and attach it to their bid documents (if possible).

- For bid security by bank transfer, attach the transfer receipt/payment order to the bid documents and ensure funds are credited to BSR's account before bid closing. The transfer description must follow the same format as the electronic guarantee.
- For bid security by bank guarantee, attach a copy to the bid documents and send the original to the bid submission address as specified in the Bidding Documents, ensuring BSR receives the original before bid closing.



DUNG QUAT REFINERY PROJECT
PACKAGE P2 & P3 - CRUDE & PRODUCT TANK FARM, PIPELINES AND
JETTY TOPSIDES



MARINE LOADING ARM DATASHEET

PAGE 3 OF 19
 ITEM NO LA-8111, LA-8112, LA-8121, LA-8122
 DATA SHEET NO: 8474L-081-SP-4026-051
 REVISION 0 DATE 24-Apr-06

1	APPLICABLE TO: ☐ PROPOSALS ☒ PURCHASE ☐ AS BUILT	
2	SERVICE <u>MOGAS 92/95 & MOGAS 90</u>	MODEL <u>MLA 260</u>
3	MANUFACTURER <u>KANON LOADING EQUIPMENT</u>	NO. REQUIRED <u>FOUR (4)</u>
4	LOCATION <u>BERTH 1 & 2 (Note 3)</u>	
5	DESIGN CONDITIONS	SITE DATA (Note 1)
6	TYPE OR NAME OF LIQUID <u>MOGAS 92/95 & MOGAS 90 & HEAVY NAPHTHA (Note 2)</u>	ELEVATION _____ m BAROMETER _____ kg/cm2g
7	PRESSURE OPERATING <u>2.97-3.05</u> kg/cm2g	RANGE OF AMBIENT TEMPS: MIN/MAX. _____ / _____ °C
8	DESIGN <u>24.33</u> kg/cm2g	RELATIVE HUMIDITY: % MAX / MIN _____ / _____
9	TEMPERATURE OPERATING <u>40</u> °C	☐ WINTERIZATION REQ'D ☒ TROPICALIZATION REQ'D.
10	DESIGN <u>60</u> °C	Design Wind Velocities (Basic 3 seconds gust wind speed)
11	VISCOSITY <u>1.17-1.22</u> cSt	☒ STORED <u>57</u> m/s
12	SPECIFIC GRAVITY <u>0.700-0.732</u>	☒ MANOEUVRING/CONNECTED <u>22</u> m/s
13	TRANSFER RATE, MAX <u>1500 m³/h</u>	☒ HYDROSTATIC/MAINTENANCE _____ m/s
14	DESIGN WIND FORCE _____ Kg/m²	☒ EARTHQUAKE LOAD TO BE CONSIDERED WHILE ARM IN STORED AND CONNECTED ALTITUDE
15	EARTHQUAKE LOAD _____ G	
16	ALLOWABLE PRESSURE DROP <u>0.49</u> kg/cm2g	☒ ELECTRICAL AREA CLASS <u>ZONE 1, GAS GROUP IIA, T3</u>
17	GAS RETURNED <u>NO</u>	SITE DATA
18	CONSTRUCTION	☒ RANGE OF AMBIENT TEMPS: MIN/MAX _____ / _____ °F
19	OPERATION ☒ HYDRAULIC ☐ MANUAL	UNUSUAL CONDITIONS
20	ARM LENGTH <u>8.0 x 8.5 x 10.5</u> m	☐ OTHER _____
21	ARM SIZE INBOARD ☒ 2 x 10" ANSI 300 # ☐ FF ☐ RF	☒ UTILITY CONDITIONS
22	☐ QUICK COUPLER _____ ☐ MANUAL	ELECTRICITY
23	☐ POWERED	VOLTAGE <u>400</u>
24	OUTBOARD ☒ 12" ANSI 300 # ☐ FF ☐ RF	HERTZ <u>50</u>
25	☒ QUICK COUPLER <u>12"</u> ☐ MANUAL	PHASE <u>3</u>
26	☒ POWERED	
27	Vendor to provide reducer if arm size not equal to 14"	INSTRUMENT AIR MAX MIN
28	BERTH DATA	PRESSURE (psig) <u>N.A.</u> <u>N.A.</u>
29	A DIST. JETTY FACE TO CTR. LINE OF RISER <u>2</u> m.	AUXILIARY EQUIPMENT
30	B DIST. JETTY FACE TO BERTHING LINE <u>2</u> m.	☐ EMERGENCY RELEASE SYSTEM ☒ REMOTE CONTROL
31	C MINIMUM DISTANCE OF MANIFOLD _____ m.	☒ TRAVEL LIMIT ALARM SYSTEM ☒ SERVICE PLATFORM/LADDER
32	D MAXIMUM DISTANCE TO SHIP SIDE _____ m.	☒ DRAIN CONNECTIONS ☒ VACUUM BREAKER VALVE
33	E DRIFT (PERPENDICULAR TO DOCK FACE) _____ m.	☐ ELECTRICAL INSULATION ☒ SUPPORT JACK
34	E* SURGE (PARALLEL TO DOCK FACE) _____ m.	☐ REMOVABLE ELBOW ☒ STORM LOCK
35	F DOCK TO HIGHEST WATER LEVEL (HHW) <u>2.5</u> m.	☐ NITROGEN PURGE SYS. ☐ HEATING SYS.
36	G DIFF BETWEEN HIGHEST & LOWEST WATER LEVEL (LLW) <u>2.7</u> m.	☒ QUICK CONNECT DISCONNECT COUPLER (QCDC)
37	H LLW LEVEL TO SHIP'S MANIFOLD <u>4.0</u> m.	☐ SHUT OFF VALVE AT TRIPLE SWIVEL ASSEMBLY (Manual/hydraulic)
38	(SMALLEST VESSEL LADEN) _____ m.	
39	I HHW LEVEL TO SHIP'S MANIFOLD <u>14.0</u> m.	MATERIAL
40	(LARGEST VESSEL LIGHT) _____ m.	ARMS INBOARD <u>ASTM A106 Gr B</u>
41	K DISTANCE BETWEEN CENTER LINE OF RISER <u>3.5</u> m.	OUTBOARD <u>ASTM A106 Gr B</u>
42	L TOP OF JETTY TO FLANGE _____ m.	RISER <u>ASTM A106 Gr B</u>
43	M MINIMUM MANIFOLD SPACING <u>1.5</u> m.	JOINT <u>DUPLEX/ A105 N</u>
44	N MAXIMUM MANIFOLD SPACING <u>3</u> m.	BALANCE UNIT <u>CARBON STEEL</u>
45		
46		
47		
48	TANKER DATA	
49		
50	TANKER SIZE (DWT) <u>30000 MT</u> <u>15000 MT</u>	
51	HEIGHT OF SHIP RAIL _____ m. _____ m.	
52	HEIGHT OF MANIFOLD ABOVE DECK AT SHIP RAIL _____ m. _____ m.	
53	DISTANCE OF MANIFOLD FLANGE TO SHIP'S SIDE _____ m. _____ m.	
54		
55		

DUNG QUAT REFINERY PROJECT
PACKAGE P2 & P3 - CRUDE & PRODUCT TANK FARM, PIPELINES AND
JETTY TOPSIDES



MARINE LOADING ARM DATASHEET

PAGE 4 OF 19
 ITEM NO LA-8111, LA-8112, **LA-8121**, LA-8122
 DATA SHEET NO: 8474L-081-SP-4026-051
 REVISION 0 DATE 24-Apr-06

1	APPLICABLE TO: ☐ PROPOSALS ☒ PURCHASE ☐ AS BUILT	
2	SERVICE <u>MOGAS 92/95 & MOGAS 90</u>	MODEL <u>MLA 260</u>
3	MANUFACTURER <u>KANON LOADING EQUIPMENT</u>	NO. REQUIRED <u>FOUR (4)</u>
4	LOCATION <u>BERTH 1 & 2</u>	
5	SPECIFIC REQUIREMENTS	
6		
7	OPERATION ☒ HYDRAULIC ☐ MANUAL	ALARM LUFFING <u>6.0</u> m
8	TWO SPEED MANOEUVRING <u>YES/NO</u>	MAXIMUM REACH (LUFFING) <u>8.0</u> m
9	EMERGENCY RELEASE SYSTEM (ERS) <u>YES/NO</u>	BOTTOM LIMIT OPERATING ENVELOPE
10	ERS MANUFACTURER & TYPE <u>N.A.</u>	TO CHART DATUM <u>4.0</u> m
11	ERS PRODUCT VALVE CLOSURE TIME <u>-</u> S	TOP LIMIT OPERATING ENVELOPE
12	ERC OPENING TIME <u>-</u> S	TO CHART DATUM <u>16.7</u> m
13	MECHANICAL INTERLOCK <u>YES/NO</u>	MAXIMUM SLEW RIGHT (SURGE) <u>4.0</u> m
14	HYDRAULIC INTERLOCK <u>YES/NO</u>	MAXIMUM SLEW LEFT (SURGE) <u>4.0</u> m
15	QUICK CONNECT/DISCONNECT COUPLER QC/DC <u>YES/NO</u>	ALARM SLEW RIGHT <u>3.0</u> m
16	QC/DC OPERATION ☒ HYDRAULIC ☐ MANUAL	ALARM SLEW LEFT <u>3.0</u> m
17	CLAMP OPERATING TIME MIN/MAX <u>10-15S</u>	MAXIMUM DRIFT VELOCITY (SURGE DIRECTION) <u>0.075</u> m/s
18	PIGGY BACK VAPOUR RETURN <u>YES/NO</u>	MAXIMUM DRIFT VELOCITY(SWAY DIRECTION) <u>0.075</u> m/s
19	FLANGE RATING/DIAMETER (NOMINAL BORE) <u>300# FF/RF</u>	
20	DRIVES	
21	☒ SLEWING <u>HYDRAULIC/ELECTROHYDRAULIC/MANUAL</u>	
22	☒ INBOARD ARM <u>HYDRAULIC/ELECTROHYDRAULIC/MANUAL</u>	
23	☒ OUTBOARD ARM <u>HYDRAULIC/ELECTROHYDRAULIC/MANUAL</u>	
24		
25	CONTROL SYSTEM	
26	☒ CENTRAL <u>YES/NO</u>	
27	☒ PORTABLE <u>YES/NO</u>	
28		
29	VACUUM BREAKER <u>YES/NO</u>	
30		
31	PURGING SYSTEM	
32	☒ RISER <u>NO</u>	
33	☒ APEX <u>NO</u>	
34	☒ MANIFOLD END <u>NO</u>	
35		
36	LADDER AND PLATFORM <u>YES/NO</u>	
37		
38	FOUNDATION BOLTS	
39	☒ SPECIFIED BY VENDOR <u>YES/NO</u>	
40	☐ SUPPLIED BY VENDOR <u>NO</u>	
41		
42	BASEPLATE TEMPLATE SUPPLIED BY VENDOR <u>YES/NO</u>	
43	STANDBY ELECTRO HYDRAULIC PUMP <u>YES/NO</u>	
44	MANUAL HYDRAULIC PUMP <u>YES/NO</u>	
45	SWIVEL PURGING <u>YES/NO</u>	
46	JACK <u>YES/NO</u>	
47	MAINTENANCE DUMMY MANIFOLD <u>YES/NO</u>	
48	DESIGN LIFE <u>20 YEARS</u>	
49	LUBRICATION <u>refer to maintenance manual</u>	
50		
51		
52		
53		
54		
55		
56		

ENVELOPE DETAILS (AS PER OCIMF)

ALARM LUFFING 6.0 m
 MAXIMUM REACH (LUFFING) 8.0 m
 BOTTOM LIMIT OPERATING ENVELOPE
 TO CHART DATUM 4.0 m
 TOP LIMIT OPERATING ENVELOPE
 TO CHART DATUM 16.7 m
 MAXIMUM SLEW RIGHT (SURGE) 4.0 m
 MAXIMUM SLEW LEFT (SURGE) 4.0 m
 ALARM SLEW RIGHT 3.0 m
 ALARM SLEW LEFT 3.0 m
 MAXIMUM DRIFT VELOCITY (SURGE DIRECTION) 0.075 m/s
 MAXIMUM DRIFT VELOCITY(SWAY DIRECTION) 0.075 m/s

CENTRAL CONTROL REQUIREMENTS

POWER ON/OFF YES/NO
 HYDRAULIC PUMP(S) ON/OFF YES/NO
 ARM SELECTOR SWITCH YES/NO
 MANOEUVRING CONTROLS YES/NO
 CENTRAL CONTROL/PENDANT CONTROL SWITCH YES/NO
 TWO SPEED MANOEUVRING SELECTOR SWITCH YES/NO
 1ST STAGE ALARM PUSH BUTTON YES/NO
 SHUTDOWN RESET BUTTON YES/NO
 ALARM LAMPS YES/NO

PENDANT CONTROL REQUIREMENTS

LOADING ARM MANOEUVRING CONTROLS YES/NO
 TWO SPEED MANOEUVRING SELECTION YES/NO

NOTES

Note 1 : Refer to Basic Engineering Design Data 8474L-000-PP-204
 Note 2: This facility may also be used for Heavy Naphtha occasionally.
 Note 3: LA-8111 & LA-8112 located in Berth 1, LA-8121 & LA-8122 located in Berth 2

DRAWINGS ITEM 1

Design data

Medium : See list
 Design pressure : 0-24.33 kg/cm²g
 Design temperature : 0°C / +60°C
 Area classification : Zone 1, Gas group IIA, T3
 Flow rate : See list

Test & Inspection

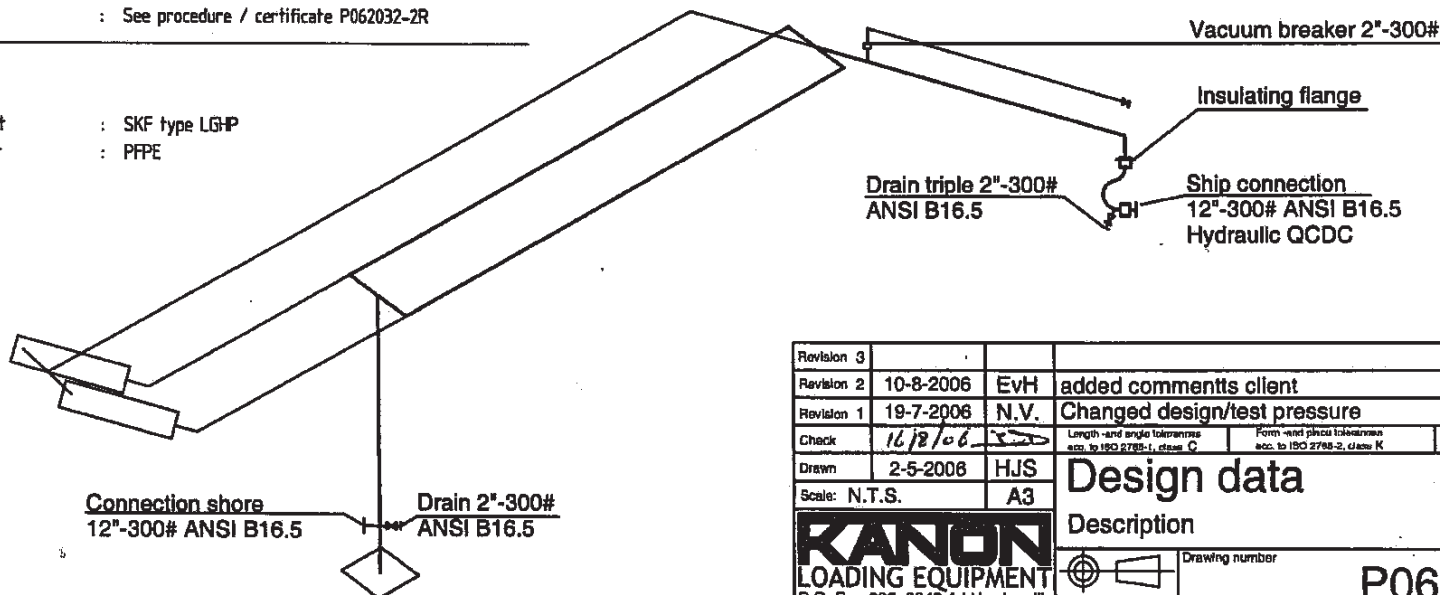
Design code : ASME VIII
 Test pressure : Hydrostatic test 36.5 kg/cm²g (30 min. water)
 See procedure / certificate P062032-1F.*10
 Leakage test : Pneumatic test at 0.5 kg/cm²g air
 See procedure / certificate P062032-1S.*10
 Operational test : At manufacturer's works
 Welding test : See drawing P062032*40
 X-ray or Y-ray circumferential seams 10% for carbon steel
 and 100% for duplex of wetted parts.
 Post material identification : 100% for alloy material and stainless steel
 Material certificates : Acc. EN 10204-3.1 for pressurized parts
 Inspection by : Kanon inspector / Inspector client

Surface Preparation

: See procedure / certificate P062032-2R

Grease type

Ball race swiveljoint : SKF type LGHP
 Sealface swiveljoint : PPPE



KANON
 LOADING EQUIPMENT

Edisonweg 27 Zeewolde NL
 tel: +31 (0)36-5219777

FABR. NR.: P062032 DESIGN PRESS.: 0-24.33 kg/cm²g
 YEAR : 2006 DESIGN TEMP.: 0°C / +80°C
 MODEL : MLA260 TEST PRESS.: 36.5 kg/cm²g
 SIZE : 12" 300# OPER. PRESS.: 2.97-3.05 kg/cm²g
 ID NR.: See list OPER. TEMP.: +40°C
 II 2 G FILE NO. KA13483

Product line Mogas / Naphta

KANON
 LOADING EQUIPMENT

Edisonweg 27 Zeewolde NL
 tel: +31 (0)36-5219777

FABR. NR.: P062032 DESIGN PRESS.: 0-24.33 kg/cm²g
 YEAR : 2006 DESIGN TEMP.: 0°C / +60°C
 MODEL : MLA260 TEST PRESS.: 36.5 kg/cm²g
 SIZE : 12" 300# OPER. PRESS.: 3.20 kg/cm²g
 ID NR.: See list OPER. TEMP.: +40°C
 II 2 G FILE NO. KA13483

Product line Auto Diesel

Identno.	Tag no.	Medium	Flow rate
P062032A10	LA-8111	Mogas/Naphta	1500 m ³ /hr
P062032B10	LA-8112	Mogas/Naphta	1500 m ³ /hr
P062032C10	LA-8113	Auto Diesel	1400 m ³ /hr
P062032D10	LA-8114	Auto Diesel	1400 m ³ /hr
P062032E10	LA-8121	Mogas/Naphta	1500 m ³ /hr
P062032F10	LA-8122	Mogas/Naphta	1500 m ³ /hr
P062032G10	LA-8123	Auto Diesel	1400 m ³ /hr
P062032H10	LA-8124	Auto Diesel	1400 m ³ /hr

Revision 3			
Revision 2	10-8-2006	EvH	added comments client
Revision 1	19-7-2006	N.V.	Changed design/test pressure
Check	16/8/06		Length and angle tolerances acc. to ISO 2768-1, class C
Drawn	2-5-2006	HJS	Form and photo tolerances acc. to ISO 2768-2, class K
Scale: N.T.S.	A3		Roughness according to ISO 4287, Ra in µm
Design data			Units in mm
Description			
Drawing number			Revision
P062032A05			2

KANON
 LOADING EQUIPMENT
 P.O. Box 385, 3840 AJ Harderwijk



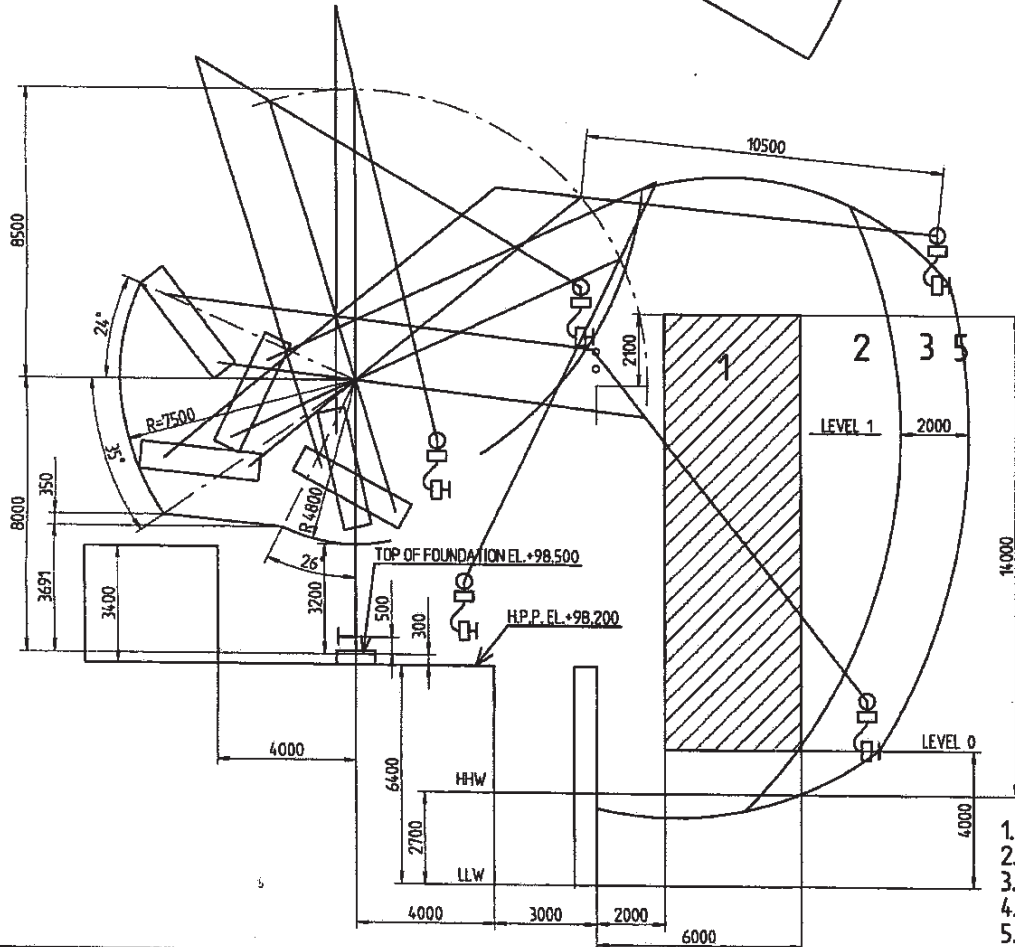
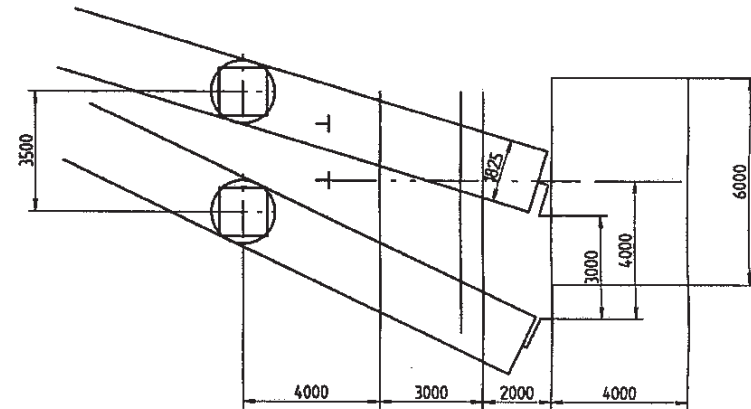
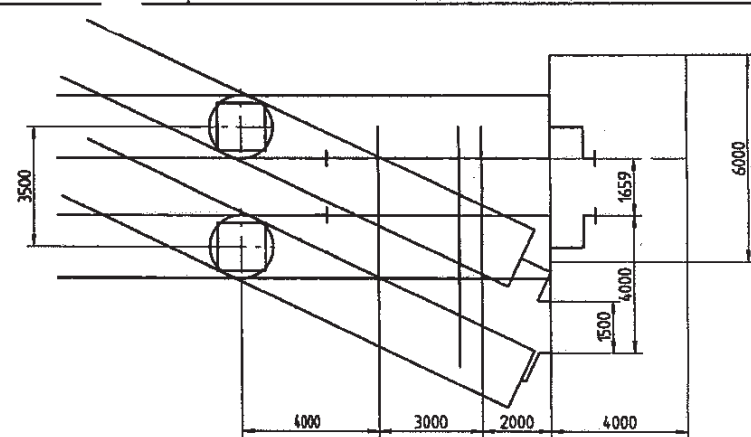
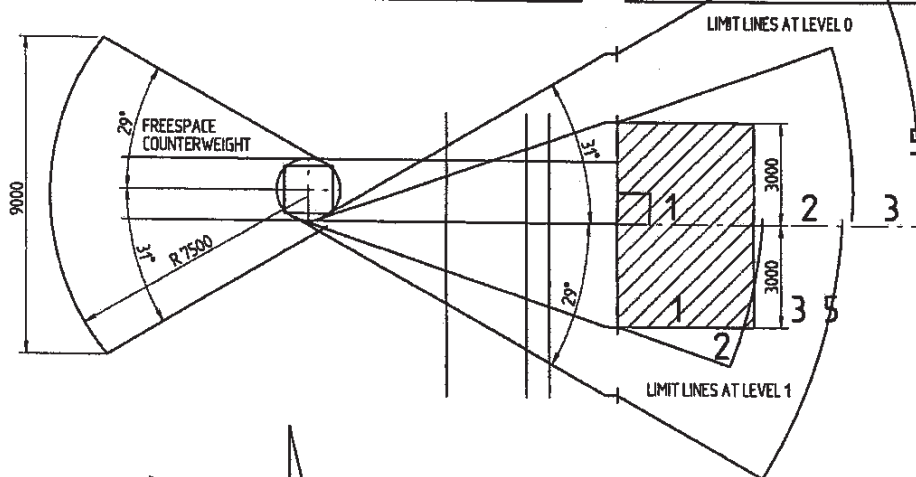
Drawing number

P062032A05

Revision
2

C:\Project\062032\Drawings\MLA A260 12m\Rev\062032A05.dwg

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Jetty 12
Ships: 15000dwt...30000dwt

1. CONNECTING AREA
2. OPERATING AREA
3. WARNING AREA
4. EMERGENCY RELEASE AREA
5. LIMIT LINE

IDENT. NR.	TAG NR.
P062032A10	LA-8111
P062032B10	LA-8112
P062032C10	LA-8113
P062032D10	LA-8114
P062032E10	LA-8121
P062032F10	LA-8122
P062032G10	LA-8123
P062032H10	LA-8124

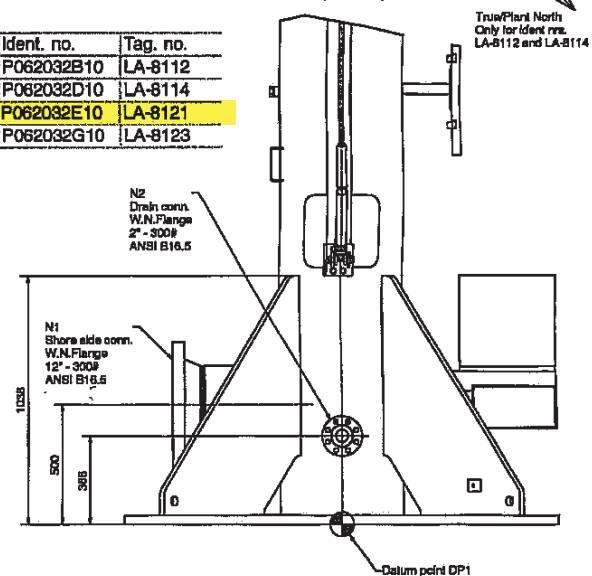
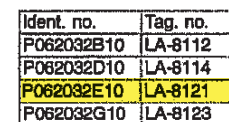
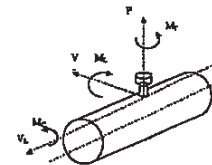
8000x8500x10500

DESCRIPTION/SIZE	REMARKS	MATERIAL	WEIGHT (kg)
3 Added comment's client	HFW 16-08-06	CHECK	1818613.2
2 Added comment's client	N.V. 14-07-06	DRAWN	11-05-06
1 Changed operating envelope	N.V. 12-07-06	DATE	SIGN
REV. DESCRIPTION	SIGN	DATA	SCALE 1:100
DESIGNER	OPERATING ENVELOPE MLA without ERC		
A2	DRAW/IDENT/JLR	P062032A09	REV. 3

RANON
LOADING EQUIPMENT
KANDIA B.V.
PO BOX 35
3848 AJ HARDERWIJK (NL)

Kanon Loading Equipment B.V. Edisonweg 27 3899 AZ Zeewolde The Netherlands Tel: +31(0)36-5219777 P.O. BOX 385 3840 AJ Harderwijk The Netherlands Fax: +31(0)36-5219770 www.kanon.nl				Identnr.		Rev.	Rev. Date	Page				
				P062032A09		2	26-7-06	1 OF 1				
								Name : NV				
								Date : 26-7-06				
Configuration 8x MLA260				Dwg.				A2- P062032A09				
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]	
	1	1	Marine loading arm MLA260 12"	P062032A10	A1-P062032A10	A-106 GrB	LA-8111	Left hand design		3.1	166852	
	2	1	Marine loading arm MLA260 12"	P062032B10	A1-P062032B10	A-106 GrB	LA-8112	Right hand design		3.1	162341	
	3	1	Marine loading arm MLA260 12"	P062032C10	A1-P062032A10	A-106 GrB	LA-8113	Left hand design		3.1	166852	
	4	1	Marine loading arm MLA260 12"	P062032D10	A1-P062032B10	A-106 GrB	LA-8114	Right hand design		3.1	162341	
	5	1	Marine loading arm MLA260 12"	P062032E10	A1-P062032B10	A-106 GrB	LA-8121	Right hand design		3.1	162341	
	6	1	Marine loading arm MLA260 12"	P062032F10	A1-P062032A10	A-106 GrB	LA-8122	Left hand design		3.1	166852	
	7	1	Marine loading arm MLA260 12"	P062032G10	A1-P062032B10	A-106 GrB	LA-8123	Right hand design		3.1	162341	
	8	1	Marine loading arm MLA260 12"	P062032H10	A1-P062032A10	A-106 GrB	LA-8124	Left hand design		3.1	166852	
	9	1	Guard safety "simplex" söl	99002210	Groeneveld	St	Ord.C 30.10.009		--		10	
	10	1	Belt position söl L=1500 mm	99002213	Groeneveld	PA	Ord.C 31.70.072		--		5	
	11	1	Belt safety sölgu-2 arbo approved	99002214	Groeneveld	PA/St.	Ord. 510.3260		--		15	
	12	1	Lifting bridge maint dev MLA 350x1400	20000037	A2-20000037	S355J2G3		H=400 Last 18 ton	--		488	
	13	1	Configuration 9x MLA260	P062032I09	A2-P062032I09				--		1131271	
	14	1	Configuration 3x MLA260	P062032Q09	A2-P062032Q09				--		547226	
Total Weight [N]												2995786





		NOZZLE LIST				Max. Nozzle Loads (V=kg) (M=kg-m)					
Nozzle no.	Description	Nozzle size	Rating	End connection	Remarks	VI	Vc	+P	MI	Mc	Mz
N1	Product connection	12"	300#	WNRF Flange		948	948	1338	1142	1142	1821
N2	Drain	2"	300#	WNRF Flange		112	112	153	20	20	31
N3	Ship's connection product	12"	300#	Hyd. GCOC		948	948	1338	1142	1142	1821
N4	Drain	2"	300#	WNRF Flange		112	112	153	20	20	31
N5	Vacuum breaker	2"	300#	2" Pipe		112	112	153	20	20	31

Cable routing see P062032A91

[illegible]

Kanon Loading Equipment B.V. Edisonweg 27 3899 AZ Zeewolde The Netherlands Tel: +31(0)36-5219777 www.kanon.nl				Identnr. P062032B10		Rev. 5		Rev. Date 12-2-07		Page 1 OF 1			
										Name : NV			
										Date : 10-5-06			
										Dwg. A1- P062032B10			
Marine loading arm MLA260 12"													
Nt	lt	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]		
	1	1	Triple assy 12"-300# with hydraulic QCDC	P062032A11	A1-P062032A11	A-234 GrWPB				3.1	9466		
	2	1	Outboard arm 12" L=10500 RH	P062032B12	A2-P062032B12	A-106 GrB				3.1	18899		
	3	1	Inboard arm right 10" L=8500	P062032A16	A1-P062032A16	A-106 GrB				3.1	12841		
	4	1	Inboard arm left 10" L=8500	P062032A17	A1-P062032A17	A-106 GrB				3.1	12203		
	5	1	Heel 12"x10"	P062032A19	A2-P062032A19	A-106 GrB				3.1	9773		
	6	1	Riser 20"x12" L=8000	P062032A20	A2-P062032A20	A-106 GrB				3.1	34135		
	7	1	Counterweight MLA260 10-220308	P062032A23	A2-P062032A23	S235JRG2				--	70785		
	8	1	Parallel structure MLA260 12" 8500x4000	P062032A24	A2-P062032A24	A-106 GrB				--	5354		
	9	1	Hydraulic cylinder VDW 100/60/60x1350	95401004	A4-95401004	St	Vremac 29566	Gelenkoog ø50	3	--	1450		
	10	1	Hydraulic cylinder VDW 100/60/60x1350	95401004	A4-95401004	St	Vremac 29566	Gelenkoog ø50	3	--	1450		
	11	2	Hydraulic cylinder VDW 80/35x250	95400881	A4-95400804	St	Vremac 28380	Gelenkoog ø35		--	380		
	12	1	Hydraulic / electric system	P062032A99	A1-P062032A99					2	--	1279	
Total Weight [N]												178016	





Kanon Loading Equipment (M) Sdn Bhd
14 & 16, Jln IM 14/8 Indera Mahkota Ind. Area, 25200
Kuantan, Pahang Darul Makmur, Malaysia

Vendor Document No.
**P062032-MLA
A & B**

Rev.
3

Page
1+23

Sectional Drawing
Marine Loading Arms – A & B

Related drawing number;
8474L-081-A2001-4026-051-001
8474L-081-A2001-4026-051-006

VIETNAM OIL AND GAS CORPORATION (PETROVIETNAM)
DUNG QUAT REFINERY (DQR) PROJECT
DUNG QUAT, VIETNAM

Technip

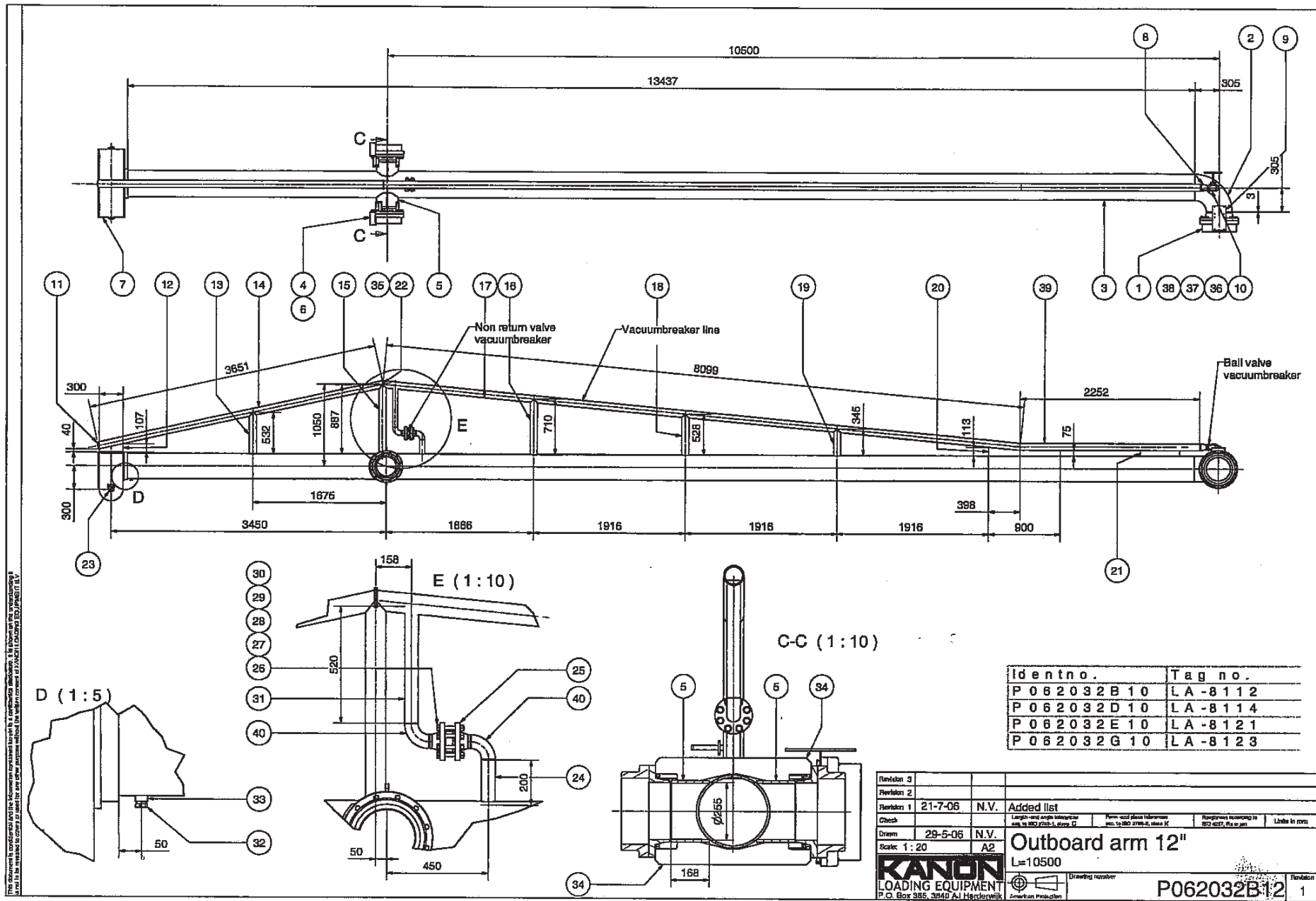
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Requisition Number:	8474L-081-MR-4026-051	Stamp			
Purchase Order Number:	53019	 ChewEow Low 2007.03.15 10:57:26 +08'00' Technip VENDOR DOCUMENT REVIEW ☐ 1. REVIEW AND RECOMMEND ☐ 2. TO BE ISSUED AS FINAL STANDARD COMMENTS AND INCORPORATED ☒ 3. NO COMMENT - FINAL ISSUE Comment given in this document does not relieve vendor of his/her responsibility for the correct engineering design and fabrication. This equipment or product shall be made as per the codes, regulation, specification, project procedures, and international standards.			
Equipment / Item Tag:	LA-8111, LA-8112, LA-8113, LA-8114, LA-8121, LA-8122, LA-8123, LA-8124				
Equipment / Item Description:	Marine Loading Arms Package				
TPC Document Number:	8474L-081-A2001-4026-051-004				
Document Class:	Z				
3	01-Mar-07	Issue for approval	Heo	Erik	Erik
2	22-Aug-06	Issue for approval	Heo	Erik	Erik
1	27-Jul-06	Issue for approval	Heo	Erik	Erik
0	10-Jun-06	Issue for approval	Heo	Erik	Erik
Rev	Date DD-MMM-YY	Status	Written By (name & visa)	Check By (name & visa)	Approved By (name & visa)
Pages changed in this revision:					

Kanon Loading Equipment B.V. Edisonweg 27 3899 AZ Zeewoide The Netherlands Tel: +31(0)36-5219777 www.kanon.nl				P.O. BOX 385 3840 AJ Harderwijk The Netherlands Fax: +31(0)36-5219770		Identnr.		Rev.	Rev. Date	Page		
						P062032A11		2	25-7-06	1 OF 1		
										Name : NV		
						Triple assy 12"-300# with hydraulic QCDC				Date : 10-5-06		
										Dwg. A1- P062032A11		
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]	
KS	1	2	Elbow 12° 90° SR sched. std ø323.9x 9.5	91322838	ANSI B16.28	A-234GRWPB	ASTM			3.1	722	
	2	2	Swiveljoint 812 12" PTFE-C&PTFE&NBR	801086814	A3-80100000	WNr 1.4462	/1.6582/St+316	s1=9.5 s2=9.5		3.1	2752	
	3	1	Wn flange 12" 150# RF s=9.5mm std	92022680	ANSI B16.5	A-105 N	ASTM			3.1	365	
	4	2	Elbow 12° 90° SR sched. std ø323.9x 9.5	91322838	ANSI B16.28	A-234GRWPB	ASTM		2	3.1	722	
	5	1	Support jack with extra adjustable feet	29012007	A2-29012007	AISI 304		Double pipe		--	528	
	6	1	Elbow 2° 45° LR sched. 80 ø 60.3x 5.5	91422222	ANSI B16.9	A-234GRWPB	ASTM			3.1	5	
KS	7	1	Ball valve 2" red. bore gefa DGF af	97070866	A4-97070866	Carbon steel	Butt weld ends	AS+FS acc. BS		3.1	30	
	8	1	Wn flange 2" 300# RF s=5.5mm	92022721	ANSI B16.5	A-105 N	ASTM			3.1	34	
	9	1	Flat bar 40 x 15 L=1510mm	93112159	DIN 1017	S235JRG2	EN 10025			3.1	72	
	10	1	Insulating set assy swiveljoint 12"-150#	49800025	A4-49800025	Cel/PE	Phenolic/Neopr	SAN812/810		--	29	
KS	11	-2	Flange SAN 812 12"	831285704	A3-83128000	A105N+316L		s2=9.5		3.1	-720	
	12	-12	Hex. screw M 24 x 65 mm	94150513	DIN 933	A2-70	DIN 267			--	-36	
	13	12	Hex. bolt M 24 x 80 mm	94050516	DIN 931	A2-70	DIN 267			--	48	
	14	1	Clamp for support jack on rod ø40	29012004	A4-29012004	AISI 304				--	10	
KS	15	1	Hydraulic QCDC 12" 300# 4	P062032A50	A3-P062032A50	A-105 N	ASTM			3.1	4700	
	16	1	Round bar ø 40 L=250mm	93350040		AISI 304L	ASTM			--	25	
	17	1	Support for support jack	P062032A75	A4-P062032A75	A-106 GrB	ASTM			3.1	25	
	18	1	Connecting material pendant	P062032A76		AISI 316				--	8	
KS	19	1	O-ring for Kanon QCDC 12"	96211543	ID CARD	FPM (Viton)		70° Shore A	1	--	0	
KS	20	1	Blanking plate KANON QCDC 12" 300# assy	46982002	A2-46982002	Alu			1	--	154	
	21	1	Pipe seamless ø 60.3 x 5.5 L=54mm	91122222	ANSI B36.10	A-106GRB	ASTM	2"-S80		3.1	4	
Total Weight [N]										9476		

Nt	Description
KS	(NOTE STRICTLY FOR KANON INTERNAL USE)



Kanon Loading Equipment B.V.				Identnr.		Rev.		Rev. Date		Page	
Edisonweg 27 3899 AZ Zeewolde The Netherlands Tel: +31(0)36-5219777 www.kanon.nl				P.O. BOX 385 3840 AJ Harderwijk The Netherlands Fax: +31(0)36-5219770		P062032B12		1		26-7-06	
Outboard arm 12" L=10500 RH										1 OF 2	
										Name : NV	
										Date : 9-6-06	
										Dwg. A2- P062032B12	
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]
KS	1	1	Swiveljoint 812 12" PTFE-C&PTFE&NBR	801086814	A3-80100000	WNR 1.4462	/1.6582/St+316	s1=9.5 s2=9.5	1	3.1	1376
	2	1	Elbow 12" 90° SR sched. std ø323.9x 9.5	91322838	ANSI B16.28	A-234GRWPB	ASTM			3.1	361
	3	1	Pipe seamless ø 323.9 x 9.5 L=13437mm	91122838	ANSI B36.10	A-106GRB	ASTM	12"-STD		3.1	9917
KS	4	2	Swiveljoint 812 10" PTFE-C&PTFE&NBR	801076814	A3-80100000	WNR 1.4462	/1.6582/St+316	s1=9.3 s2=9.3	1	3.1	1658
	5	2	Pipe seamless ø 273 x 9.3 L=168mm	91122737	ANSI B36.10	A-106GRB	ASTM	10"-S40		3.1	202
	6	2	Maintenance device on swivel 10" SAN810	20752103	A3-20752103	AISI 316				--	141
	7	1	Support parallel outboard 12" H=300 ø70	20820002	A3-20820001	S235JRG2		Plate 40 A-516Gr60		3.1	2625
	8	1	Reducer conc. 3"x2" s40 ø 88.9xø 60.3	91522322	ANSI B16.9	A-234GRWPB	ASTM			3.1	9
	9	1	Bracket junction box	P062032A72	A3-P062032A72	S235JRG2				--	47
KS	10	1	Ball valve 2" red. bore gefa DGF af	97070866	A4-97070866	Carbon steel	Butt weld ends	AS+FS acc. BS		3.1	30
MR	11	1	Plate 5mm 80 x 80mm	93010005	EN 10029	S235JRG2	EN 10025			--	2
	12	1	Plate 15mm 300 x 104mm	93010015	EN 10029	S235JRG2	EN 10025			--	25
	13	1	Pipe seamless ø 88.9 x 5.5 L=531mm	91120322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		--	60
	14	1	Pipe seamless ø 88.9 x 5.5 L=3651mm	91120322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		--	413
	15	1	Pipe seamless ø 88.9 x 5.5 L=887mm	91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	100
	16	1	Pipe seamless ø 88.9 x 5.5 L=710mm	91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	80
	17	1	Pipe seamless ø 88.9 x 5.5 L=8099mm	91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	915
	18	1	Pipe seamless ø 88.9 x 5.5 L=528mm	91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	60
	19	1	Pipe seamless ø 88.9 x 5.5 L=345mm	91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	39
	20	1	Plate 10mm 900 x 113mm	93012010	EN 10029	S235JRG2	EN 10025			3.1	89
	21	1	Plate 10mm 300 x 50mm	93012010	EN 10029	S235JRG2	EN 10025			3.1	12
MR	22	1	Plate 10mm 110 x 110mm	93012010	EN 10029	S235JRG2	EN 10025			3.1	7
	23	2	Pin parallel structure ø70 x 290	20000063	A4-20000063	1.4462/304				--	187
	24	1	Pipe seamless ø 60.3 x 5.5 L=200mm	91122222	ANSI B36.10	A-106GRB	ASTM	2 "-S80		3.1	15
	25	2	Wn flange 2" 300# RF sw=5.5mm	92022721	ANSI B16.5	A-105 N	ASTM			3.1	68
	26	8	Hex. bolt M 16 x125 mm	94050425	DIN 931	A2-70	DIN 267			--	16
	27	16	Washer ID 17	94050940	DIN 125	A2				--	0
	28	8	Hex. nut M 16	94050740	DIN 934	A2	DIN 267			--	0
KS	29	1	Non return valve 2"-300# , DN50-PN40	99801893	Gefa	1.4581	Viton O-ring	RF6666V (L=40)		3.1	11
	30	2	Gasket 2" 300# thickness 1.5mm	96040720	ANSI B 16.5		Egraflex GHE98%			--	0
	31	1	Pipe seamless ø 60.3 x 5.5 L=420mm	91122222	ANSI B36.10	A-106GRB	ASTM	2 "-S80		3.1	32
	32	1	Hex. head plug 1/2" NPT 3000#	99800151	ANSI B16.11	A-105N	ASTM		1	--	1
	33	1	Half coupling 1/2" NPT 3000#	91822005	ANSI B16.11	A-105	ASTM		1	3.1	1
	34	2	Reinforcement plate for apex	P062032A74	A3-P062032A74	S235JRG2	ASTM			3.1	136

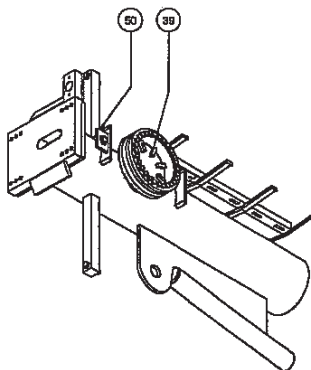
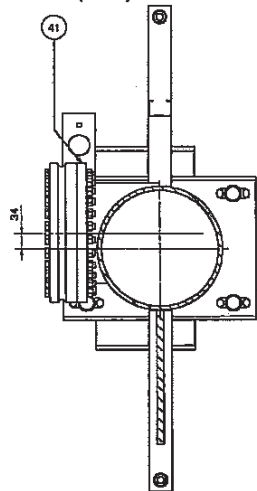
Total Weight [N]

18899

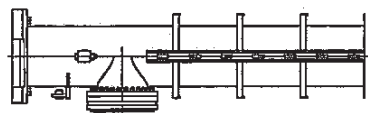
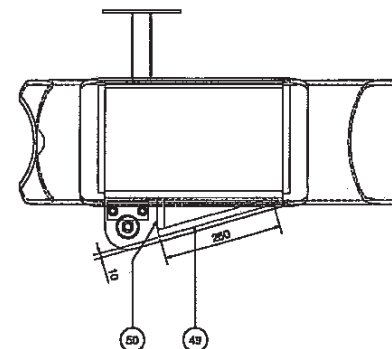
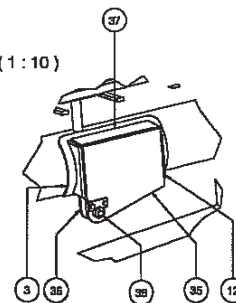
Kanon Loading Equipment B.V. Edisonweg 27 P.O. BOX 385 3899 AZ Zeewolde 3840 AJ Harderwijk The Netherlands The Netherlands Tel: +31(0)36-5219777 Fax: +31(0)36-5219770 www.kanon.nl				Identnr.	Rev.	Rev. Date	Page 2 OF 2				
				P062032B12	1	26-7-06	Name : NV				
							Date : 9-6-06				
							Dwg. A2- P062032B12				
Outboard arm 12" L=10500 RH											
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]
	35	1	Detail pipe connection on inb./outb. arm	20000005	A4-20000005					--	0
KS	36	1	T-handle for ball valve bh.dg1.t.63-0040	99801401	Gefa 6693-3	Stainless steel	For FB:DN32-40	& RB: DN40-50		--	2
	37	1	Chain ø3 L=2500mm	99800288		Stainless steel				--	10
	38	2	D-shackle ø 5	99801322	Haan Hoogerwerf	AISI 316	ASTM	NR. 88010050		--	0
	39	1	Pipe seamless ø 88.9 x 5.5 L=2252mm	91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	254
	40	2	Elbow 2" 90° LR sched. 80 ø 60.3x 5.5	91222222	ANSI B16.9	A-234GRWPB	ASTM			3.1	18
Total Weight [N]											18899

Nt	Description
KS	(NOTE STRICTLY FOR KANON INTERNAL USE)
MR	MAKE ROUND

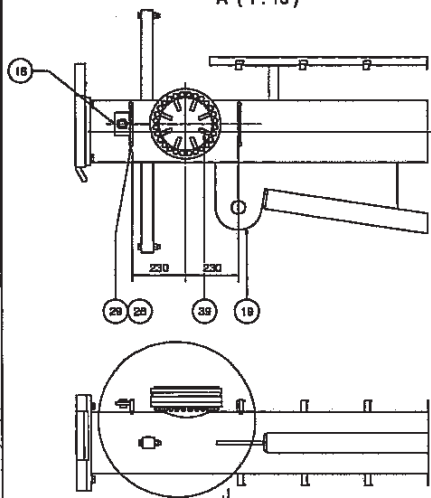
B-B (1:5)



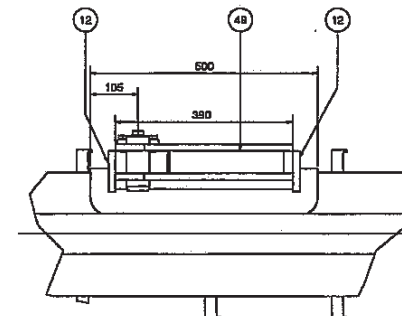
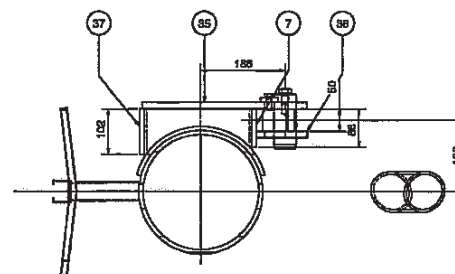
D (1:10)



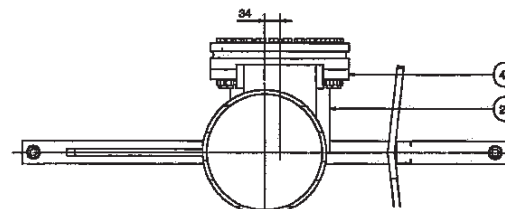
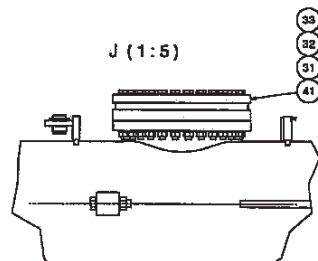
A (1:10)



C (1:5)



J (1:5)



Sheet 2 of 2

Revision	21-7-05	N.V.	Added list, counterweight removed
Revision	12-7-05	N.V.	Changed location turnpoint cylinder
Drawn	3-4-05	N.V.	10" L=9000
Scale	1:25	A1	Inboard arm
RANON LOADING EQUIPMENT P.O. Box 325, 3300 AH Dordrecht, The Netherlands			
P062032A16 2			10" L=9000 Inboard arm

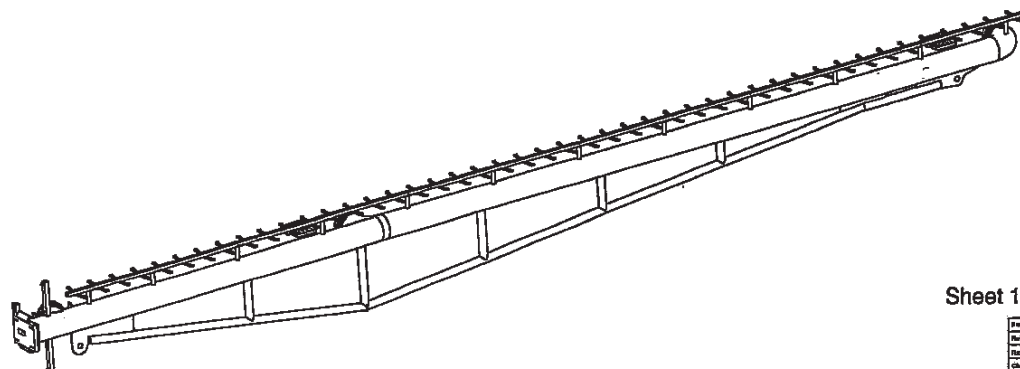
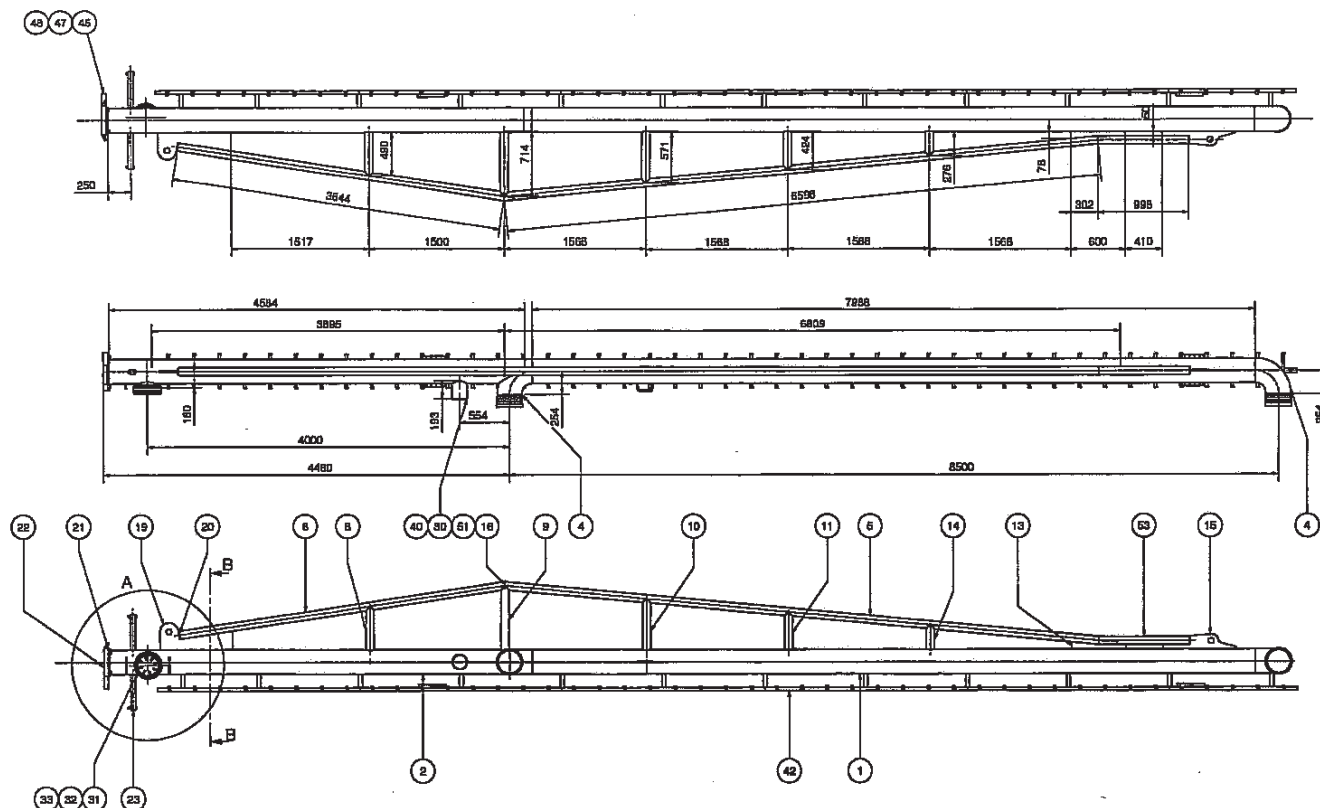
Kanon Loading Equipment B.V.				Identnr.		Rev.	Rev. Date	Page					
Edisonweg 27 3899 AZ Zeewolde The Netherlands Tel: +31(0)36-5219777 www.kanon.nl				P.O. BOX 385 3840 AJ Harderwijk The Netherlands Fax: +31(0)36-5219770		P062032A16		2	25-7-06	1 OF 2			
Inboard arm right 10" L=8500								Dwg.		A1- P062032A16			
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]		
	1	1	Pipe seamless ø 273 x 9.3	L=7986mm 91122737	ANSI B36.10	A-106GRB	ASTM	10"-S40		3.1	4808		
	2	1	Pipe seamless ø 273 x 9.3	L=4584mm 91122737	ANSI B36.10	A-106GRB	ASTM	10"-S40		3.1	2760		
HP	3	1	Pipe seamless ø 273 x 9.3	L=500mm 91122737	ANSI B36.10	A-106GRB	ASTM	10"-S40		3.1	301		
	4	2	Elbow 10" 90° SR sched. 40 ø273.0x 9.3	91322737	ANSI B16.28	A-234GRWPB	ASTM			3.1	490		
	5	1	Pipe seamless ø 88.9 x 5.5	L=6332mm 91120322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		--	716		
	6	1	Pipe seamless ø 88.9 x 5.5	L=3644mm 91120322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		--	412		
	7	1	Plate 15mm	390 x 86mm 93010015	EN 10029	S235JRG2	EN 10025			--	39		
	8	1	Pipe seamless ø 88.9 x 5.5	L=490mm 91120322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		--	55		
	9	1	Pipe seamless ø 88.9 x 5.5	L=714mm 91120322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		--	81		
	10	1	Pipe seamless ø 88.9 x 5.5	L=578mm 91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	65		
	11	1	Pipe seamless ø 88.9 x 5.5	L=424mm 91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	48		
	12	2	Plate 15mm	237 x 110mm 93010015	EN 10029	S235JRG2	EN 10025			--	35		
	13	1	Plate 10mm	600 x 78mm 93012010	EN 10029	S235JRG2	EN 10025			3.1	26		
	14	1	Pipe seamless ø 88.9 x 5.5	L=276mm 91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	31		
	15	1	Plate 15mm	800 x 165mm 93012015	EN 10029	S235JRG2	EN 10025			3.1	78		
	16	1	Detail pipe connection on Inb./outb. arm	20000005	A4-20000005					--	0		
	17	1	Mounting plate for junction box	48100002	A4-48100002	S235JRG2		Stahl 8146/x04x		--	16		
	18	1	Plate 10mm	100 x 65mm 93010010	EN 10029	S235JRG2	EN 10025			--	4		
	19	1	Plate 15mm	800 x 300mm 93010015	EN 10029	S235JRG2	EN 10025			--	227		
MR	20	2	Plate 5mm	80 x 80mm 93010005	EN 10029	S235JRG2	EN 10025			--	4		
	21	1	Endplate Inboard arm 10" on MLA260	20750005	A4-20750005	S235JRG2				--	198		
	22	1	Lockplate LD MLA260 on 10" pipe	20700003	A3-20700003	S235JRG2				--	559		
	23	2	Balance weight Square 50 L=400 0 weights	20080013	A4-20080013	St.	0 weights	Square 50 L=400	2	--	159		
	27	1	Pipe seamless ø 219.1 x 8.2	L=160mm 91120633	ANSI B36.10	A-106GRB	ASTM	8 "-S40		--	68		
	28	2	Plate 10mm	159 x 115mm 93010010	EN 10029	S235JRG2	EN 10025			--	24		
	29	4	Round bar ø 16	L=50mm 93350016		AISI 304L	ASTM			--	3		
MR	30	1	Plate 5mm	160 x 160mm 93010005	EN 10029	S235JRG2	EN 10025			--	8		
	31	28	Hex. bolt M 12 x 95 mm	94020369	DIN 6914	10.9	ISO 7412	Hot dip galvanised		--	28		
	32	28	Hex. nut M 12	94020735	DIN 934	10		Hot dip galvanized		--	0		
	33	56	Washer ID 13	94020935	DIN 6916	HV10	ISO 7416	Hot dip galvanized		--	0		
	35	1	Plate 15mm	390 x 365mm 93010015	EN 10029	S235JRG2	EN 10025			--	147		
	36	1	Plate 15mm	390 x 114mm 93010015	EN 10029	S235JRG2	EN 10025			--	32		
	37	1	Plate 15mm	390 x 102mm 93010015	EN 10029	S235JRG2	EN 10025			--	47		
	38	1	Pin hydraulic drive ø50x125	20000066	A4-20000066	WNr 1.4462		Deep 105		--	23		

Total Weight [N]

12841

Kanon Loading Equipment B.V. Edisonweg 27 3899 AZ Zeewolde The Netherlands Tel: +31(0)36-5219777 www.kanon.nl			P.O. BOX 385 3840 AJ Harderwijk The Netherlands Fax: +31(0)36-5219770		Identnr. P062032A16 Inboard arm right 10" L=8500	Rev. 2	Rev. Date 25-7-06	Page 2 OF 2	Name : NV	Date : 10-5-06	Dwg. A1- P062032A16
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]
	39	8	Square bar 10 L=50mm	93410010		S235JRG2	EN 10025			--	3
	40	1	Pipe seamless ø 168.3 x 7.1 L=193mm	91120528	ANSI B36.10	A-106 GrB	ASTM	6"-S40		--	54
	41	1	Flange bearing s.1.039-341/10-220308	527014	A4-527014	S235JRG2		ø306x20 Binnenring		--	110
	42	1	Stairs in Inboard arm right	P062032A59	A3-P062032A59	ST. GALV.				--	996
	47	4	Washer ID 21	94050944	DIN 7349	A2				--	0
	48	4	Hex. bolt M 20 x 60 mm	94050462	DIN 931	A2-70	DIN 267			--	40
	49	1	Plate 15mm 260 x 50mm	93010015	EN 10029	S235JRG2	EN 10025			--	15
	50	1	Plate 15mm 50 x 200mm	93010015	EN 10029	S235JRG2	EN 10025			--	12
MR	51	1	Plate 10mm 110 x 110mm	93010010	EN 10029	S235JRG2	EN 10025			--	7
	53	1	Pipe seamless ø 88.9 x 5.5 L=998mm	91140322	ANSI B36.10	A-333GR6	ASTM	3"-S40		--	113
	54	1	Plate 15mm 0 x 0mm	93040015		A-516GR60	ASTM			--	0
Total Weight [N]											12841

Nt	Description
HP	TO MAKE HALF PIECES OF PIPE
MR	MAKE ROUND

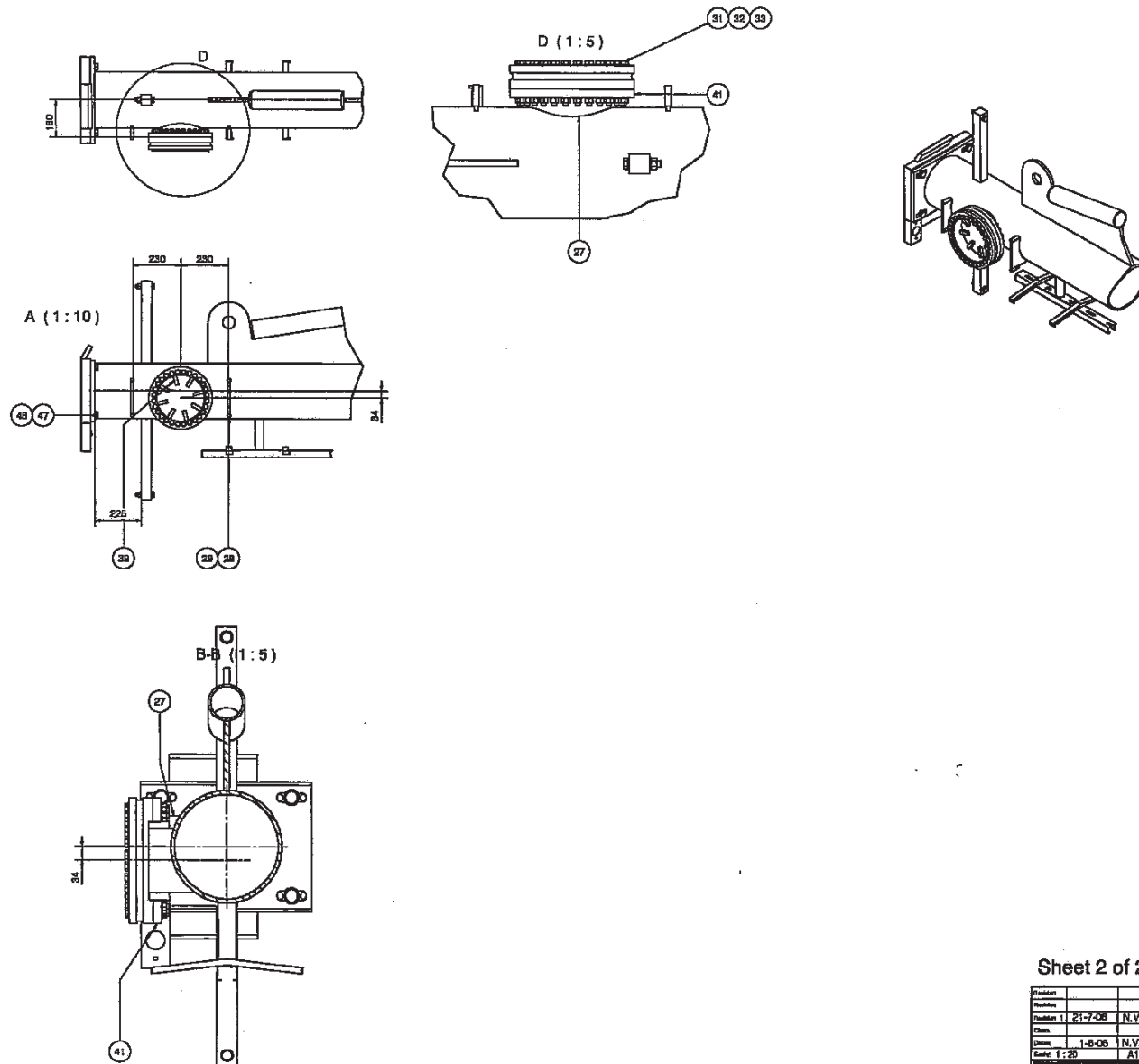


Identno.	Tag no.
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P062032B10	LA-8112
P062032C10	LA-8113
P062032D10	LA-8114
P062032E10	LA-8121
P062032F10	LA-8122
P062032G10	LA-8123
P062032H10	LA-8124

Sheet 1 of 2

Details see drawing P062032A54

Revision	21-7-08	N.V.	Added list
Drawn	1-5-08	N.V.	AT
Scale	1:20		
KANON LOADING EQUIPMENT P.O. Box 383, 2500 AD Wageningen			
Inboard arm 10' L=8500			P062032A17 1



Identno.	Tag no.
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P062032B10	LA-8112
P062032C10	LA-8113
P062032D10	LA-8114
P062032E10	LA-8121
P062032F10	LA-8122
P062032G10	LA-8123
P062032H10	LA-8124

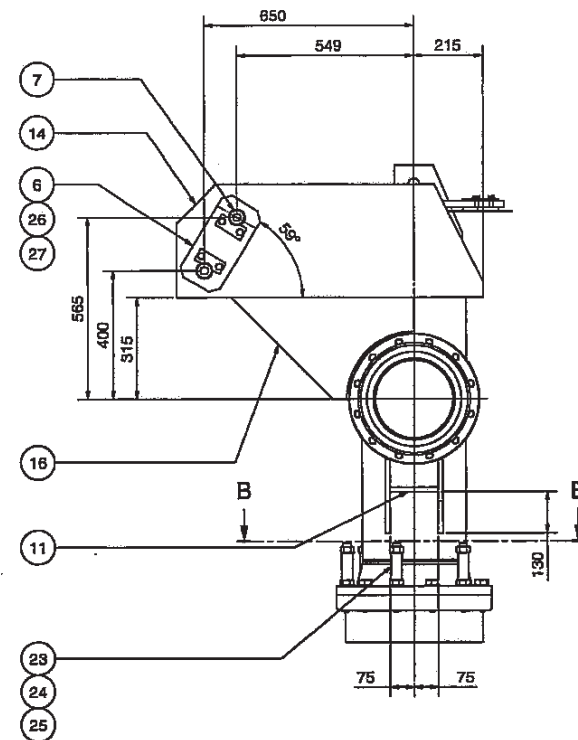
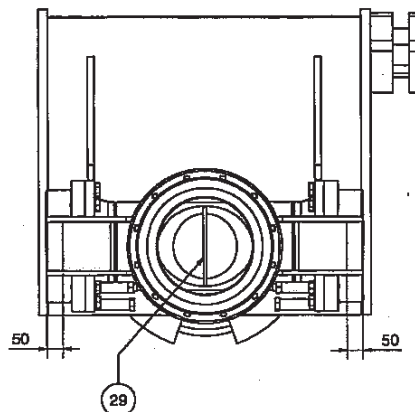
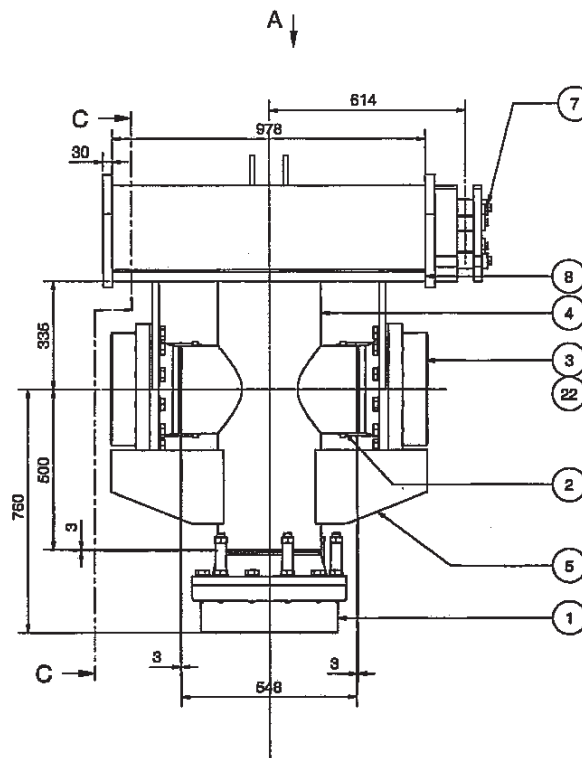
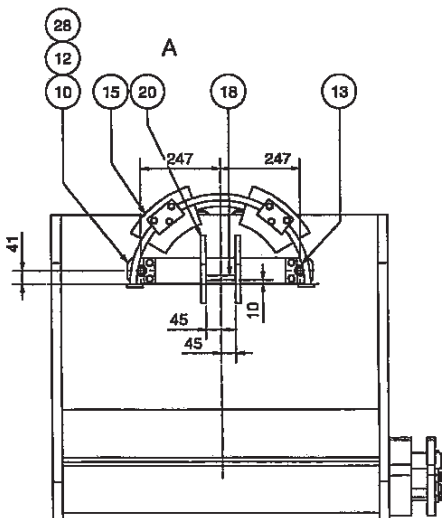
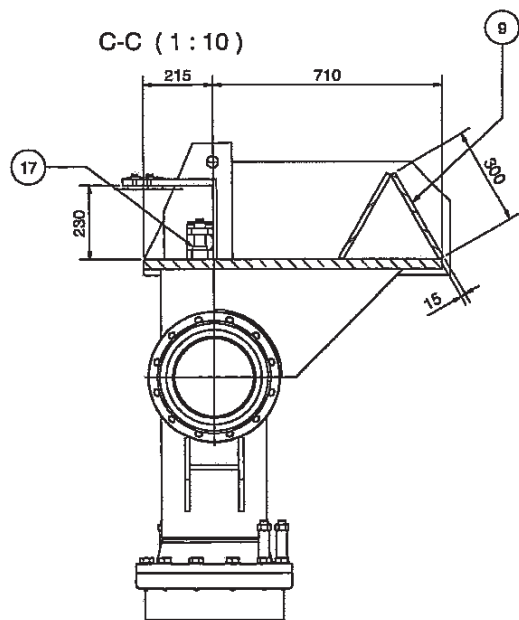
Sheet 2 of 2

Revision			
Revision 1	21-7-08	N.V.	Added list
Drawn	1-8-08	N.V.	10" Lx B500
Scale	1:20	A1	Inboard arm
KANON LOADING EQUIPMENT P.O. Box 255, 8200 AZ, Breda, The Netherlands		Drawing number P062032A17	

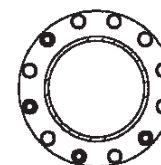
Kanon Loading Equipment B.V. Edisonweg 27 3899 AZ Zeewolde The Netherlands Tel: +31(0)36-5219777 www.kanon.nl				P.O. BOX 385 3840 AJ Harderwijk The Netherlands Fax: +31(0)36-5219770		Identnr. P062032A17	Rev. 3	Rev. Date 14-8-2006	Page 1 OF 2		
Inboard arm left 10" L=8500									Dwg. A1- P062032A17		
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]
	1	1	Pipe seamless ø 273 x 9.3	L=7986mm 91122737	ANSI B36.10	A-106GRB	ASTM	10"-S40		3.1	4808
	2	1	Pipe seamless ø 273 x 9.3	L=4584mm 91122737	ANSI B36.10	A-106GRB	ASTM	10"-S40		3.1	2760
	3	1		0					--		0
	4	2	Elbow 10" 90° SR sched. 40 ø273.0x9.3	91322737	ANSI B16.28	A-234GRWPB	ASTM			3.1	490
	5	1	Pipe seamless ø 88.9 x 5.5	L=6598mm 91120322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		--	746
	6	1	Pipe seamless ø 88.9 x 5.5	L=3644mm 91120322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		--	412
	7	1		0					--		0
	8	1	Pipe seamless ø 88.9 x 5.5	L=490mm 91120322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		--	55
	9	1	Pipe seamless ø 88.9 x 5.5	L=714mm 91120322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		--	81
	10	1	Pipe seamless ø 88.9 x 5.5	L=571mm 91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	65
	11	1	Pipe seamless ø 88.9 x 5.5	L=424mm 91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	48
	12	1		0					--		0
	13	1	Plate 10mm	600 x 78mm 93012010	EN 10029	S235JRG2	EN 10025			3.1	26
	14	1	Pipe seamless ø 88.9 x 5.5	L=276mm 91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	31
	15	1	Plate 15mm	800 x 165mm 93012015	EN 10029	S235JRG2	EN 10025			3.1	78
	16	1	Detail pipe connection on inb./outb. arm	20000005	A4-20000005					--	0
	17	0		0					3	--	0
	18	1	Plate 10mm	100 x 65mm 93010010	EN 10029	S235JRG2	EN 10025			--	4
	19	1	Plate 15mm	800 x 300mm 93010015	EN 10029	S235JRG2	EN 10025			--	227
MR	20	2	Plate 5mm	80 x 80mm 93010005	EN 10029	S235JRG2	EN 10025			--	4
	21	1	Endplate inboard arm 10" on MLA260	20750005	A4-20750005	S235JRG2				--	198
	22	1	Lockplate LD MLA260 on 10" pipe	20700003	A3-20700003	S235JRG2				--	559
	23	2	Balance weight Square 50 L=400 0 weights	20080013	A4-20080013	St.	0 weights	Square 50 L=400	2	--	159
	27	1	Pipe seamless ø 219.1 x 8.2	L=160mm 91120633	ANSI B36.10	A-106GRB	ASTM	8 "-S40		--	68
	28	2	Plate 10mm	159 x 115mm 93010010	EN 10029	S235JRG2	EN 10025			--	24
	29	4	Round bar ø 16	L=50mm 93350016		AISI 304L	ASTM			--	3
MR	30	1	Plate 5mm	160 x 160mm 93010005	EN 10029	S235JRG2	EN 10025			--	8
	31	28	Hex. bolt M 12 x 95 mm	94020369	DIN 6914	10.9	ISO 7412	Hot dip galvanised		--	28
	32	28	Hex. nut M 12	94020735	DIN 6915	10	ISO 7414	Hot dip galvanized		--	0
	33	56	Washer ID 13	94020935	DIN 6916	HV10	ISO 7416	Hot dip galvanized		--	0
	35	1		0					--		0
	36	1		0					--		0
	37	1		0					--		0
	38	1		0					--		0
Total Weight [N]										12203	

Kanon Loading Equipment B.V.				Identnr.		Rev.		Rev. Date		Page		
Edisonweg 27				P.O. BOX 385		3		14-8-2006		2 OF 2		
3899 AZ Zeewolde				3840 AJ Harderwijk		P062032A17				Name : NV		
The Netherlands				The Netherlands						Date : 1-6-2006		
Tel: +31(0)36-5219777				Fax: +31(0)36-5219770		Inboard arm left 10" L=8500				Dwg. A1- P062032A17		
www.kanon.nl												
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]	
	39	8	Square bar 10	L=50mm 93410010		S235JRG2	EN 10025			--	3	
	40	1	Pipe seamless ø 168.3 x 7.1	L=193mm 91120528	ANSI B36.10	A-106 GrB	ASTM	6 "-S40		--	54	
	41	1	Flange bearing s.1.039-341/10-220308	527014	A4-527014	S235JRG2		ø306x20 Binnening		--	110	
	42	1	Stairs in inboard arm right	P062032A59	A3-P062032A59	ST. GALV.				--	996	
	47	4	Washer ID 21	94050944	DIN 7349	A2				--	0	
	48	4	Hex. bolt M 20 x 60 mm	94050462	DIN 931	A2-70	DIN 267			--	40	
	49	1		0						--	0	
	50	1		0						--	0	
MR	51	1	Plate 10mm	110 x 110mm 93010010	EN 10029	S235JRG2	EN 10025			--	7	
	53	1	Pipe seamless ø 88.9 x 5.5	L=998mm 91120322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		--	113	
	54	1		0						--	0	
										Total Weight [N]		12203

Nt	Description
MR	MAKE ROUND



B-B



Identno.	Tag no.
P062032A10	LA-8111
P062032B10	LA-8112
P062032C10	LA-8113
P062032D10	LA-8114
P062032E10	LA-8121
P062032F10	LA-8122
P062032G10	LA-8123
P062032H10	LA-8124

Details see dwg. P062032A56

Revision	21-7-06	N.V.	Added list
Revision	14-8-06	N.V.	Changed item 6
Check	31-5-06	N.V.	Length and angle tolerance acc. to ISO 2768-1, class C
Drawn	1:10	A2	Form and plate dimension acc. to ISO 2768-1, class M
Book	1:10	A2	Roundness according to ISO 2517, Form pm
Units	mm		
Drawn	31-5-06	N.V.	Heel
Book	1:10	A2	12"x10"
Revision	2		

RANON
LOADING EQUIPMENT
P.O. Box 385, 3840 AJ Harderwijk



Drawing number

P062032A19

Revision

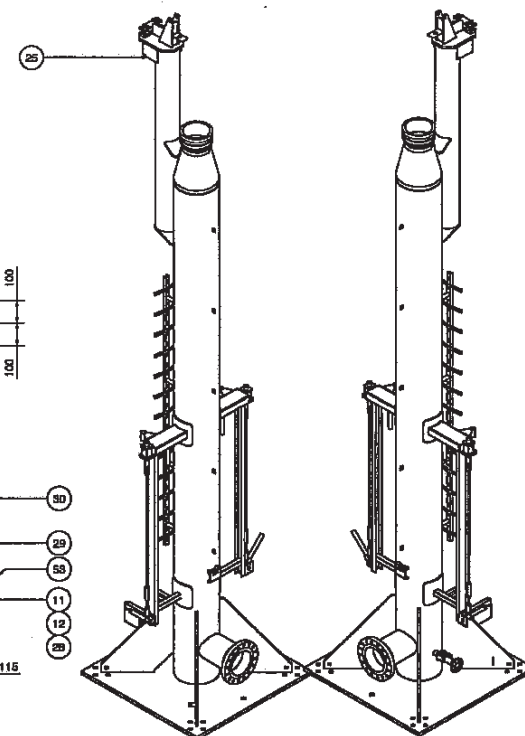
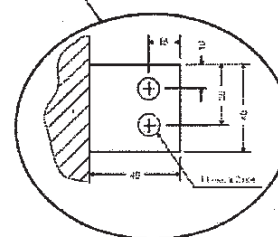
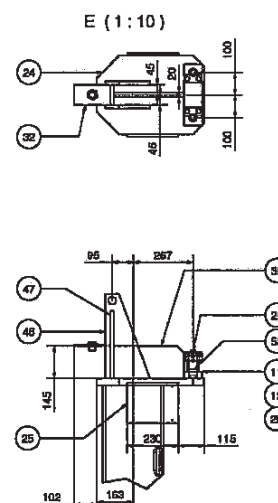
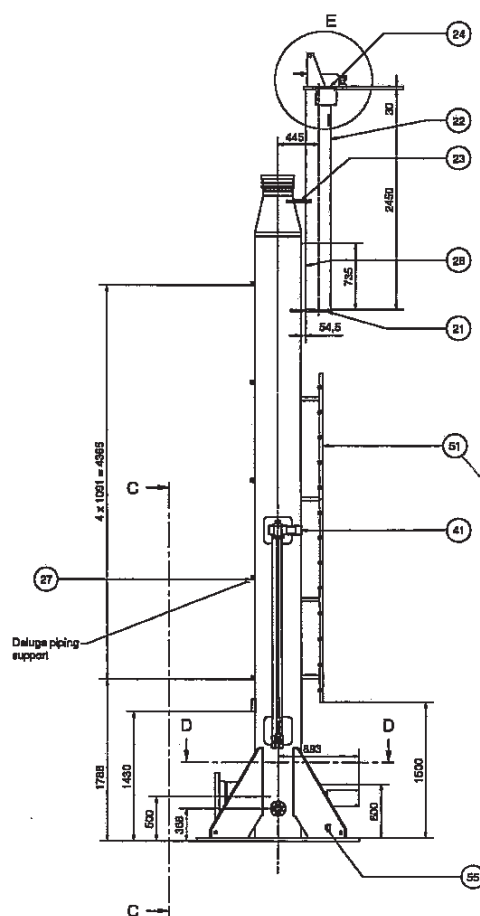
Kanon Loading Equipment B.V. Edisonweg 27 3899 AZ Zeewolde The Netherlands Tel: +31(0)36-5219777 www.kanon.nl		P.O. BOX 385 3840 AJ Harderwijk The Netherlands Fax: +31(0)36-5219770	Identnr. P062032A19 Heel 12"x10"	Rev. 2	Rev. Date 26-7-06	Page 1 OF 1
						Name : NV
						Date : 10-5-06
						Dwg. A2- P062032A19

Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]
KS	1	1	Swiveljoint 812 12" PTFE-C&PTFE&NBR	801086814	A3-80100000	WNR 1.4462	/1.6582/St+316	s1=9.5 s2=9.5	2	3.1	1376
	2	1	Pipe seamless ø 273 x 12.7 L=548mm	91122750	ANSI B36.10	A-106GRB	ASTM	10"-S60/XS		3.1	447
KS	3	2	Swiveljoint 812 10" PTFE-C&PTFE&NBR	801076814	A3-80100000	WNR 1.4462	/1.6582/St+316	s1=9.3 s2=9.3	2	3.1	1858
	4	1	Pipe seamless ø 323.9 x 9.5 L=835mm	91122838	ANSI B36.10	A-106GRB	ASTM	12"-STD		3.1	616
	5	4	Plate 15mm 350 x 230mm	93012015	EN 10029	S235JRG2	EN 10025			3.1	320
	6	1	Plate 70mm 293 x 140mm	93010070	EN 10029	S235JRG2	EN 10025		1	--	224
	7	2	Pin hydraulic drive ø50x125	20000066	A4-20000066	WNR 1.4462		Deep 105		--	47
	8	1	Plate 30mm 978 x 925mm	93022030	EN 10029	S355J2G3	EN 10025			3.1	2130
	9	2	Plate 15mm 978 x 300mm	93010015	EN 10029	S235JRG2	EN 10025			--	402
	10	1	Plate 20mm 573 x 80mm	93010020	EN 10029	S235JRG2	EN 10025			--	72
	11	2	Plate 15mm 150 x 150mm	93010015	EN 10029	S235JRG2	EN 10025			--	53
	12	1	Plate 30mm 573 x 80mm	93010030	EN 10029	S235JRG2	EN 10025			--	108
	13	2	Pin hydraulic drive ø35 x 115	20000067	A4-20000067	1.4462/304				--	22
	14	2	Plate 30mm 950 x 350mm	93010030	EN 10029	S235JRG2	EN 10025		1	--	1426
	15	1	Detection plate rotation drive	P062032A61	A3-P062032A61	S235JRG2				--	72
	16	2	Plate 20mm 589 x 335mm	93010020	EN 10029	S235JRG2	EN 10025			--	340
	17	2	Fill ring ø45 x ø36 x 12	44000014	A4-44000014	AISI 316L	ASTM			--	2
	18	1	Plate 15mm 150 x 90mm	93010015	EN 10029	S235JRG2	EN 10025			--	16
	20	2	Plate 15mm 360 x 210mm	93010015	EN 10029	S235JRG2	EN 10025			--	112
	22	2	Maintenance device on swivel 10" SAN810	20752104	A3-20752104	AISI 316				--	61
	23	4	Threaded rod M24 L=200mm	94150500	DIN 975	A2-70				--	29
	24	8	Hex. nut M 24	94050750	DIN 934	A2	DIN 267			--	8
	25	4	Pipe welded ø 33.4 x 3.38 L=85mm	91060073	ANSI B36.10	AISI 316L	ASTM	1"-S40		--	8
	26	1	Square bar 50 L=120mm	93410050		S235JRG2	EN 10025			--	24
	27	1	Plate 25mm 293 x 140mm	93010025	EN 10029	S235JRG2	EN 10025			--	81
	28	1	Square bar 50 L=373mm	93410050		S235JRG2	EN 10025			--	73
MR	29	1	Plate 10mm 242 x 242mm	93012010	EN 10029	S235JRG2	EN 10025			3.1	46

Total Weight [N]

9773

Nt	Description
KS	(NOTE STRICTLY FOR KANON INTERNAL USE)
MR	MAKE ROUND



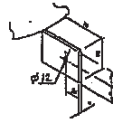
Revision 5	25-2-07	N.V.	Detail Earthing Boxes		
Revision 3	10-8-06	EvH	Added comments client		
Revision 1	20-7-06	N.V.	Added list		
Client	22-11-07		SED	1 line lightning protection on 100/1000V lines C	100V lightning protection on 100/1000V lines C
Uptake	20-5-05		N.V.	100V lightning protection on 100/1000V lines C	
Scale: 1:10	A1		Riser		
20"x12" L=8500			 Drawing number		
 LOADING EQUIPMENT			P062032A20		

Sheet 1 of 3
Details see dwg P062032A55

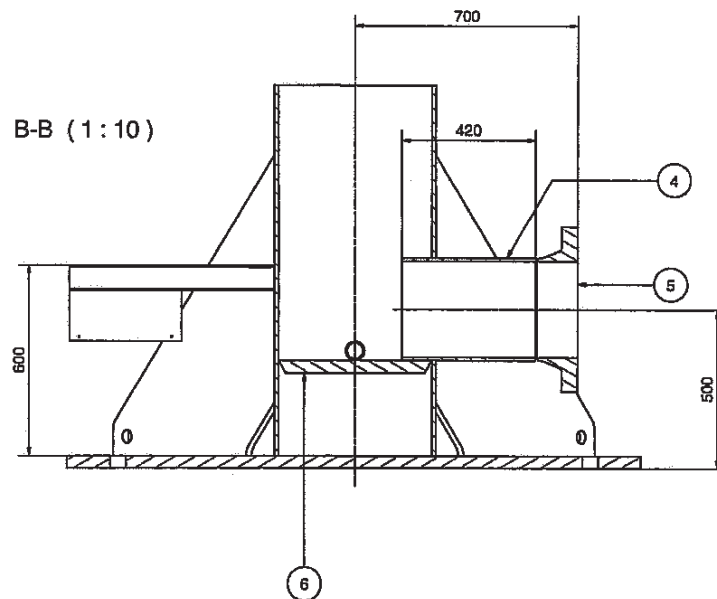
Văn bản được tải lên hệ thống eoffice.bsr.com.vn. Với số định danh: 4496/TTr-TMDV/2025



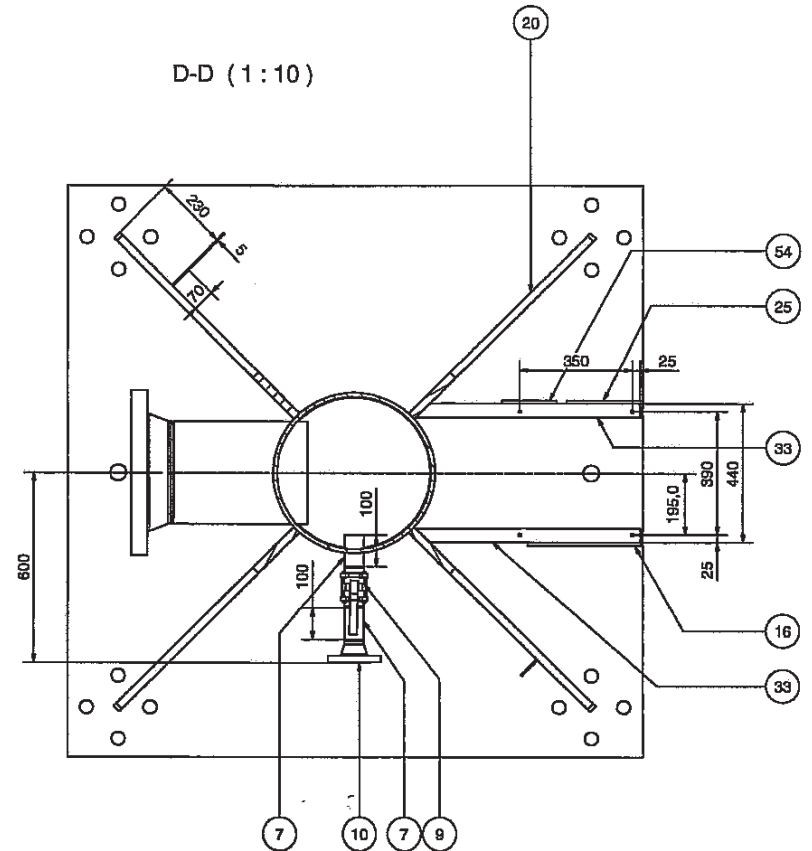
Detail Earthing Boss



B-B (1:10)

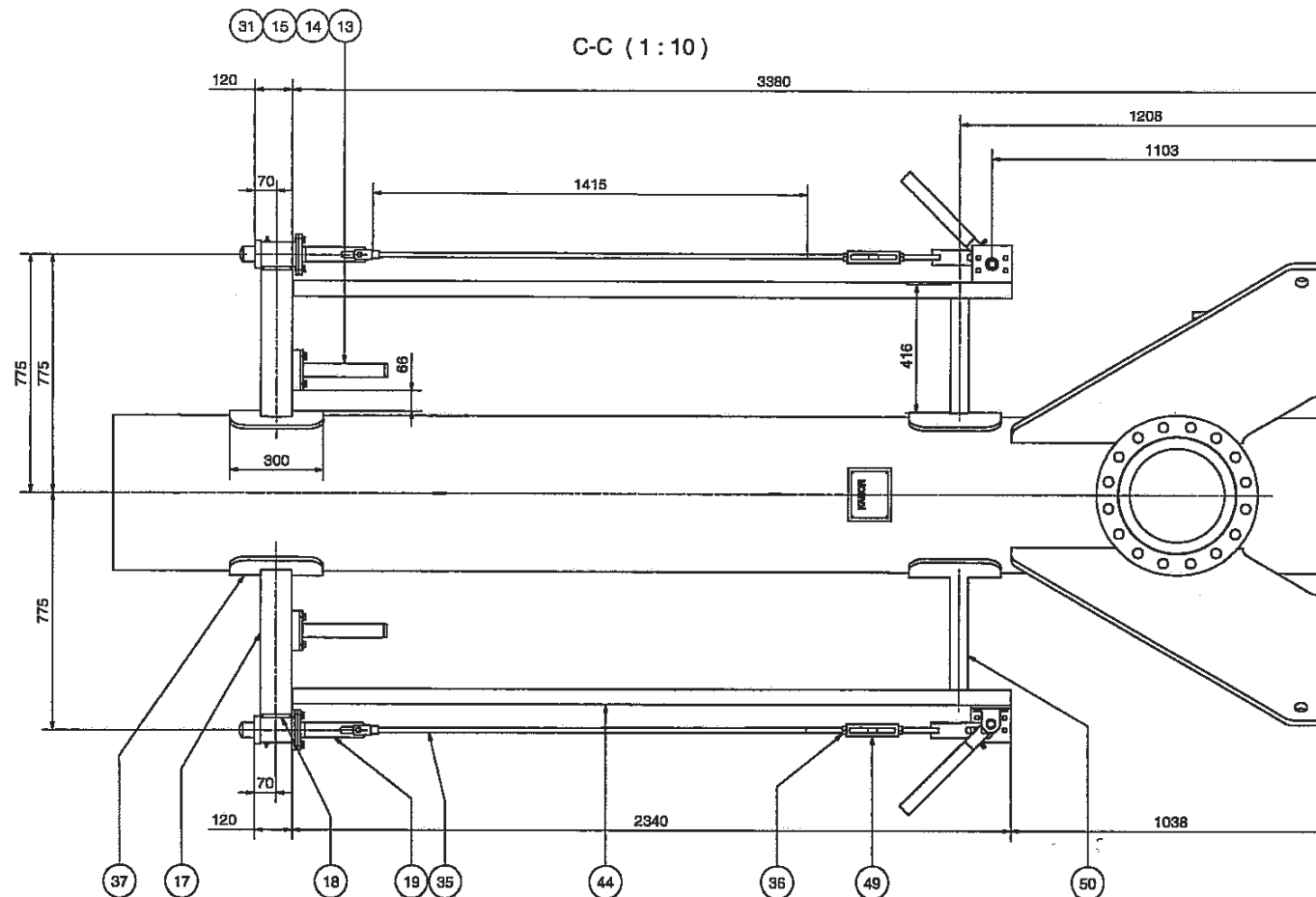


D-D (1:10)



Sheet 2 of 3

Revision 3	28-2-07	N.V.	Detail Earthing Boss
Revision 2	10-8-08	EvH	Added comments client
Revision 1	20-7-08	N.V.	Added list
Drawn	27-2-07	N.V.	Length and weight dimensions are in mm (inches), show in
Drawn	30-5-08	N.V.	Form and place dimensions are in mm (inches), show in
Scale:	1:10	A2	Dimensions according to
RANON LOADING EQUIPMENT P.O. Box 385, 3840 AJ Harderwijk			Drawing number P062032A20
American Production			Revision 3



Sheet 3 of 3

Revision 3	26-2-07	N.V.	Detail Earthing Boss			
Revision 2	10-8-06	EvH	Added comments client			
Revision 1	20-7-06	N.V.	Added list			
Check	1-7-12	3SD	Length and angle dimensions mm to 1000 4700-1, else 0'	Drawn and place dimensions mm to 1000 4700-1, else 0'	Dimensions as working in 1000-4700, else as per	Scale in mm
Drawn	30-5-06	N.V.	Riser			
Scale:	1 : 10	A2	20"x12" L=8500			
 LOADING EQUIPMENT P.O. Box 385, 3840 AJ Harderwijk			 Draughting number		Revision P062032A20 3	

Kanon Loading Equipment B.V. Edisonweg 27 3899 AZ Zeewolde The Netherlands Tel: +31(0)36-5219777 www.kanon.nl				P.O. BOX 385 3840 AJ Harderwijk The Netherlands Fax: +31(0)36-5219770		Identnr.		Rev.	Rev. Date	Page		
						P062032A20		3	27-2-07	1 OF 2		
										Name : NV		
										Date : 10-5-06		
Riser 20"x12" L=8000								Dwg. A2- P062032A20				
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]	
	1	1	Baseplate MLA 1800x1800x38	29070015	A4-29070015	S235JRG2	OUN 526026	Anchorbolts 16x M36		--	8900	
	2	1	Pipe seamless ø 508.0 x 15,1	L=6655mm 91122953	ANSI B36.10	A-106GRB	ASTM	20"-S40		3.1	12205	
	3	1	Reducer conc.20"x12" XS ø508.0xø323.9	91522978	ANSI B16.9	A-234GRWPB	ASTM			3.1	790	
	4	1	Pipe seamless ø 323.9 x 9.5	L=420mm 91122838	ANSI B36.10	A-106GRB	ASTM	12"-STD		3.1	310	
	5	1	Wn flange 12" 300# RF s=9.5mm std	92022780	ANSI B16.5	A-105 N	ASTM			3.1	618	
	6	1	Plate inside riserpipe ø 508.0 x 15,1	20970113	A4-20970112	S355J2G3		ø472x40		3.1	509	
	7	2	Pipe seamless ø 60.3 x 5.5	L=100mm 91122222	ANSI B36.10	A-106GRB	ASTM	2 "-S80		3.1	15	
KS	9	2	Ball valve 2" red. bore gefa DGF af	97070866	A4-97070866	Carbon steel	Butt weld ends	AS+FS acc. BS		3.1	60	
	10	1	Wn flange 2" 300# RF	a=5.5mm 92022721	ANSI B16.5	A-105 N	ASTM			3.1	34	
	11	1	Plate 20mm	270 x 80mm 93010020	EN 10029	S235JRG2	EN 10025			--	34	
	12	1	Square bar 50	L=105mm 93410050		S235JRG2	EN 10025			--	21	
	13	2	Pin maintenance device MLA260 ø45 x 305	20000014	A4-20000014	1.4462/304				--	88	
	14	4	Hex. screw M 12 x 30 mm	94150356	DIN 933	A2-70	DIN 267			--	4	
	15	4	Washer ID 13	94050935	DIN 125	A2	DIN 522			--	0	
	16	1	Mounting plate for junction box	48100005	A4-48100005	S235JRG2		Stahl 8146/x07x		--	49	
	17	2	Hollow section 200x100x 8	L=475mm 93210725		S235JRH	EN 10210/10219			--	323	
	18	2	Plate 10mm	190 x 90mm 93010010	EN 10029	S235JRG2	EN 10025			--	27	
	19	2	Locking set MLA special pin ø50 concentr	20000044	A2-20000044	SS/ST				--	352	
	20	4	Side plate riser	P062032173	A4-P062032173	S235JRG2				3.1	3368	
	21	1	Plate 20mm	450 x 448mm 93012020	EN 10029	S235JRG2	EN 10025			3.1	154	
	22	1	Support pipe ø 273 x 12.7	P062032A52	A3-P062032A52	A-106 GrB	ASTM	For slewing drive		--	1995	
	23	1	Plate 20mm	450 x 260mm 93012020	EN 10029	S235JRG2	EN 10025			3.1	97	
	24	1	Plate 30mm	480 x 350mm 93010030	EN 10029	S235JRG2	EN 10025			--	386	
	25	2	Mounting plate for junction box	48100004	A4-48100004	S235JRG2		Stahl 8146/x06x		--	65	
	26	1	Plate 20mm	735 x 54mm 93012020	EN 10029	S235JRG2	EN 10025			3.1	62	
	27	2	Plate 5mm	70 x 50mm 93010005	EN 10029	S235JRG2	EN 10025		2	--	3	
	28	1	Plate 30mm	270 x 80mm 93010030	EN 10029	S235JRG2	EN 10025			--	51	
	29	2	Pin hydraulic drive ø35 x 115	20000067	A4-20000067	1.4462/304				--	22	
	30	1	Plate 20mm	315 x 145mm 93010020	EN 10029	S235JRG2	EN 10025			--	71	
	31	2	Plate 25mm	130 x 60mm 93010025	EN 10029	S235JRG2	EN 10025			--	31	
	32	1	Plate 10mm	163 x 90mm 93010010	EN 10029	S235JRG2	EN 10025			--	12	
	33	2	Channel UNP 80	L=700mm 93500080	DIN 1026	S235JRG2	EN 10025			--	120	
	34	1	Ident plate assy MLA CE PED	29070002	A3-29070002	ST/ST.ST.				--	18	
	35	2	Round bar ø 16	L=1415mm 93350016		AISI 304L	ASTM			--	45	

Total Weight [N]

34135

Kanon Loading Equipment B.V. Edisonweg 27 3899 AZ Zeewolde The Netherlands Tel: +31(0)36-5219777 www.kanon.nl				Identnr. P062032A20 Riser 20"x12" L=8000		Rev. 3	Rev. Date 27-2-07	Page 2 OF 2			
								Name : NV			
								Date : 10-5-06			
								Dwg. A2- P062032A20			
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]
	36	4	Hex. nut M 16	94050740	DIN 934	A2	DIN 267			--	0
HP	37	4	Pipe seamless ø 508.0 x 15,1 L=300mm	91122953	ANSI B36.10	A-106GRB	ASTM	20"-S40		3.1	2201
	41	2	Guide for exchanging seal swiveljoint	P062032A53	A3-P062032A53					--	67
	42	1	Instruction locking device double pipe	20000016	A2-20000016			On MLA260		--	0
	44	2	Channel UNP 100 L=2340mm	93500100	DIN 1026	S235JRG2	EN 10025			--	498
	49	2	Tumbuckle no clevis both ends ø16	98112016	Haan Hoogerwerf	St	DIN 1480	Art nr. 25011016		--	20
	50	2	Hollow section 60x 60x 4 L=416mm	93210230		S235JRH	EN 10210/10219			--	58
	51	1	Stairs on riser	P062032A60	A3-P06203260	St. galv.				--	439
	53	2	Fill ring ø45 x ø36 x 12	44000014	A4-44000014	AISI 316L	ASTM			--	2
	54	1	Mounting plate for junction box	48100003	A4-48100003	S235JRG2		Stahl 8146/x05x		--	23
	55	5	Plate 20mm 40 x 40mm	93012020	EN 10029	S235JRG2	EN 10025			2 3.1	13
Total Weight [N]											34135

Nt	Description
HP	TO MAKE HALF PIECES OF PIPE
KS	(NOTE STRICTLY FOR KANON INTERNAL USE)

DATA SHEET ITEM 2

DUNG QUAT REFINERY PROJECT PACKAGE P2 & P3 - CRUDE & PRODUCT TANK FARM, PIPELINES AND JETTY TOPSIDES



MARINE LOADING ARM DATASHEET

PAGE 11 OF 19
ITEM NO LA-8134, LA-8144 & LA-8145
DATA SHEET NO: 8474L-081-SP-4026-051
REVISION 0 DATE 24-Apr-06

1	APPLICABLE TO:	☐ PROPOSALS ☒ PURCHASE ☐ AS BUILT
2	SERVICE	MOGAS 92/95 & MOGAS 90 MODEL MLA 260
3	MANUFACTURER	KANON LOADING EQUIPMENT NO. REQUIRED THREE (3)
4	LOCATION	BERTH 3 & 4 (Note 2)
5	DESIGN CONDITIONS	
6	TYPE OR NAME OF LIQUID MOGAS 92/95, MOGAS 90 & HEAVY NAPHTHA (Note 3)	
7	PRESSURE OPERATING	3.05 kg/cm2g
8	DESIGN	30.7 kg/cm2g
9	TEMPERATURE OPERATING	40 °C
10	DESIGN	60 °C
11	VISCOSITY	1.17-1.22 cSt
12	SPECIFIC GRAVITY	0.700-0.732
13	TRANSFER RATE, MAX	750 m³/h
14	DESIGN WIND FORCE	Kg/m²
15	EARTHQUAKE LOAD	G
16	ALLOWABLE PRESSURE DROP	0.34 kg/cm2g
17	GAS RETURNED	NO
18	CONSTRUCTION	
19	OPERATION	☒ HYDRAULIC ☐ MANUAL
20	ARM LENGTH	6.0 x 8.5 x 10.5 m
21	ARM SIZE INBOARD	☒ 2 x 8" ANSI 300 # ☐ FF ☐ RF
22		☒ QUICK COUPLER ☐ MANUAL
23		☒ POWERED
24	OUTBOARD	☒ 10" ANSI 300 # ☐ FF ☐ RF
25		☒ QUICK COUPLER 10" ☐ MANUAL
26		☒ POWERED
27	Vendor to provide reducer if arm size not equal to 10"	
28	BERTH DATA	
29	A	DIST. JETTY FACE TO CTR. LINE OF RISER 2 m.
30	B	DIST. JETTY FACE TO BERTHING LINE 2 m.
31	C	MINIMUM DISTANCE OF MANIFOLD m.
32	D	MAXIMUM DISTANCE TO SHIP SIDE m.
33	E	DRIFT (PERPENDICULAR TO DOCK FACE) m.
34	E*	SURGE (PARALLEL TO DOCK FACE) m.
35	F	DOCK TO HIGHEST WATER LEVEL (HHW) 2.5 m.
36	G	DIFF BETWEEN HIGHEST & LOWEST WATER LEVEL (LLW) 2.7 m.
37	H	LLW LEVEL TO SHIP'S MANIFOLD 1.0 m.
38		(SMALLEST VESSEL LADEN)
39	I	HHW LEVEL TO SHIP'S MANIFOLD 7.0 m.
40		(LARGEST VESSEL LIGHT)
41	K	DISTANCE BETWEEN CENTER LINE OF RISER 3.5 m.
42	L	TOP OF JETTY TO FLANGE m.
43	M	MINIMUM MANIFOLD SPACING 1.5 m.
44	N	MAXIMUM MANIFOLD SPACING 3 m.
45		
46		
47		
48		
49	TANKER DATA	
50		MAX MIN
51	TANKER SIZE (DWT)	5000 MT 3000 MT
52	HEIGHT OF SHIP RAIL	m. m.
53	HEIGHT OF MANIFOLD ABOVE DECK AT SHIP RAIL	m. m.
54	DISTANCE OF MANIFOLD FLANGE TO SHIP'S SIDE	m. m.
55		
	SITE DATA (Note 1)	
	ELEVATION	m BAROMETER kg/cm2g
	RANGE OF AMBIENT TEMPS: MIN/MAX. / °C	
	RELATIVE HUMIDITY: % MAX / MIN /	
	☐ WINTERIZATION REQ'D ☒ TROPICALIZATION REQ'D.	
	Design Wind Velocities (Basic 3 seconds gust wind speed)	
	☒ STORED	57 m/s
	☒ MANOEUVRING/CONNECTED	22 m/s
	☒ HYDROSTATIC/MAINTENANCE	m/s
	☒ EARTHQUAKE LOAD TO BE CONSIDERED WHILE ARM IN STORED AND CONNECTED ALTITUDE	
	☒ ELECTRICAL AREA CLASS	ZONE 1, GAS GROUP IIA, T3
	SITE DATA	
	☒ RANGE OF AMBIENT TEMPS: MIN/MAX / °F	
	UNUSUAL CONDITIONS	
	☐ OTHER	
	☒ UTILITY CONDITIONS	
	ELECTRICITY	
	VOLTAGE	400
	HERTZ	50
	PHASE	3
	INSTRUMENT AIR	MAX MIN
	PRESSURE (psig)	N.A. N.A.
	AUXILIARY EQUIPMENT	
	☐ EMERGENCY RELEASE SYSTEM	☒ REMOTE CONTROL
	☒ TRAVEL LIMIT ALARM SYSTEM	☒ SERVICE PLATFORM/LADDER
	☒ DRAIN CONNECTIONS	☒ VACUUM BREAKER VALVE
	☒ ELECTRICAL INSULATION	☒ SUPPORT JACK
	☐ REMOVABLE ELBOW	☒ STORM LOCK
	☐ NITROGEN PURGE SYS.	☐ HEATING SYS.
	☒ QUICK CONNECT DISCONNECT COUPLER (QCDC)	
	☐ SHUT OFF VALVE AT TRIPLE SWIVEL ASSEMBLY (Manual/hydraulic)	
	MATERIAL	
	ARMS INBOARD	ASTM A106 Gr B
	OUTBOARD	ASTM A106 Gr B
	RISER	ASTM A106 Gr B
	JOINT	DUPLEX/ A105 N
	BALANCE UNIT	CARBON STEEL

DUNG QUAT REFINERY PROJECT				MARINE LOADING ARM DATASHEET	
PACKAGE P2 & P3 - CRUDE & PRODUCT TANK FARM, PIPELINES AND JETTY TOPSIDES					
1 APPLICABLE TO: ☐ PROPOSALS ☒ PURCHASE ☐ AS BUILT				PAGE <u>12</u> OF <u>19</u>	
2 SERVICE <u>MOGAS 92/95 & MOGAS 90</u>				ITEM NO <u>LA-8134, LA-8144 & LA-8145</u>	
3 MANUFACTURER <u>KANON LOADING EQUIPMENT</u>				DATA SHEET NO: <u>8474L-081-SP-4026-051</u>	
4 LOCATION <u>BERTH 3 & 4 (Note 2)</u>				REVISION <u>0</u> DATE <u>24-Apr-06</u>	
SPECIFIC REQUIREMENTS				ENVELOPE DETAILS (AS PER OCIMF)	
7 OPERATION ☒ HYDRAULIC ☐ MANUAL				ALARM LUFFING <u>5.0</u> m	
8 TWO SPEED MANOEUVRING YES/NO				MAXIMUM REACH (LUFFING) <u>7.0</u> m	
9 EMERGENCY RELEASE SYSTEM (ERS) YES/NO				BOTTOM LIMIT OPERATING ENVELOPE	
10 ERS MANUFACTURER & TYPE <u>N.A.</u>				TO CHART DATUM <u>1.0</u> m	
11 ERS PRODUCT VALVE CLOSURE TIME <u>-</u> S				TOP LIMIT OPERATING ENVELOPE	
12 ERC OPENING TIME <u>-</u> S				TO CHART DATUM <u>9.7</u> m	
13 MECHANICAL INTERLOCK YES/NO				MAXIMUM SLEW RIGHT (SURGE) <u>4.0</u> m	
14 HYDRAULIC INTERLOCK YES/NO				MAXIMUM SLEW LEFT (SURGE) <u>4.0</u> m	
15 QUICK CONNECT/DISCONNECT COUPLER QC/DC YES/NO				ALARM SLEW RIGHT <u>3.0</u> m	
16 QC/DC OPERATION ☒ HYDRAULIC ☐ MANUAL				ALARM SLEW LEFT <u>3.0</u> m	
17 CLAMP OPERATING TIME MIN/MAX <u>10-15S</u>				MAXIMUM DRIFT VELOCITY (SURGE DIRECTION) <u>0.075</u> m	
18 PIGGY BACK VAPOUR RETURN YES/NO				MAXIMUM DRIFT VELOCITY(SWAY DIRECTION) <u>0.075</u> m	
19 FLANGE RATING/DIAMETER (NOMINAL BORE) <u>300# FF/RF</u>					
CENTRAL CONTROL REQUIREMENTS					
20 DRIVES					
21 ☒ SLEWING HYDRAULIC/ELECTROHYDRAULIC/MANUAL				POWER ON/OFF YES/NO	
22 ☒ INBOARD ARM HYDRAULIC/ELECTROHYDRAULIC/MANUAL				HYDRAULIC PUMP(S) ON/OFF YES/NO	
23 ☒ OUTBOARD ARM HYDRAULIC/ELECTROHYDRAULIC/MANUAL				ARM SELECTOR SWITCH YES/NO	
24				MANOEUVRING CONTROLS YES/NO	
25 CONTROL SYSTEM				CENTRAL CONTROL/PENDANT CONTROL SWITCH YES/NO	
26 ☒ CENTRAL YES/NO				TWO SPEED MANOEUVRING SELECTOR SWITCH YES/NO	
27 ☒ PORTABLE YES/NO				1ST STAGE ALARM PUSH BUTTON YES/NO	
28				SHUTDOWN RESET BUTTON YES/NO	
29 VACUUM BREAKER YES/NO				ALARM LAMPS YES/NO	
30					
31 PURGING SYSTEM				PENDANT CONTROL REQUIREMENTS	
32 ☒ RISER NO				LOADING ARM MANOEUVRING CONTROLS YES/NO	
33 ☒ APEX NO				TWO SPEED MANOEUVRING SELECTION YES/NO	
34 ☒ MANIFOLD END NO					
35					
36 LADDER AND PLATFORM YES/NO					
37					
38 FOUNDATION BOLTS				NOTES	
39 ☒ SPECIFIED BY VENDOR YES/NO				Note 1 : Refer to Basic Engineering Design Data 8474L-000-PP-204	
40 ☐ SUPPLIED BY VENDOR NO				Note 2: LA-8134 located in Berth 3, LA-8144&LA-8145 located in Berth 4	
41				Note 3: This facility may also be used for Heavy Naphtha occasionally.	
42 BASEPLATE TEMPLATE SUPPLIED BY VENDOR YES/NO					
43 STANDBY ELECTRO HYDRAULIC PUMP YES/NO					
44 MANUAL HYDRAULIC PUMP YES/NO					
45 SWIVEL PURGING YES/NO					
46 JACK YES/NO					
47 MAINTENANCE DUMMY MANIFOLD YES/NO					
48 DESIGN LIFE refer to maintenance					
49 LUBRICATION manual					
50					
51					
52					
53					
54					
55					
56					

DRAWING ITEM 2

Design data

Medium : See list
 Design pressure : 0-30.7 kg/cm²g for product line Jet A1/Kerosene/Mogas/Naphta
 0-30.7 kg/cm²g for product line Auto diesel
 Design temperature : 0°C / +60°C
 Area classification : Zone 1, Gas group IIA, T3
 Flow rate : See list

Test & Inspection

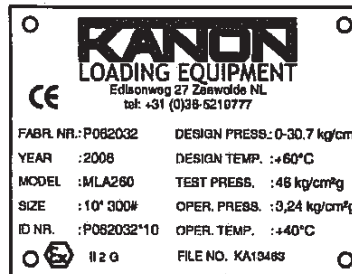
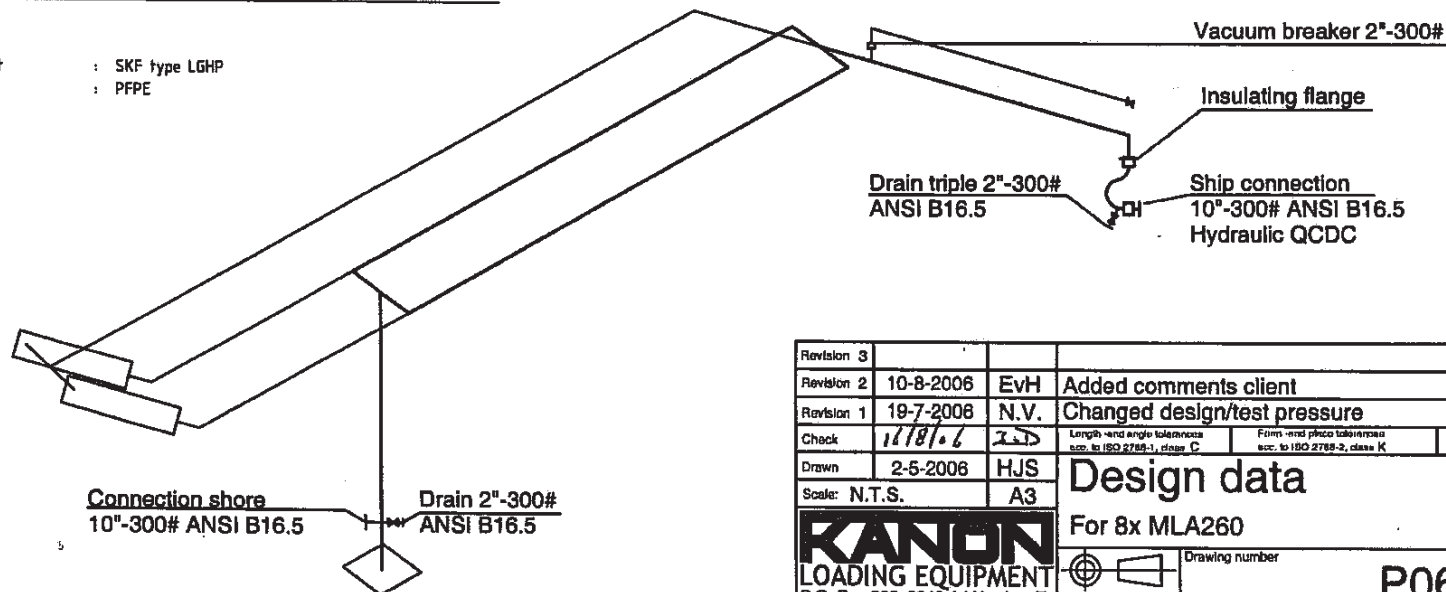
Design code : ASME VIII
 Test pressure : Hydrostatic test 46 kg/cm²g (30 min. water)
 For product line Jet A1/Kerosene/Mogas/Naphta
 Hydrostatic test 46 kg/cm²g (30 min. water)
 For product line Auto diesel
 See procedure / certificate P062032-1F.*10
 Leakage test : Pneumatic test at 0.5 kg/cm²g air
 See procedure / certificate P062032-1S.*10
 Operational test : At manufacturer's works
 Welding test : See drawing P062032*40
 X-ray or Y-ray circumferential seams 10% for carbon steel
 and 100% for duplex of wetted parts.
 Post material identification : 100% for alloy material and stainless steel
 Material certificates : Acc. EN 10204-3.1 for pressurized parts
 Inspection by : Kanon inspector / Inspector client

Surface Preparation

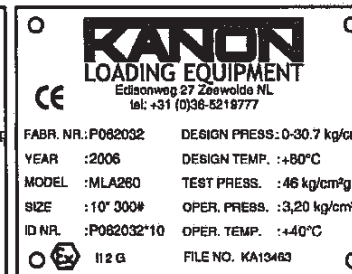
: See procedure / certificate P062032-2R

Grease type

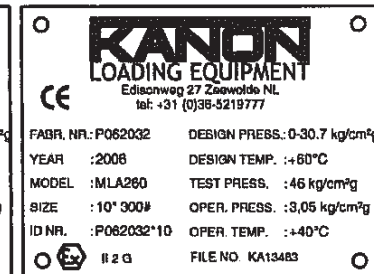
Ball race swiveljoint : SKF type LGHP
 Sealface swiveljoint : PFPE



Product line Jet A1 / Kerosene



Product line Auto Diesel



Product line Mogas / Naphta

Identno.	Tag no.	Medium	Flow rate
P062032I10	LA-8131	Jet A1/Kerosene	700 m ³ /hr
P062032J10	LA-8133	Auto Diesel	700 m ³ /hr
P062032K10	LA-8134	Mogas/Naphta	750 m ³ /hr
P062032L10	LA-8135	Auto Diesel	700 m ³ /hr
P062032M10	LA-8141	Jet A1/Kerosene	700 m ³ /hr
P062032N10	LA-8143	Auto Diesel	700 m ³ /hr
P062032O10	LA-8144	Mogas/Naphta	750 m ³ /hr
P062032P10	LA-8145	Mogas/Naphta	750 m ³ /hr

Revision 3			
Revision 2	10-8-2006	EvH	Added comments client
Revision 1	19-7-2008	N.V.	Changed design/test pressure
Check	11/8/06	2.5	Length and angle tolerances acc. to ISO 2768-1, class C
Drawn	2-5-2008	HJS	Form and photo tolerances acc. to ISO 2768-2, class K
Scale:	N.T.S.	A3	Fineness according to ISO 4287, file in µm
Design data			Units in mm
For 8x MLA260			
KANON LOADING EQUIPMENT P.O. Box 385, 3840 AJ Harderwijk			Drawing number
			P062032I05
			Revision
			2

G:\Projecten\P062032\Drawing\MLA260 10x10x10\P062032I05.dwg

Kanon Loading Equipment B.V. Edisonweg 27 3899 AZ Zeewolde The Netherlands Tel: +31(0)36-5219777 P.O. BOX 385 3840 AJ Harderwijk The Netherlands Fax: +31(0)36-5219770 www.kanon.nl				Identnr.		Rev.	Rev. Date	Page			
				P062032I09		0		1 OF 1			
								Name : HJS			
						Date : 23-5-06					
Configuration 8x MLA260								Dwg. A2- P062032I09			
Nt	lt	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Aft	Wght[N]
	1	1	MLA260 10" 6000x8500x10500	P062032I10	A1-P062032I10	A-106 GrB	LA-8131	Left hand design		3.1	141344
	2	1	MLA260 10" 6000x8500x10500	P062032J10	A1-P062032J10	A-106 GrB	LA-8133	Right hand design		3.1	141344
	3	1	MLA260 10" 6000x8500x10500	P062032K10	A1-P062032I10	A-106 GrB	LA-8134	Left hand design		3.1	141344
	4	1	MLA260 10" 6000x8500x10500	P062032L10	A1-P062032J10	A-106 GrB	LA-8135	Right hand design		3.1	141344
	5	1	MLA260 10" 6000x8500x10500	P062032M10	A1-P062032I10	A-106 GrB	LA_8141	Left hand design		3.1	141344
	6	1	MLA260 10" 6000x8500x10500	P062032N10	A1-P062032J10	A-106 GrB	LA-8143	Right hand design		3.1	141344
	7	1	MLA260 10" 6000x8500x10500	P062032O10	A1-P062032I10	A-106 GrB	LA-8144	Left hand design		3.1	141344
	8	1	MLA260 10" 6000x8500x10500	P062032P10	A1-P062032J10	A-106 GrB	LA-8145	Right hand design		3.1	141344
	9	1	Marine loading arm MLA260 12"	P062032S10	A1-P062032S10	A-106 GrB	LA-8161	Right hand design		3.1	169277
	10	1	Belt position söl L=1500 mm	99002213	Groeneveld	PA	Ord.C 31.70.072			--	5
	11	1	Belt safety sōgu-2 arbo approved	99002214	Groeneveld	PA/St.	Ord. 510.3260			--	15
	12	1	Lifting bridge maint dev MLA 350x1400	20000037	A2-20000037	S355J2G3		H=400 Last 18 ton		--	488
	13	1	Guard safety "simplex" söl	99002210	Groeneveld	St	Ord.C 30.10.009			--	10
Total Weight [N]										1300547	

Total Weight [N]

1300547

Kanon Loading Equipment B.V. Edisonweg 27 3899 AZ Zeewolde The Netherlands Tel: +31(0)36-5219777 www.kanon.nl				Identnr. P062032I10		Rev. 6	Rev. Date 12-2-07	Page 1 OF 1			
P.O. BOX 385 3840 AJ Harderwijk The Netherlands Fax: +31(0)36-5219770				MLA260 10" 6000x8500x10500				Name : HJS Date : 8-5-06			
				Dwg. A1- P062032I10							
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]
	1	1	Triple assy 10"-300# hydraulic QCDC	P062032I11	A2-P062032I11	A-234GRWPB				3.1	6855
	2	1	Outboard arm 10" L=10500 LH	P062032I12	A2-P062032I12	A-106 GrB				3.1	15535
	3	1	Inboard arm right 8"-150# L=8500	P062032I16	A1-P062032I16	A-106 GrB				3.1	10785
	4	1	Inboard arm left 8"-150# L=8500	P062032I17	A1-P062032I17	A-106 GrB				3.1	10228
	5	1	Heel 16" x 10"	P062032I19	A2-P062032I19	A-106 GrB				3.1	9113
	6	1	Riser 20"-10" L=6000	P062032I20	A2-P062032I20	A-106 GrB				3.1	25626
	7	1	Counterweight MLA260 10-220308	P062032I23	A2-P062032I23	S235JRG2				--	55157
	8	1	Parallel structure MLA260 12" 8500x4000	P062032A24	A2-P062032A24	A-106 GrB				--	5354
	9	1	Hydraulic cylinder VDW 100/60/60x1350	95401004	A4-95401004	St	Vremac 29566	Gelenkoog ø50	4	--	1450
	10	1	Hydraulic cylinder VDW 100/60/60x1350	95401004	A4-95401004	St	Vremac 29566	Gelenkoog ø50	4	--	1450
	11	2	Hydraulic cylinder VDW 80/35x200	95400892	A4-95400804	St	Vremac 28380	Gelenkoog ø35	5	--	0
	12	1	Hydraulic / electric system	P062032A99	A1-P062032A99					--	1279

Total Weight [N]

142831





Kanon Loading Equipment (M) Sdn Bhd
14 & 16, Jin IM 14/8 Indera Mahkota Ind. Area, 25200
Kuantan, Pahang Darul Makmur, Malaysia

Vendor Document No.
P062032-MLA
I & J

Rev. Page
3 1+25

Sectional Drawing
Marine Loading Arms – I & J

Related drawing number;
8474L-081-A2001-4026-051-001
8474L-081-A2001-4026-051-006

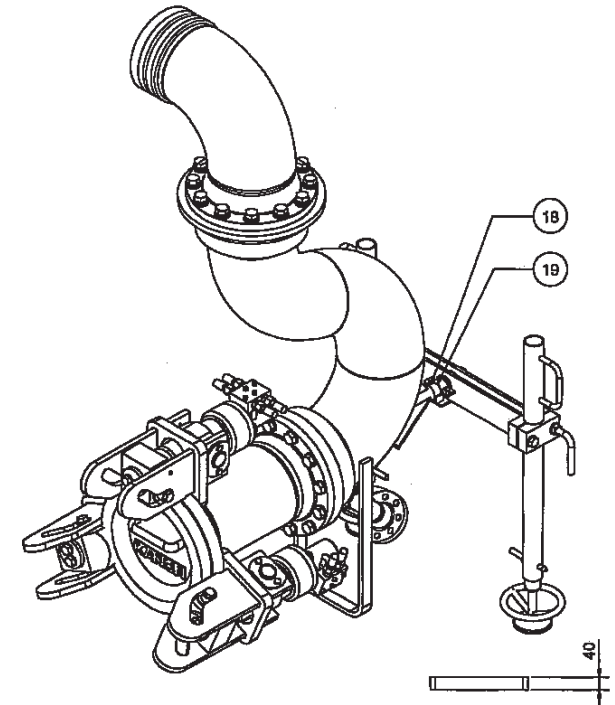
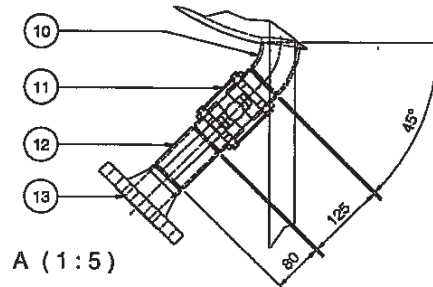
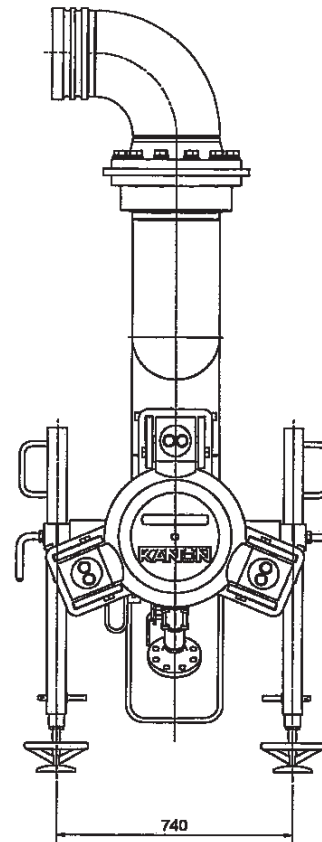
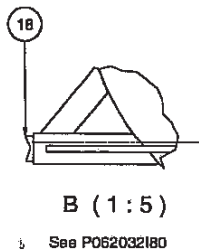
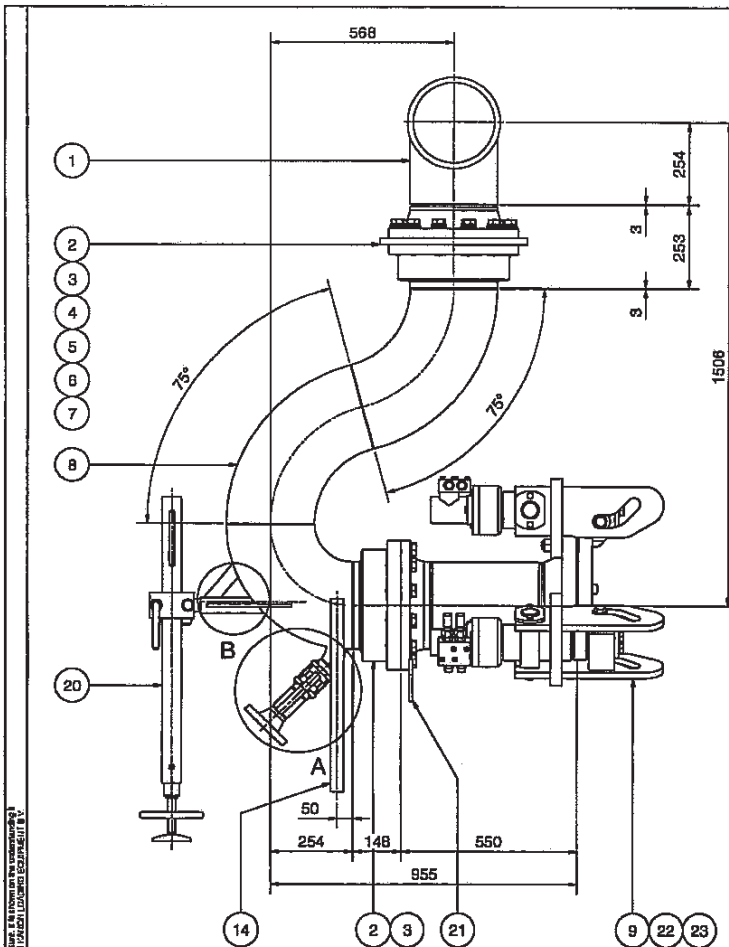
VIETNAM OIL AND GAS CORPORATION (PETROVIETNAM)
DUNG QUAT REFINERY (DQR) PROJECT
DUNG QUAT, VIETNAM

Technip

JGC



Requisition Number:	8474L-081-MR-4026-051	Stamp ChewEow Low 2007.03.15 11:02:28 +08'00' VENDOR DOCUMENT REVIEW ☐ 1 REVIEW AND REQUEST ☐ 2 TO BE ISSUED AS FINAL PROVIDED DOCUMENTS ARE INCORPORATED ☒ 3 NO COMMENT - FINAL ISSUE Comment given in this document does not relieve vendor of his/her responsibility for the correct engineering design and fabrication. This equipment or product shall be made as per the codes, requisition, specification, project procedures, and international standards.			
Purchase Order Number:	53019				
Equipment / Item Tag:	LA-8131, LA-8133, LA-8134, LA-8135, LA-8141, LA-8143, LA-8144, LA-8145				
Equipment / Item Description:	Marine Loading Arms Package				
TPC Document Number:	8474L-081-A2001-4026-051-003				
Document Class:	Z				
Rev	Date DD-MMM-YY	Status	Written By (name & visa)	Check By (name & visa)	Approved By (name & visa)
3	01-Mar-07	Issue for approval	Heo	Erik	Erik
2	22-Aug-06	Issue for approval	Heo	Erik	Erik
1	27-Jul-06	Issue for approval	Heo	Erik	Erik
0	02-Jun-06	Issue for approval	Heo	Erik	Erik
Pages changed in this revision:					



Identno.	Tag no.
P062032I10	LA-8131
P062032J10	LA-8133
P062032K10	LA-8134
P062032L10	LA-8135
P062032M10	LA-8141
P062032N10	LA-8143
P062032O10	LA-8144
P062032P10	LA-8145

For details see P062032I80

Revision 1	21-7-06	N.V.	Added list, Changed elbow item 8
Revision 2	16-8-06	HJS	Item 23 changed.
Revision 3	6-6-06	HJS	See parts list.
Check			Length and angle tolerance acc. to ISO 9001-4, class C
Design	9-5-06	HJS	Item 23 changed.
Scale	1:10	A2	Triple Assembly
			10"-300# with hydraulic QCDC
			Revision 3

RANON
LOADING EQUIPMENT
P.O. Box 385, 3840 AJ Harderwijk

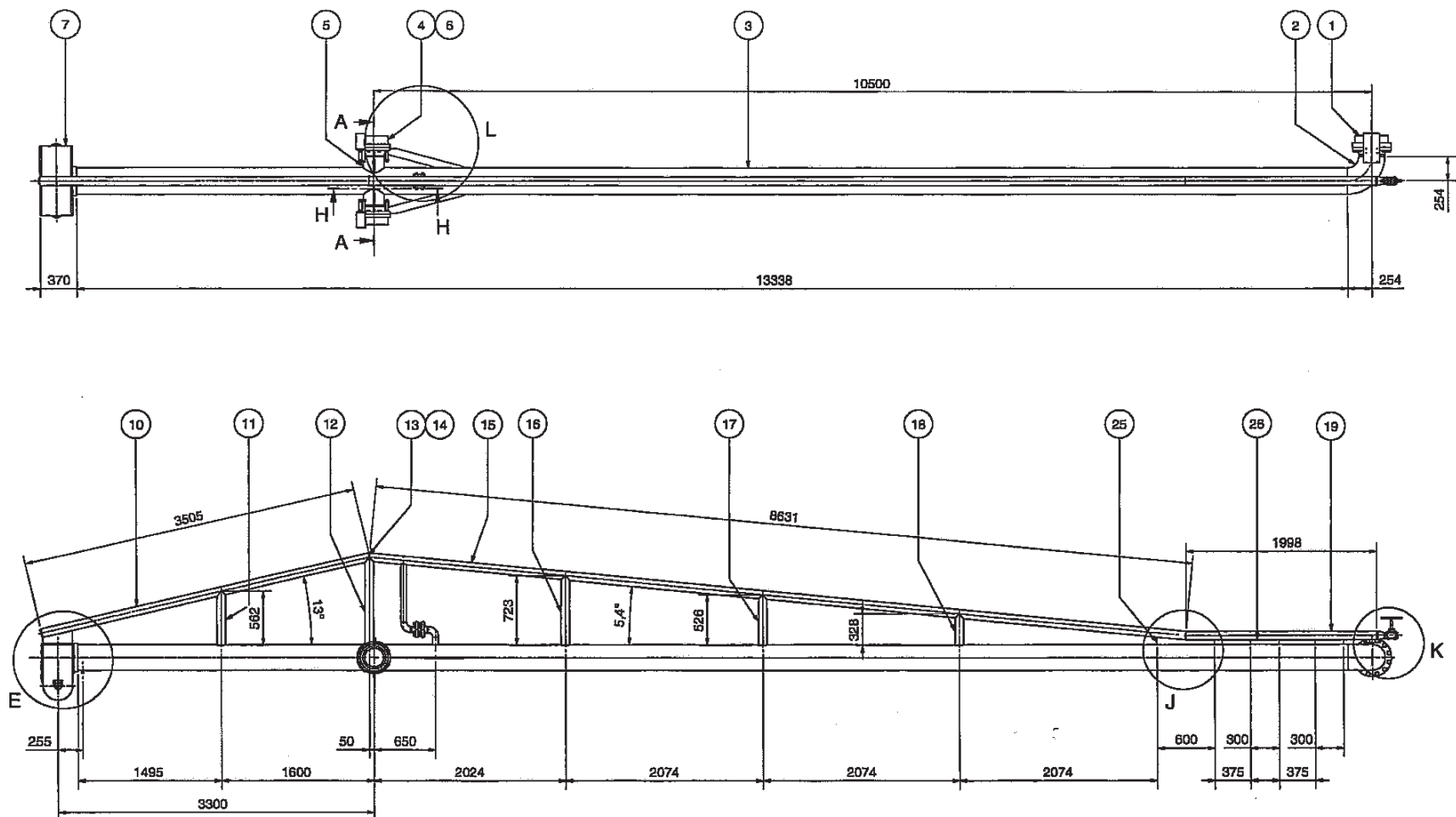


Drawing number

P062032I11

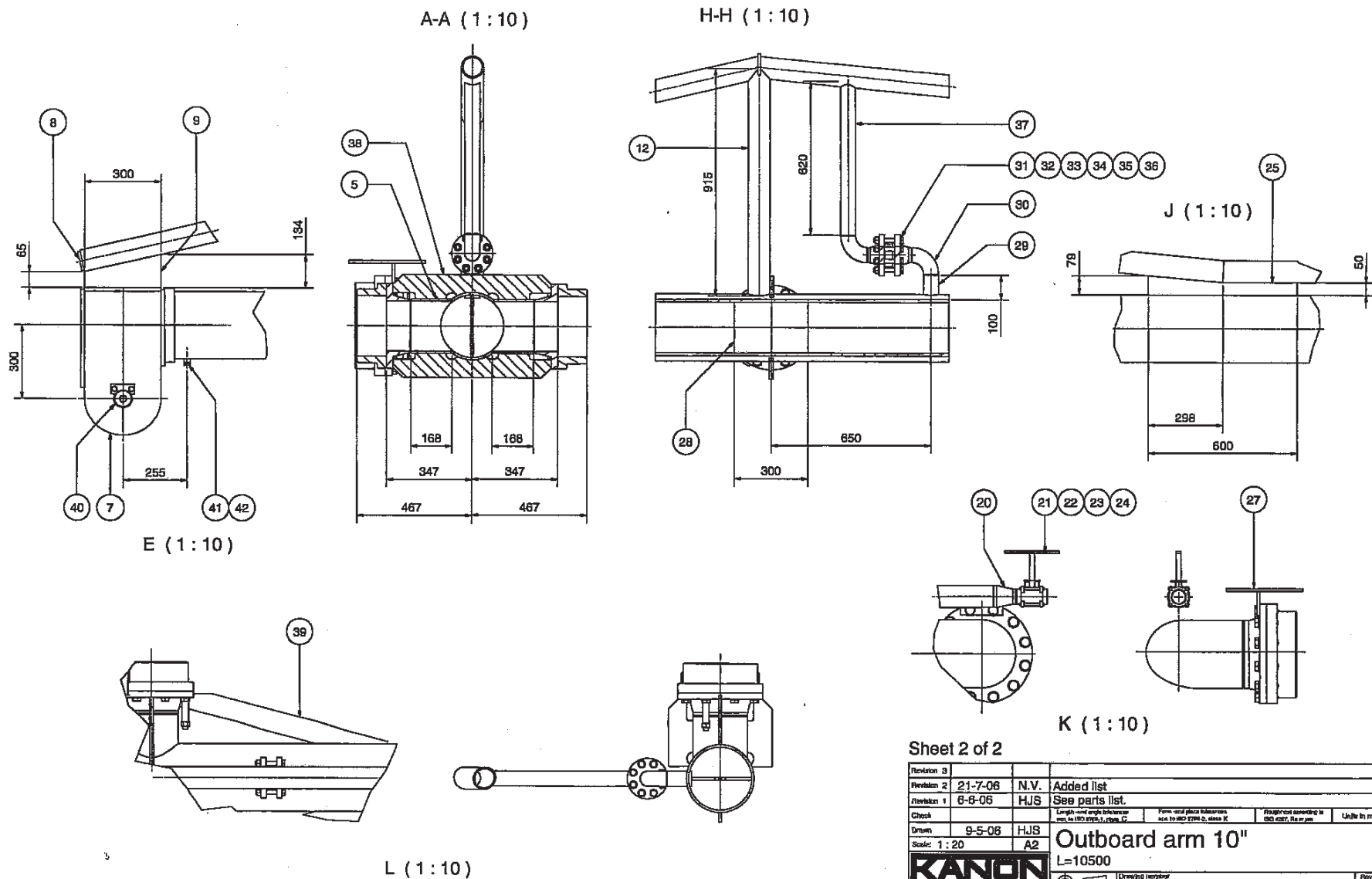
Revision 3

Kanon Loading Equipment B.V. Edisonweg 27 3899 AZ Zeewolde The Netherlands Tel: +31(0)36-5219777 www.kanon.nl				P.O. BOX 385 3840 AJ Harderwijk The Netherlands Fax: +31(0)36-5219770		Identnr.		Rev.		Rev. Date		Page			
						P062032I11		3		25-7-06		1 OF 1			
												Name : HJS			
										Date : 9-5-06		Dwg. A2- P062032I11			
Triple assy 10"-300# hydraulic QCDC															
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]				
	1	2	Elbow 10" 90° SR sched. 40 ø273.0x 9.3	91322737	ANSI B16.28	A-234GRWPB	ASTM			3.1	490				
KS	2	2	Swiveljoint 812 10" PTFE-C&PTFE&NBR	801076814	A3-80100000	WNR 1.4462	/1.6582/St+316	s1=9.3 s2=9.3	3	3.1	1658				
KS	3	-2	Flange SAN 812 10"	831275704	A3-83127000	A105N+316L		s2=9.3		3.1	-480				
	4	1	Wn flange 10" 150# RF s=9.3mm std	92022670	ANSI B16.5	A-105 N	ASTM			3.1	240				
KS	5	1	Insulating set assy swiveljoint 10"-150#	49800029	A4-49800029	Cel/PE	Phenolic/Neopr	SAN812/810		--	20				
	6	-12	Hex. screw M 24 x 60 mm	94150512	DIN 933	A2-70	DIN 267			--	-36				
	7	12	Hex. bolt M 24 x100 mm	94050520	DIN 931	A2-70	DIN 267			--	60				
	8	2	Elbow 10" 75° LR sched. 40 ø273.0x 9.3	99802063	ANSI B16.9	A-234GRWPB	ASTM		3	3.1	586				
KS	9	1	Hydraulic QCDC 10" 300#	P062032I50	A3-P062032I50	A-106 GrB	ASTM	For 150# swivel		3.1	2905				
	10	1	Elbow 2" 45° LR sched. 80 ø 60.3x 5.5	91422222	ANSI B16.9	A-234GRWPB	ASTM			3.1	5				
KS	11	1	Ball valve 2" red. bore gefa DGF af	97070866	A4-97070866	Carbon steel	Butt weld ends	AS+FS acc. BS		3.1	30				
	12	1	Pipe seamless ø 60.3 x 5.5 L=80mm	91122222	ANSI B36.10	A-106GRB	ASTM	2 "-S80		3.1	6				
	13	1	Wn flange 2" 300# RF s=3.9mm std	92022720	ANSI B16.5	A-105 N	ASTM			3.1	34				
	14	1	Flat bar 40 x 15 L=1470mm	93112159	DIN 1017	S235JRG2	EN 10025		1	3.1	71				
	15	1	Pipe seamless ø 48.3 x 3.7 L=194mm	91122156	ANSI B36.10	A-106GRB	ASTM	1½"-S40		3.1	8				
	16	2	Plate 10mm 287 x 40mm	93012010	EN 10029	S235JRG2	EN 10025		1	3.1	18				
	17	1	Plate 10mm 138 x 40mm	93012010	EN 10029	S235JRG2	EN 10025		1	3.1	4				
	18	1	Round bar ø 40 L=250mm	93310040		S235JRG2C	EN 10277/10278		--	--	25				
	19	1	Clamp for support jack on rod ø40	29012004	A4-29012004	AISI 304				--	10				
	20	1	Support jack with extra adjustable feet	29012007	A2-29012007	AISI 304		Double pipe		--	528				
	21	1	Connecting material pendant	P062032A76		AISI 316				--	8				
KS	22	1	Blanking plate KANON QCDC 10" 300# assy	46972002	A2-46972002	Alu				--	111				
KS	23	1	O-ring for Kanon QCDC 10"	96211487	ID CARD	FPM (Viton)		70° Shore A	2	--	0				
Total Weight [N]												6320			
Nt	Description														
KS	(NOTE STRICTLY FOR KANON INTERNAL USE)														



Sheet 1 of 2

Revision 3			
Revision 2	21-7-06	N.V.	Added list
Revision 1	6-6-06	HJS	See parts list.
Check			Length and angle information see to 100 2700-5, plate C
Drawn	9-5-06	HJS	Form and place information see to 100 2700-5, plate K
Scale	1:20	A2	Weight and material see to 100 2700-5, plate L
L=10500			Units in mm
RANON LOADING EQUIPMENT P.O. Box 385, 3840 AJ Harderwijk			Drawing number P062032112
Revision			2



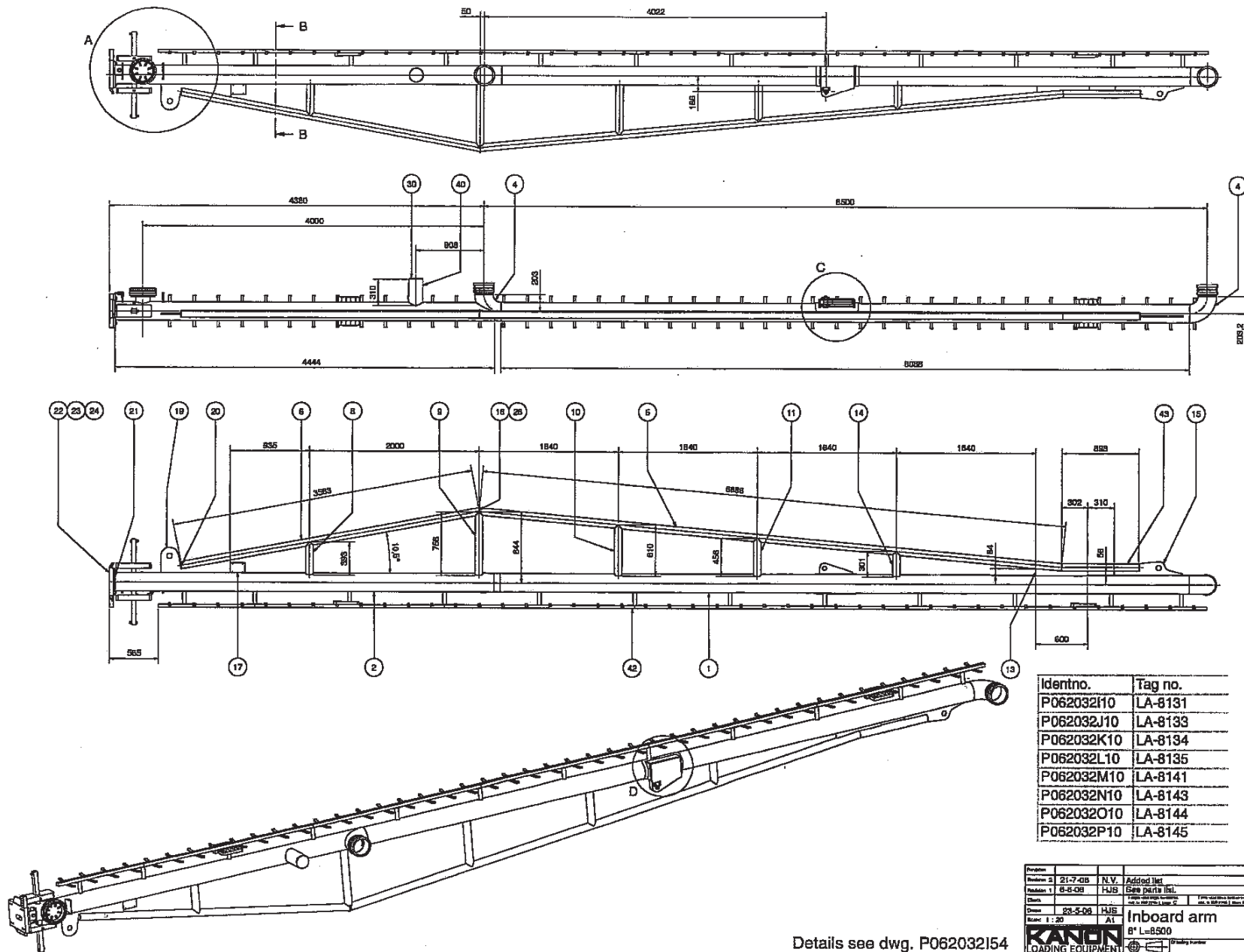
Kanon Loading Equipment B.V.				Identnr.	Rev.	Rev. Date	Page					
Edisonweg 27 3899 AZ Zeewolde The Netherlands Tel: +31(0)36-5219777 www.kanon.nl				P.O. BOX 385 3840 AJ Harderwijk The Netherlands Fax: +31(0)36-5219770		P062032I12	2	26-7-06	1 OF 2			
						Outboard arm 10" L=10500 LH			Dwg. A2- P062032I12			
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]	
KS	1	1	Swiveljoint 812 10" PTFE-C&PTFE&NBR	801076814	A3-80100000	WNR 1.4462	/1.6582/St+316	s1=9.3 s2=9.3	2	3.1	829	
	2	1	Elbow 10" 90° SR sched. 40 ø273.0x 9.3	91322737	ANSI B16.28	A-234GRWPB	ASTM			3.1	245	
	3	1	Pipe seamless ø 273 x 9.3 L=13338mm	91122737	ANSI B36.10	A-106GRB	ASTM	10"-S40		3.1	8029	
KS	4	2	Swiveljoint 812 8" PTFE-C&PTFE&NBR	801066814	A3-80100000	WNR 1.4462	/1.6582/St+316	s1=8.2 s2=8.2	2	3.1	1262	
	5	2	Pipe seamless ø 219.1 x 8.2 L=168mm	91122633	ANSI B36.10	A-106 GrB	ASTM	8 "-S40		3.1	143	
	6	2	Maintenance device on swivel 8" SAN810	20652103	A3-20652103	AISI 316			--		131	
MR	7	1	Support parallel outboard 10" H=300 ø70	20720002	A3-20720002	S235JRG2		Plate 40 S355J2G3		3.1	2131	
	8	1	Plate 5mm 80 x 80mm	93010005	EN 10029	S235JRG2	EN 10025		--		3	
	9	1	Plate 10mm 300 x 134mm	93010010	EN 10029	S235JRG2	EN 10025		--		23	
	10	1	Pipe seamless ø 88.9 x 5.5 L=3505mm	91120322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40	--		396	
	11	1	Pipe seamless ø 88.9 x 5.5 L=562mm	91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	64	
	12	1	Pipe seamless ø 88.9 x 5.5 L=912mm	91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	103	
MR	13	1	Plate 10mm 110 x 110mm	93010010	EN 10029	S235JRG2	EN 10025		--		9	
	14	1	Detail pipe connection on inb./outb. arm	20000005	A4-20000005				--		0	
	15	1	Pipe seamless ø 88.9 x 5.5 L=8631mm	91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	975	
	16	1	Pipe seamless ø 88.9 x 5.5 L=723mm	91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	82	
	17	1	Pipe seamless ø 88.9 x 5.5 L=526mm	91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	59	
	18	1	Pipe seamless ø 88.9 x 5.5 L=328mm	91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	37	
	19	1	Pipe seamless ø 88.9 x 5.5 L=1998mm	91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	226	
	20	1	Reducer conc. 3"x 2" s40 ø 88.9xø 60.3	91522322	ANSI B16.9	A-234GRWPB	ASTM			3.1	9	
	KS	21	1	Ball valve 2" red. bore gefa DGF af	97070866	A4-97070866	Carbon steel	Butt weld ends	AS+FS acc. BS		3.1	30
KS	22	1	T-handle for ball valve bh.dg1.t.63-0040	99801401	Gefa 6693-3	Stainless steel	For FB:DN32-40	& RB: DN40-50	--		2	
	23	2	D-shackle ø 5	99801322	Haan Hoogerwerf	AISI 316	ASTM	NR. 88010050	--		0	
	24	1	Chain ø3 L=2500mm	99800288		Stainless steel			--		10	
	25	1	Plate 10mm 600 x 78mm	93012010	EN 10029	S235JRG2	EN 10025		1	3.1	27	
	26	2	Plate 10mm 300 x 50mm	93012010	EN 10029	S235JRG2	EN 10025		1	3.1	24	
	27	1	Bracket junction box	P062032I79	A4-P062032I79	S235JRG2			--		55	
	28	1	Plate 10mm 300 x 253mm	93012010	EN 10029	S235JRG2	EN 10025		1	3.1	60	
	29	1	Pipe seamless ø 60.3 x 5.5 L=100mm	91122222	ANSI B36.10	A-106GRB	ASTM	2 "-S80		3.1	8	
	30	2	Elbow 2" 90° LR sched. 80 ø 60.3x 5.5	91222222	ANSI B16.9	A-234GRWPB	ASTM			3.1	18	
	31	2	Wn flange 2" 300# RF s=3.9mm std	92022720	ANSI B16.5	A-105 N	ASTM			3.1	68	
	32	2	Gasket 2" 300# thickness 1.5mm	96040720	ANSI B 16.5		Egraflex GHE98%		--		0	
	KS	33	1	Non return valve 2"-300# , DN50-PN40	99801893	Gefa	1.4581	Viton O-ring	RF6666V (L=40)		3.1	11
	34	8	Hex. bolt,M 16 x110 mm	94050422	DIN 931	A2-70	DIN 267		--		16	

Total Weight [N]

15535

Kanon Loading Equipment B.V. Edisonweg 27 3899 AZ Zeewolde The Netherlands Tel: +31(0)36-5219777 www.kanon.nl				P.O. BOX 385 3840 AJ Harderwijk The Netherlands Fax: +31(0)36-5219770		Identnr.		Rev.		Rev. Date		Page			
						P062032I12		2		26-7-06		2 OF 2			
												Name		: HJS	
												Date		: 9-5-06	
Outboard arm 10" L=10500 LH		Dwg.		A2- P062032I12											
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]				
	35	16	Washer ID 17	94050839	DIN 7349	A2				--	0				
	36	8	Hex. nut M 16	94050740	DIN 934	A2	DIN 267			--	0				
	37	1	Pipe seamless ø 60.3 x 5.5	L=605mm 91122222	ANSI B36.10	A-106GRB	ASTM	2 "-S80		3.1	45				
	38	2	Reinforcement plate for apex	P062032I74	A3-P062032I74	S235JRG2			1	3.1	126				
	39	2	Apex Reinforcement Strip	P062032I75	A3-P062032I75	S235JRG2			1	3.1	92				
	40	2	Pin parallel structure ø70 x 290	20000063	A4-20000063	1.4462/304				--	187				
	41	1	Hex. head plug 1/2" NPT 3000#	99800151	ANSI B16.11	A-105N	ASTM			--	1				
	42	1	Half coupling 1/2" NPT 3000#	91822005	ANSI B16.11	A-105	ASTM			3.1	1				
Total Weight [N]											15535				

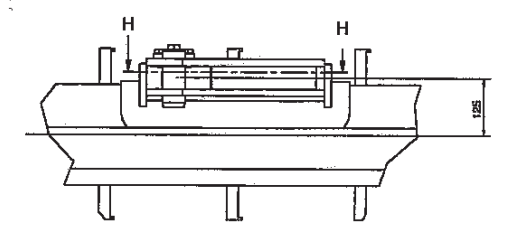
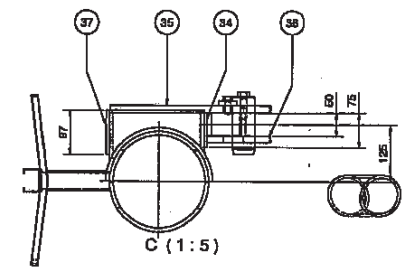
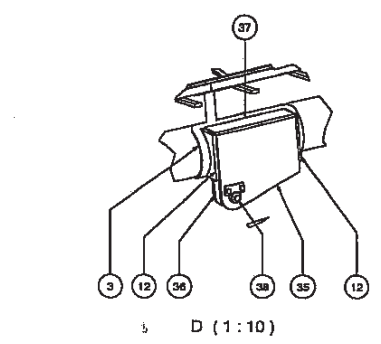
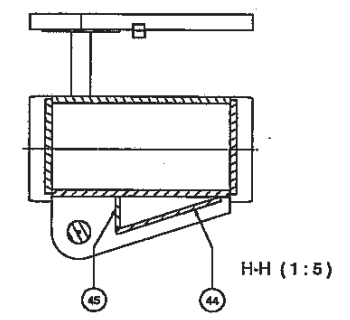
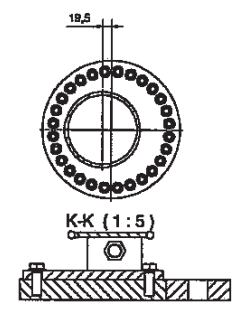
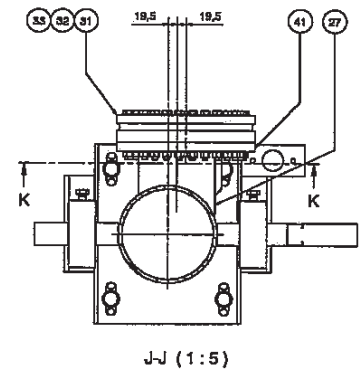
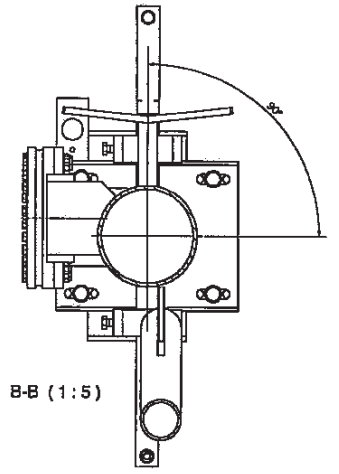
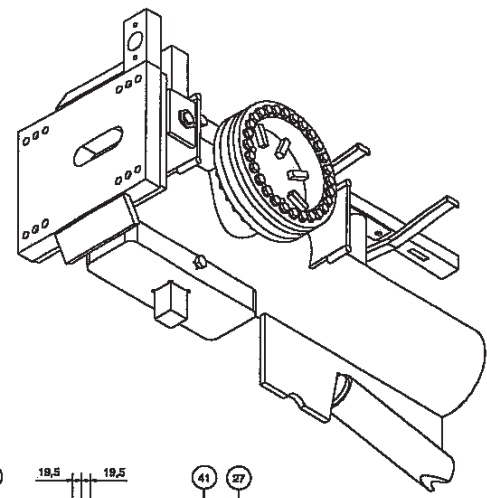
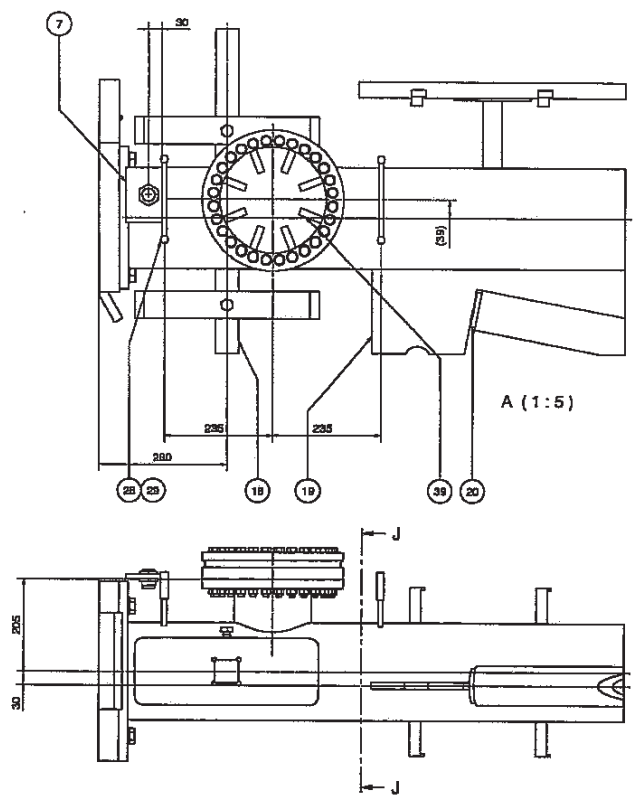
Nt	Description
KS	(NOTE STRICTLY FOR KANON INTERNAL USE)
MR	MAKE ROUND



Sheet 1 of 2

Details see dwg. P062032I54

Revision	2	21-7-08	N.V.	Added list
Revision	1	6-8-08	HJB	See parts list.
Drawn	23-5-08 HJB			
Check	23-5-08 HJB			
Scale	1:20			
Inboard arm				
6" L=8500				
KONING				
LOADING EQUIPMENT				
P.O. Box 200, 2120 AA IJmuiden				
P062032I16				2



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Product	21-7-06	N.V.	Added list
Revision	8-8-06	H/S	See parts list
Client	1. For technical information: 02-20-00-00-00-00 2. For sales information: 02-20-00-00-00-00		
Date	23-5-06	H/S	Inboard arm
Scale	1:20	A1	B* L=8500
CANON LOADING EQUIPMENT			
P. 11. Item 200. 2000-A1 (1/1/2006)			P062032116 2

Sheet 2 of 2

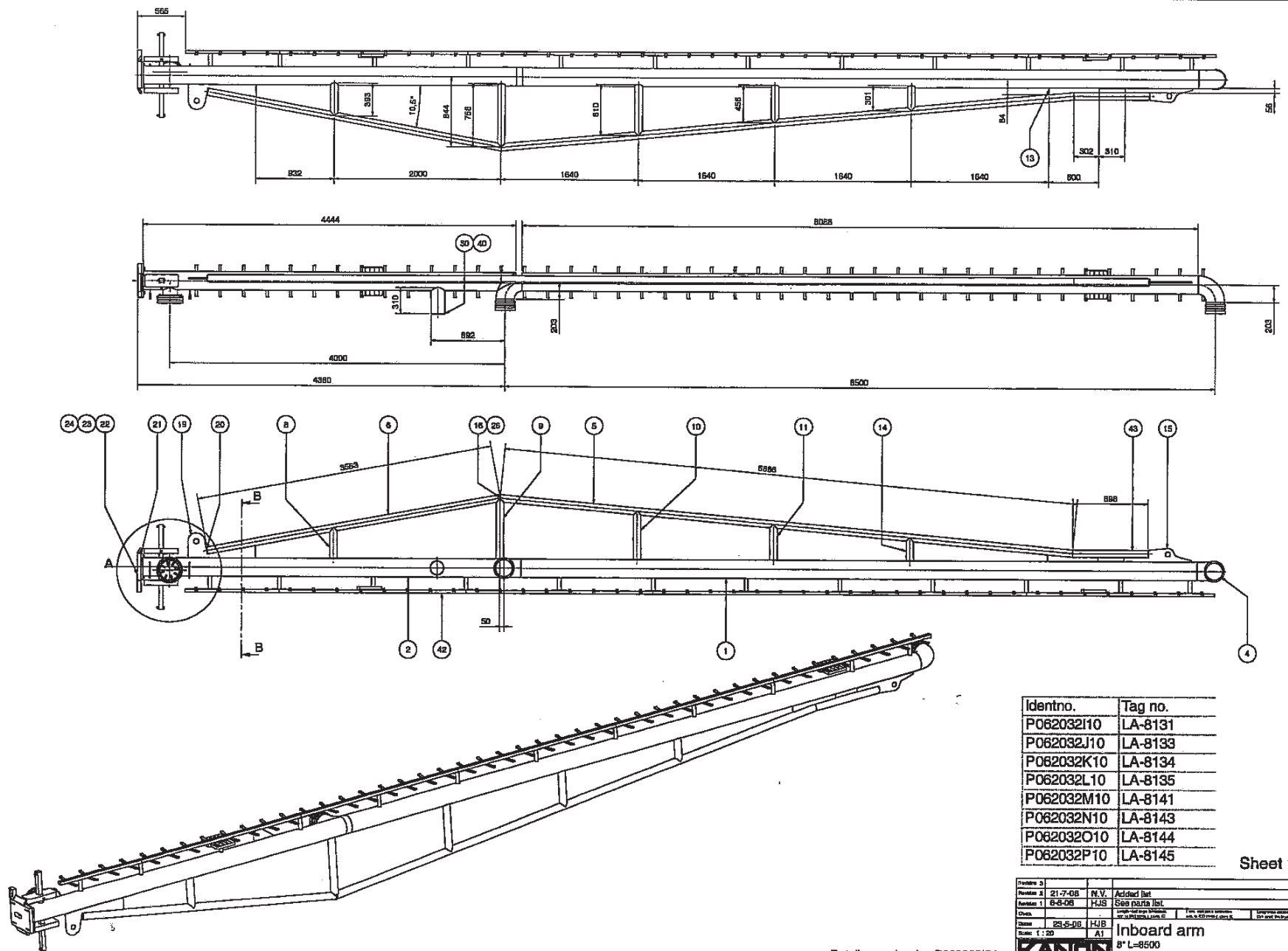
Kanon Loading Equipment B.V.				Identnr.	Rev.	Rev. Date	Page				
Edisonweg 27				P.O. BOX 385		P062032I16	2	26-7-06	1 OF 2		
3899 AZ Zeewolde				3840 AJ Harderwijk					Name	: HJS	
The Netherlands				The Netherlands					Date	: 23-5-06	
Tel: +31(0)36-5219777				Fax: +31(0)36-5219770		Inboard arm right 8"-150# L=8500			Dwg. A1- P062032I16		
www.kanon.nl											
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]
	1	1	Pipe seamless ø 219.1 x 8.2	L=8088mm 91122633	ANSI B36.10	A-106 GrB	ASTM	8 "-S40		3.1	3437
	2	1	Pipe seamless ø 219.1 x 8.2	L=4444mm 91122633	ANSI B36.10	A-106 GrB	ASTM	8 "-S40		3.1	1889
HP	3	1	Pipe seamless ø 219.1 x 8.2	L=500mm 91122633	ANSI B36.10	A-106 GrB	ASTM	8 "-S40		3.1	212
	4	2	Elbow 8" 90° SR sched. 40 ø219.1x 8.2	91322633	ANSI B16.28	A-234 GrWPB	ASTM			3.1	276
	5	1	Pipe seamless ø 88.9 x 5.5	L=6886mm 91120322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		--	778
	6	1	Pipe seamless ø 88.9 x 5.5	L=3563mm 91120322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		--	403
	7	1	Detection plate apex angle	P062032I65	A4-P062032I65	AISI 316L		120x65x10		--	5
	8	1	Pipe seamless ø 88.9 x 5.5	L=393mm 91120322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		--	44
	9	1	Pipe seamless ø 88.9 x 5.5	L=758mm 91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	86
	10	1	Pipe seamless ø 88.9 x 5.5	L=610mm 91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	69
	11	1	Pipe seamless ø 88.9 x 5.5	L=456mm 91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	52
	12	2	Plate 15mm	210 x 155mm 93010015	EN 10029	S235JRG2	EN 10025			--	28
	13	1	Plate 10mm	600 x 84mm 93012010	EN 10029	S235JRG2	EN 10025			1 3.1	30
	14	1	Pipe seamless ø 88.9 x 5.5	L=301mm 91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	34
	15	1	Plate 15mm	800 x 165mm 93012015	EN 10029	S235JRG2	EN 10025			1 3.1	79
	16	1	Detail pipe connection on Inb./outb. arm	20000005	A4-20000005					--	0
	17	1	Mounting plate for junction box	48100002	A4-48100002	S235JRG2		Stahl 8146/x04x		--	16
	18	2	Balance weight	20080011	A4-20080011	St.	1 weight	Square 50 L=400		--	693
	19	1	Plate 15mm	800 x 300mm 93010015	EN 10029	S235JRG2	EN 10025			--	132
MR	20	2	Plate 5mm	78 x 78mm 93010005	EN 10029	S235JRG2	EN 10025			--	5
	21	1	Endplate Inboard arm 8" on MLA260	20650020	A4-20650020	S235JRG2				--	195
	22	1	Lockplate LD MLA260 on 8" pipe	20600003	A3-20600003	S235JRG2				--	551
	23	4	Washer ID 21	94050944	DIN 7349	A2				--	0
	24	4	Hex. screw M 20 x 60 mm	94150462	DIN 933	A2-70	DIN 267			--	8
	25	0		0						--	0
MR	26	1	Plate 10mm	110 x 110mm 93010010	EN 10029	S235JRG2	EN 10025			--	9
	27	1	Pipe seamless ø 168.3 x 7.1	L=150mm 91120528	ANSI B36.10	A-106 GrB	ASTM	6 "-S40		--	42
	28	2	Plate 10mm	159 x 151mm 93010010	EN 10029	S235JRG2	EN 10025			--	31
	29	4	Round bar ø 16	L=60mm 93350018		AISI 304L	ASTM			--	4
MR	30	1	Plate 5mm	160 x 160mm 93010005	EN 10029	S235JRG2	EN 10025			--	10
	31	28	Hex. bolt M 12 x100 mm	94020370	DIN 931	10.9	ISO 4014	Hot dip galvanised		--	28
	32	28	Hex. nut M 12	94020735	DIN 934	10		Hot dip galvanised		--	0
	33	56	Washer ID 13	94020935	DIN 6916	HV10	ISO 7416	Hot dip galvanised		--	0
	34	1	Plate 15mm	390 x 75mm 93010015	EN 10029	S235JRG2	EN 10025			--	34

Total Weight [N]

10785

Kanon Loading Equipment B.V. Edisonweg 27 3899 AZ Zeewolde The Netherlands Tel: +31(0)36-5219777 www.kanon.nl				Identnr. P062032I16		Rev. 2		Rev. Date 26-7-06		Page 2 OF 2		
										Name : HJS		
										Date : 23-5-06		
										Dwg. A1- P062032I16		
				Inboard arm right 8"-150# L=8500								
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]	
	35	1	Plate 15mm 390 x 355mm	93010015	EN 10029	S235JRG2	EN 10025			--	140	
	36	1	Plate 15mm 390 x 140mm	93010015	EN 10029	S235JRG2	EN 10025			--	41	
	37	1	Plate 15mm 390 x 97mm	93010015	EN 10029	S235JRG2	EN 10025			--	45	
	38	1	Pin hydraulic drive ø50x125	20000066	A4-20000066	WNr 1.4462		Deep 105		--	23	
	39	8	Square bar 15 L=50mm	93410015		S235JRG2	EN 10025			--	7	
	40	1	Pipe seamless ø 168.3 x 7.1 L=310mm	91120528	ANSI B36.10	A-106 GrB	ASTM	6 "-S40		--	87	
	41	1	Flange bearing s.1.039-341/10-220308	527014	A4-527014	S235JRG2		ø306x20 Binnenring		--	110	
	42	1	Stairs at inboard	P062032I57	A3-P062032I57	St galv.				--	1038	
	43	1	Pipe seamless ø 88.9 x 5.5 L=898mm	91120322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		--	101	
	44	1	Plate 10mm 240 x 50mm	93010010	EN 10029	S235JRG2	EN 10025			--	9	
	45	1	Plate 10mm 71 x 50mm	93010010	EN 10029	S235JRG2	EN 10025			--	3	
Total Weight [N]												
10785												

Nt	Description
HP	TO MAKE HALF PIECES OF PIPE
MR	MAKE ROUND

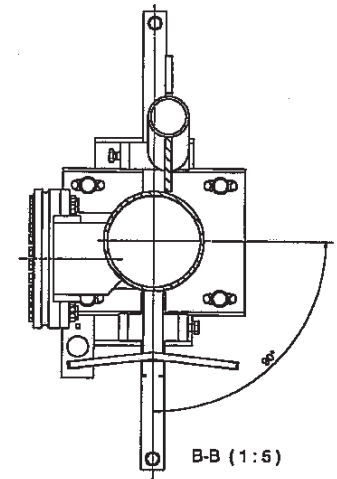
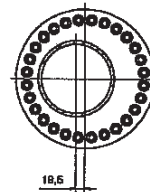
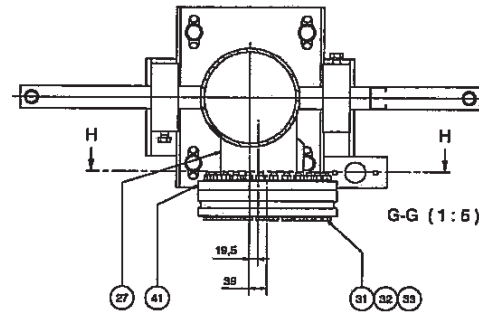
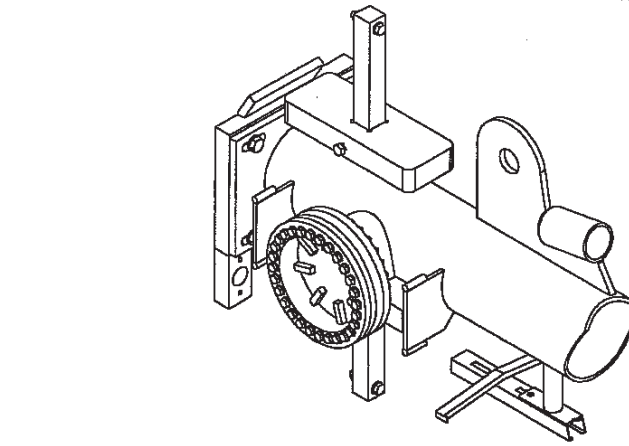
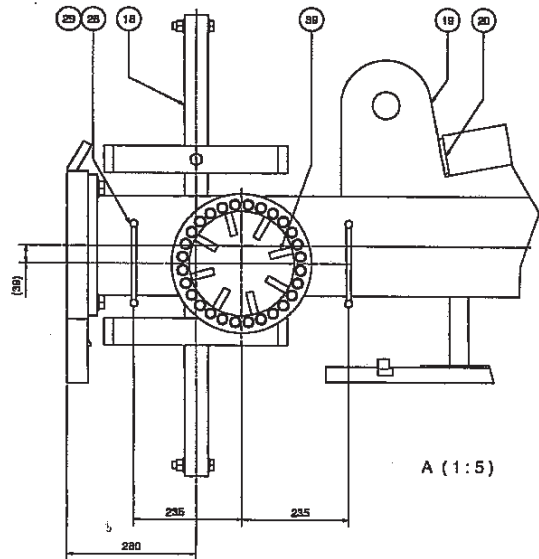


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P062032M10	LA-8141
P062032N10	LA-8143
P062032O10	LA-8144
P062032P10	LA-8145

Sheet 1 of 2

Revision 3	21-7-08	N.V.	Added list
Revision 2	6-5-05	HJB	See parts list
Revision 1	6-5-05	HJB	See parts list
Drawn	23-5-05	HJB	See parts list
Scale	1:20	A1	Inboard arm
8" L=8500			
RANON LOADING EQUIPMENT P.O. Box 245-3460 AA IJmuiden			
P062032117 2			Revision 2

Details see drawing P062032154



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Revision #					
Revision #	21-7-08	N.V.	Added list		
Revision #	8-8-05	NJB	See parts list.		
Check	☐ Part was found. Materials are in inventory. ☐ Part was found. Materials are in inventory. ☐ Part was found. Materials are in inventory.			☐ Engineering change order. ☐ New. ☐ Update in stock.	
Date	28-5-08	NJB	Inboard arm		
Scale:	1:20	A1	8" L=85D0		
					Product
LOADING EQUIPMENT			P062032117		2
F.B. & B. Ltd. Ltd.					

Sheet 2 of 2

Văn bản được tải lên hệ thống eoffice.bsr.com.vn. Với số định danh: 4496/TTr-TMDV/2025



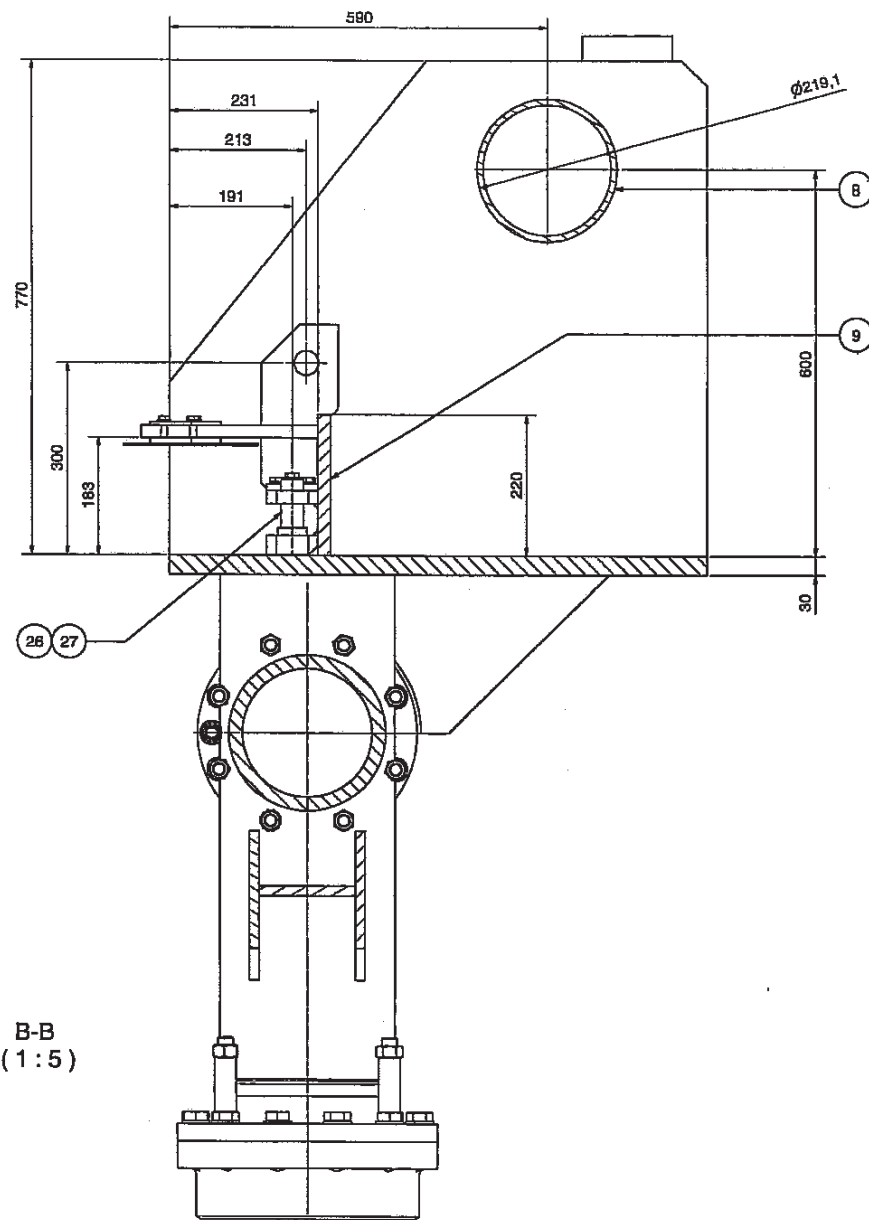
Kanon Loading Equipment B.V.				Identnr.	Rev.	Rev. Date	Page				
Edisonweg 27				P.O. BOX 385		P062032I17	2	26-7-06	1 OF 2		
3899 AZ Zeewolde				3840 AJ Harderwijk					Name : HJS		
The Netherlands				The Netherlands					Date : 23-5-06		
Tel: +31(0)36-5219777				Fax: +31(0)36-5219770		Inboard arm left 8"-150# L=8500			Dwg. A1- P062032I17		
www.kanon.nl											
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]
	1	1	Pipe seamless ø 219.1 x 8.2	L=8088mm 91122633	ANSI B36.10	A-106 GrB	ASTM	8 "-S40		3.1	3437
	2	1	Pipe seamless ø 219.1 x 8.2	L=4444mm 91122633	ANSI B36.10	A-106 GrB	ASTM	8 "-S40		3.1	1889
	3	0		0						--	0
	4	2	Elbow 8" 90° SR sched. 40 ø219.1x 8.2	91322633	ANSI B16.28	A-234 GrWPB	ASTM			3.1	276
	5	1	Pipe seamless ø 88.9 x 5.5	L=6886mm 91120322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		--	778
	6	1	Pipe seamless ø 88.9 x 5.5	L=3563mm 91120322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		--	403
	7	0		0						--	0
	8	1	Pipe seamless ø 88.9 x 5.5	L=393mm 91120322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		--	44
	9	1	Pipe seamless ø 88.9 x 5.5	L=758mm 91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	86
	10	1	Pipe seamless ø 88.9 x 5.5	L=610mm 91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	69
	11	1	Pipe seamless ø 88.9 x 5.5	L=456mm 91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	52
	12	0		0						--	0
	13	1	Plate 10mm	600 x 84mm 93012010	EN 10029	S235JRG2	EN 10025		1	3.1	30
	14	1	Pipe seamless ø 88.9 x 5.5	L=301mm 91122322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		3.1	34
	15	1	Plate 15mm	800 x 165mm 93012015	EN 10029	S235JRG2	EN 10025		1	3.1	79
	16	1	Detail pipe connection on Inb./outb. arm	20000005	A4-20000005					--	0
	17	0		0						--	0
	18	2	Balance weight	20080011	A4-20080011	St.	1 weight	Square 50 L=400		--	693
	19	1	Plate 15mm	800 x 300mm 93010015	EN 10029	S235JRG2	EN 10025			--	132
MR	20	2	Plate 5mm	78 x 78mm 93010005	EN 10029	S235JRG2	EN 10025			--	5
	21	1	Endplate inboard arm 8" on MLA260	20650020	A4-20650020	S235JRG2				--	195
	22	1	Lockplate LD MLA260 on 8" pipe	20600003	A3-20600003	S235JRG2				--	551
	23	4	Washer ID 21	94050944	DIN 7349	A2				--	0
	24	4	Hex. screw M 20 x 60 mm	94150462	DIN 933	A2-70	DIN 267			--	8
	25	0		0						--	0
MR	26	1	Plate 10mm	110 x 110mm 93010010	EN 10029	S235JRG2	EN 10025			--	9
	27	1	Pipe seamless ø 168.3 x 7.1	L=150mm 91120528	ANSI B36.10	A-106 GrB	ASTM	6 "-S40		--	42
	28	2	Plate 10mm	159 x 151mm 93010010	EN 10029	S235JRG2	EN 10025			--	31
	29	4	Round bar ø 16	L=60mm 93350016		AISI 304L	ASTM			--	4
MR	30	1	Plate 5mm	160 x 160mm 93010005	EN 10029	S235JRG2	EN 10025			--	10
	31	28	Hex. bolt M 12 x100 mm	94020370	DIN 931	10.9	ISO 4014	Hot dip galvanised		--	28
	32	28	Hex. nut M 12	94020735	DIN 934	10		Hot dip galvanized		--	0
	33	56	Washer ID 13	94020935	DIN 6916	HV10	ISO 7416	Hot dip galvanized		--	0
	34	0		0						--	0

Total Weight [N]

10228

Kanon Loading Equipment B.V.				Identnr.		Rev.		Rev. Date		Page	
Edisonweg 27				P.O. BOX 385		2		26-7-06		2 OF 2	
3899 AZ Zeewolde				3840 AJ Harderwijk						Name : HJS	
The Netherlands				The Netherlands						Date : 23-5-06	
Tel: +31(0)36-5219777				Fax: +31(0)36-5219770						Dwg. A1- P062032I17	
www.kanon.nl						Inboard arm left 8"-150# L=8500					
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Aft	Wght[N]
	35	0		0						--	0
	36	0		0						--	0
	37	0		0						--	0
	38	0		0						--	0
	39	8	Square bar 15	L=50mm 93410015		S235JRG2	EN 10025			--	7
	40	1	Pipe seamless ø 168.3 x 7.1	L=310mm 91120528	ANSI B36.10	A-106 GrB	ASTM	6 "-S40		--	87
	41	1	Flange bearing s.1.039-341/10-220308	527014	A4-527014	S235JRG2		ø306x20 Binnerring		--	110
	42	1	Stairs at inboard	P062032I57	A3-P062032I57	St galv.				--	1038
	43	1	Pipe seamless ø 88.9 x 5.5	L=898mm 91120322	ANSI B36.10	A-106 GrB	ASTM	3 "-S40		--	101
Total Weight [N]										10228	

Nt	Description
MR	MAKE ROUND

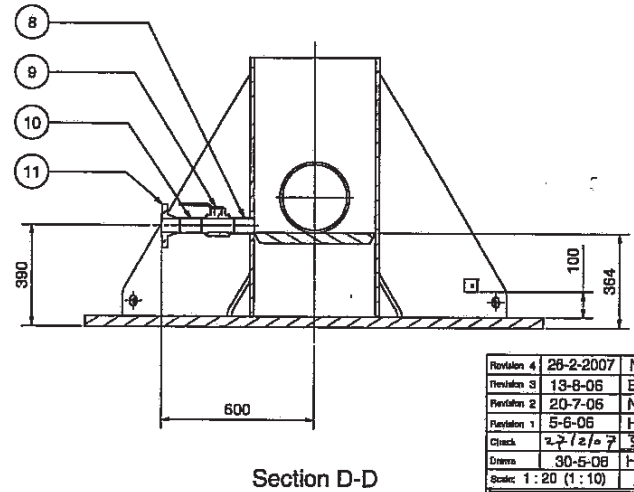
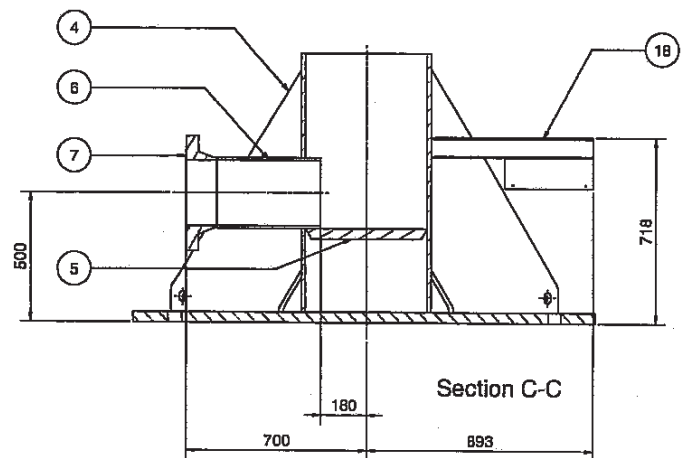
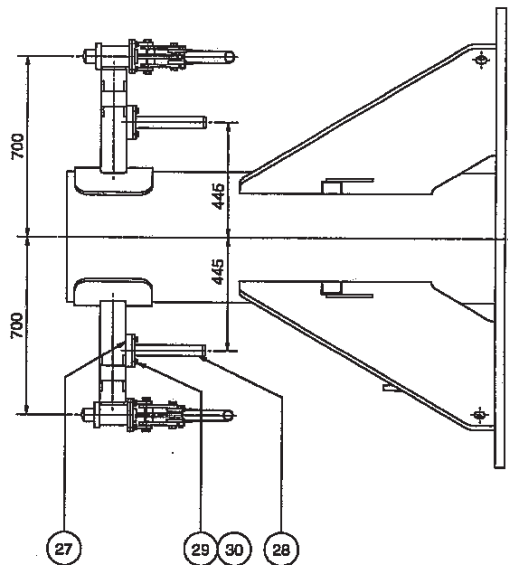
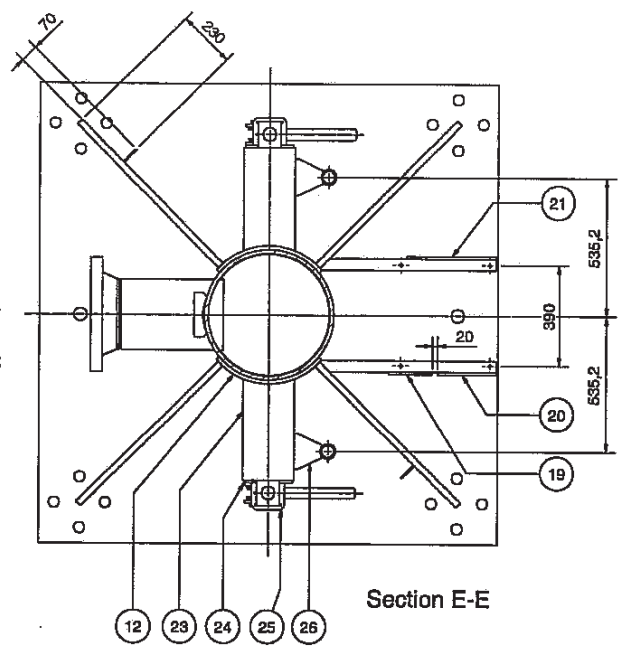
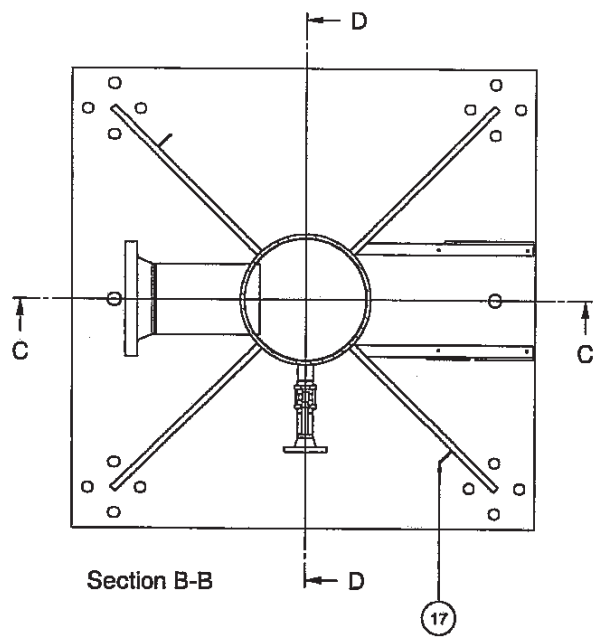


Sheet 2 of 2

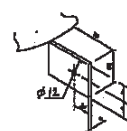
Revision 3	21-7-06	N.V.	Added list
Revision 2	8-6-06	N.V.	Added sheet 2
Revision 1	6-6-06	HJS	See parts list
Drawn	23-5-08	HJS	Length and angle tolerance see ISO 2768-1, class G
Scale	1:10	A2	Form and plate tolerance see ISO 2768-1, class M
Heel			Surface according to ISO 2768-1, class N
10"x8"			Usable to max
RANON LOADING EQUIPMENT P.O. Box 395, 3840 AJ Harderwijk			Drawing number P062032119 Revision 3

Kanon Loading Equipment B.V. Edisonweg 27 P.O. BOX 385 3899 AZ Zeewolde 3840 AJ Harderwijk The Netherlands The Netherlands Tel: +31(0)36-5219777 Fax: +31(0)36-5219770 www.kanon.nl				Identnr.	Rev.	Rev. Date	Page	1 OF 1			
				P062032I19	3	26-7-06	Name	: HJS			
							Date	: 29-5-06			
							Dwg.	A2- P062032I19			
Heel 16" x 10"											
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]
KS	1	1	Swiveljoint 812 10" PTFE-C&PTFE&NBR	801076814	A3-80100000	WNr 1.4462	/1.6582/St+316	s1=9.3 s2=9.3	3	3.1	829
	2	1	Pipe seamless ø 219.1 x 8.2 L=498mm	91122633	ANSI B36.10	A-106 GrB	ASTM	8 "-S40		3.1	212
KS	3	2	Swiveljoint 812 8" PTFE-C&PTFE&NBR	801066814	A3-80100000	WNr 1.4462	/1.6582/St+316	s1=8.2 s2=8.2	3	3.1	1262
	4	1	Pipe seamless ø 273 x 9.3 L=788mm	91122737	ANSI B36.10	A-106GRB	ASTM	10"-S40		3.1	474
	5	4	Plate 15mm 300 x 230mm	93012015	EN 10029	S235JRG2	EN 10025		1	3.1	278
	6	1	Plate 30mm 950 x 840mm	93012030	EN 10029	S235JRG2	EN 10025		1	3.1	1879
	7	2	Plate 25mm 840 x 790mm	93010025	EN 10029	S235JRG2	EN 10025		--		2210
	8	1	Pipe seamless ø 219.1 x 8.2 L=950mm	91120633	ANSI B36.10	A-106GRB	ASTM	8 "-S40	--		404
	9	1	Plate 20mm 950 x 220mm	93010020	EN 10029	S235JRG2	EN 10025		--		328
	10	2	Plate 20mm 472 x 250mm	93012020	EN 10029	S235JRG2	EN 10025		1	3.1	194
	11	2	Plate 15mm 150 x 150mm	93010015	EN 10029	S235JRG2	EN 10025		--		53
	12	2	Plate 15mm 260 x 120mm	93010015	EN 10029	S235JRG2	EN 10025		2	--	61
	13	1	Detection plate rotation drive	P062032I61	A3-P062032I61	S235JRG2			2	--	52
RD	14	1	Plate 10mm 202 x 202mm	93012010	EN 10029	S235JRG2	EN 10025		1	3.1	32
	15	2	Maintenance device on swivel 8" SAN810	20652104	A3-20652104	AISI 316			--		44
	16	4	Threaded rod M24 L=200mm	94150500	DIN 975	A2-70			--		29
	17	8	Hex. nut M 24	94050750	DIN 934	A2	DIN 267		--		8
	18	4	Pipe welded ø 33.4 x 3.38 L=85mm	91060073	ANSI B36.19	AISI 316L	ASTM	1 "-S40	--		8
	19	2	Plate 25mm 240 x 140mm	93010025	EN 10029	S235JRG2	EN 10025		--		132
	20	2	Plate 50mm 120 x 50mm	93010050	EN 10029	S235JRG2	EN 10025		--		47
	21	2	Plate 50mm 240 x 140mm	93010050	EN 10029	S235JRG2	EN 10025		--		264
	22	2	Pin hydraulic drive ø50x125	20000066	A4-20000066	WNr 1.4462		Deep 105	--		47
	23	1	Plate 30mm 477 x 80mm	93010030	EN 10029	S235JRG2	EN 10025		--		90
	24	2	Plate 50mm 237 x 50mm	93010050	EN 10029	S235JRG2	EN 10025		--		93
	25	1	Plate 20mm 477 x 80mm	93010020	EN 10029	S235JRG2	EN 10025		--		60
	26	2	Fill ring ø45 x ø36 x 12	44000014	A4-44000014	AISI 316L	ASTM		--		2
	27	2	Pin hydraulic drive ø35 x 115	20000067	A4-20000067	1.4462/304			--		22
Total Weight [N]											9113

Nt	Description
KS	(NOTE STRICTLY FOR KANON INTERNAL USE)
RD	TO MAKE ROUND PLATE



Detail Earthing Boss



Sheet 2 of 2

Revision 4	28-2-2007	N.V.	Added earthing boss
Revision 3	13-8-06	EvH	Added comments client
Revision 2	20-7-06	N.V.	Added list
Revision 1	5-6-06	HJS	See parts list.
Check	27/2/07	HJS	Length - wing angle tolerance see to ISO 2768-1, class G
Drawn	30-5-06	HJS	Form and profile tolerance see to ISO 2768-1, class M
Scale	1:20 (1:10)	A2	Dimensions at drawing in mm ASST. 0,1 to 0,5 mm
RANON LOADING EQUIPMENT P.O. Box 3855, 3840 AJ Harderwijk			20"-10" L=6000 Drawing number P062032120 Revision 4

Kanon Loading Equipment B.V.				Identnr.		Rev.	Rev. Date	Page			
Edisonweg 27 3899 AZ Zeewolde The Netherlands Tel: +31(0)36-5219777				P.O. BOX 385 3840 AJ Harderwijk The Netherlands Fax: +31(0)36-5219770		P062032I20 4 27-2-07		1 OF 2			
www.kanon.nl				Riser 20"-10" L=6000						Name : HJS	
										Date : 9-5-06	
										Dwg. A2- P062032I20	
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]
	1	1	Baseplate MLA 1800x1800x38	29070015	A4-29070015	S235JRG2	OLD 526026	Anchorbolts 16x M36		--	8900
	2	1	Pipe seamless $\varnothing$ 508.0 x 15,1	L=4665mm 91122953	ANSI B36.10	A-106GRB	ASTM	20"-S40		3.1	8556
	3	1	Reducer conc.20"x10" xs $\varnothing$ 508.0x $\varnothing$ 273.1	91522998	ANSI B16.9	A-234GRWPB	ASTM			3.1	594
	4	4	Side plate riser	P062032I73	A4-P062032I73	S235JRG2			1	3.1	3368
	5	1	Plate inside riserpipe $\varnothing$ 508.0 x 15,1	20970113	A4-20970112	S355J2G3		$\varnothing$ 472x40	1	3.1	509
	6	1	Pipe seamless $\varnothing$ 273 x 9.3	L=400mm 91122737	ANSI B36.10	A-106GRB	ASTM	10"-S40		3.1	241
	7	1	Wn flange 10" 300# RF s=9.3mm std	92022770	ANSI B16.5	A-105 N	ASTM			3.1	427
	8	1	Pipe seamless $\varnothing$ 60.3 x 5.5	L=75mm 91122222	ANSI B36.10	A-106GRB	ASTM	2 "-S80		3.1	6
	9	1	Ball valve 2" red. bore gefa DGF af	97070866	A4-97070866	Carbon steel	Butt weld ends	AS+FS acc. BS		3.1	30
	10	1	Pipe seamless $\varnothing$ 60.3 x 5.5	L=82mm 91122222	ANSI B36.10	A-106GRB	ASTM	2 "-S80		3.1	6
	11	1	Wn flange 2" 300# RF	s=5.5mm 92022721	ANSI B16.5	A-105 N	ASTM			3.1	34
HP	12	2	Pipe seamless $\varnothing$ 508.0 x 15,1	L=300mm 91122953	ANSI B36.10	A-106GRB	ASTM	20"-S40		3.1	330
	13	1	Plate 15mm	346 x 240mm 93012015	EN 10029	S235JRG2	EN 10025		1	3.1	85
	14	1	Plate 15mm	330 x 86mm 93012015	EN 10029	S235JRG2	EN 10025		1	3.1	33
	15	1	Plate 15mm	315 x 300mm 93012015	EN 10029	S235JRG2	EN 10025		1	3.1	73
	16	1	Pipe seamless $\varnothing$ 219.1 x 8.2	L=1900mm 91120633	ANSI B36.10	A-106GRB	ASTM	8 "-S40		--	808
	17	2	Plate 5mm	70 x 50mm 93010005	EN 10029	S235JRG2	EN 10025		3	--	3
	18	2	Channel UNP 80	L=700mm 93500080	DIN 1026	S235JRG2	EN 10025			--	120
	19	1	Mounting plate for junction box	48100002	A4-48100002	S235JRG2		Stahl 8146/x04x		--	16
	20	1	Mounting plate for junction box	48100004	A4-48100004	S235JRG2		Stahl 8146/x06x		--	32
	21	1	Mounting plate for junction box	48100005	A4-48100005	S235JRG2		Stahl 8146/x07x		--	49
	22	1	Ident plate assy MLA CE	29070001	A3-29070001	ST/ST.ST.				--	13
	23	2	Hollow section 200x100x 8	L=400mm 93210725		S235JRH	EN 10210/10219			--	272
	24	2	Plate 10mm	190 x 90mm 93010010	EN 10029	S235JRG2	EN 10025			--	27
	25	2	Locking set MLA pin $\varnothing$ 50 standard	20000010	A2-20000010	S235/304L				--	297
	26	2	Guide for exchanging seal swiveljoint	P062032I53	A3-P062032I53					--	70
	27	2	Flat bar 80 x 25	L=130mm 93110236	DIN 1017	S235JRG2	EN 10025			--	31
	28	2	Pin maintenance device MLA260 $\varnothing$ 45 x 305	20000014	A4-20000014	1.4462/304				--	88
	29	4	Hex. screw M 12 x 30 mm	94150356	DIN 933	A2-70	DIN 267			--	4
	30	4	Washer ID 13	94050935	DIN 125	A2	DIN 522			--	0
	31	1	Plate 30mm	360 x 260mm 93010030	EN 10029	S235JRG2	EN 10025			--	200
	32	1	Mounting plate for junction box	48100002	A4-48100002	S235JRG2		Stahl 8146/x04x		--	16
	33	1	Square bar 90	L=250mm 93410090		S235JRG2	EN 10025			--	162
	34	1	Plate 15mm	180 x 145mm 93010015	EN 10029	S235JRG2	EN 10025			--	30

Total Weight [N]

25626

Kanon Loading Equipment B.V. Edisonweg 27 3899 AZ Zeewolde The Netherlands Tel: +31(0)36-5219777 www.kanon.nl				Identnr. P062032I20		Rev. 4	Rev. Date 27-2-07	Page 2 OF 2			
								Name : HJS			
				Date : 9-5-06							
				Dwg. A2- P062032I20							
Riser 20"-10" L=6000											
Nt	It	Qty	Description	Partnr	Dwg/Norm/Sup	Material	Materialnorm	Remarks	Rev	Att	Wght[N]
	35	1	Plate 30mm 270 x 80mm	93010030	EN 10029	S235JRG2	EN 10025			--	51
	36	1	Square bar 50 L=105mm	93410050		S235JRG2	EN 10025			--	21
	37	1	Flat bar 80 x 20 L=270mm	93110310	EN 10029	S235JRG2	EN 10025			--	34
	38	2	Fill ring ø45 x ø36 x 12	44000014	A4-44000014	AISI 316L	ASTM			--	2
	39	2	Pin hydraulic drive ø35 x 115	20000067	A4-20000067	1.4462/304				--	22
	40	2	Flat bar 80 x 15 L=285mm	93110309	DIN 1017	S235JRG2	EN 10025			--	54
	41	1	Flat bar 90 x 10 L=154mm	93110332	DIN 1017	S235JRG2	EN 10025			--	11
	42	5	Plate 5mm 40 x 40mm	93012005	EN 10029	S235JRG2	EN 10025			3.1	3
Total Weight [N] 25626											

Nt	Description
HP	TO MAKE HALF PIECES OF PIPE

Factory Acceptance Test procedure

		Kanon Loading Equipment (M) Sdn Bhd Lot 203G, T/Supply, Gebeng Industrial Estate, 26080 Kuantan, Pahang Darul Makmur, Malaysia.		Vendor Document No. P062032-FAT Procedure		Rev. 1	Page 1+22
Factory Acceptance Test							
MLA 260 10" 300# without ERC P062032K10, LA-8134							
MLA 260 12" 300# without ERC P062032F10, LA-8122							
MLA 260 10" 6" with ERC P062032Q10, LA-8151							
VIETNAM OIL AND GAS CORPORATION (PETROVIETNAM) DUNG QUAT REFINERY (DQR) PROJECT DUNG QUAT, VIETNAM							
							
Requisition Number:		8474L-081-MR-4026-051-001		Stamp			
Purchase Order Number:		53019		 VENDOR DOCUMENT REVIEW ☐ 1 REVISAL AND RESUBMIT ☐ 2 TO BE ISSUED AS FINAL PROVIDED COMMENTS ARE INCORPORATED ☒ 3 NO COMMENT - FINAL ISSUE ChewEow Low 2007.07.23 10:12:18 +08'00'			
Equipment / Item Tag:		LA-8111, LA-8112, LA-8113, LA-8114, LA-8121, LA-8122, LA-8123, LA-8124, LA-8131, LA-8133, LA-8134, LA-8135, LA-8141, LA-8143, LA-8144, LA-8145, LA-8161, LA-8151, LA-8152, LA-8162					
Equipment / Item Description:		Marine Loading Arms Package					
TPC Document Number:		8474L-081-B1104-4026-051-001					
Document Class:		Z					
Comment given in this document does not relieve vendor of his/her responsibility for the correct engineering design and fabrication. This equipment or product shall be made as per the codes, requisition, specification, project procedures, and international standards.							
1	13-Jul-07	Issue for approval	Heo	Erik	Erik		
0	27-Jun-06	Issue for approval	Heo	Erik	Erik		
Rev	Date DD-MMM-YY	Status	Written By (name & visa)	Check By (name & visa)	Approved By (name & visa)		
Pages changed in this revision:							

	F.A.T. PROCEDURE MLA 260	Doc.: P062032-FAT K10 Rev.1
	TECHNIP FOR DUNG QUAT REFINERY MLA 260 10" 300# without ERC	DATE:

**THIS PERFORMANCE TEST PROCEDURE CONTAINS THE
FOLLOWING ELEMENTS:**

PAGE: 2:

OPERATING ENVELOPE PROJECTED ON FLAT SURFACE 500 MM
ABOVE FACTORY GROUND LEVEL

PAGES: 3, 4, 5:

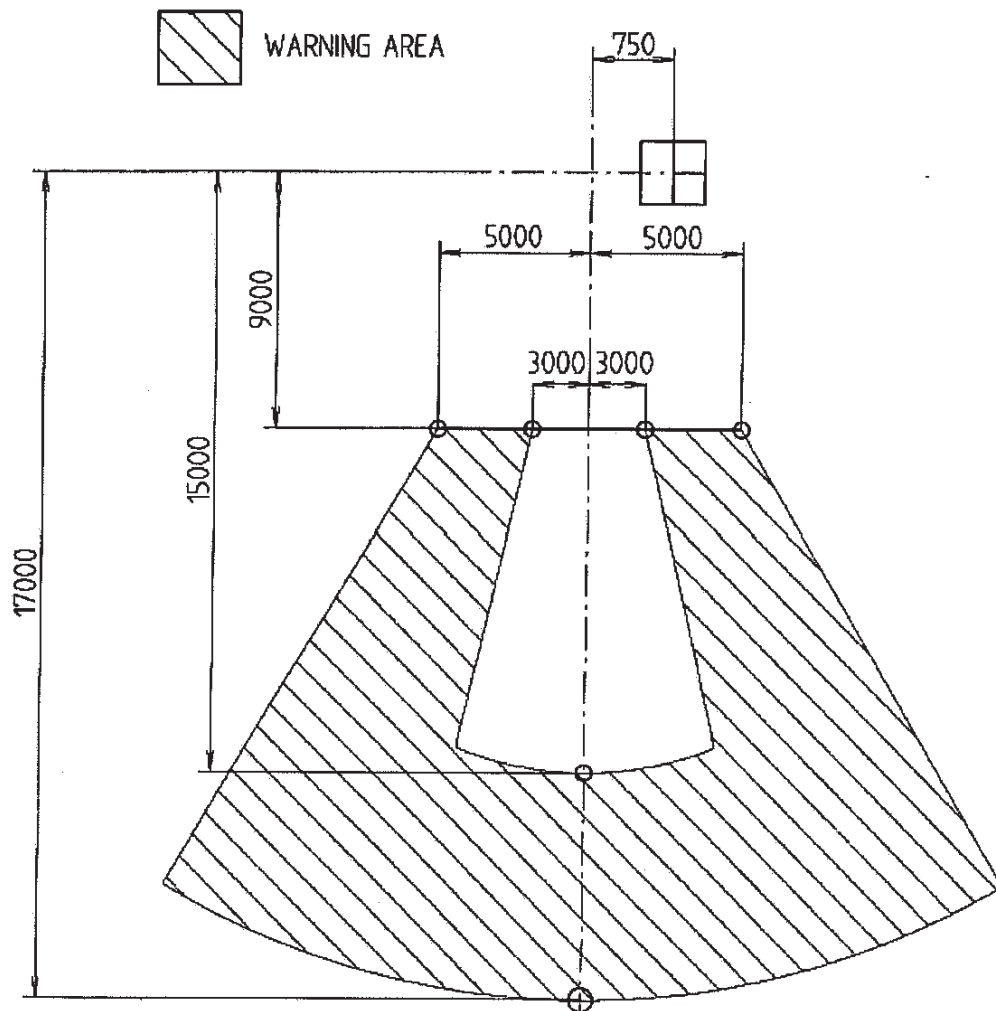
OPERATIONAL FLOW CHART

PAGES: 6:

ACCEPTANCE CRITERIA & RESULTS

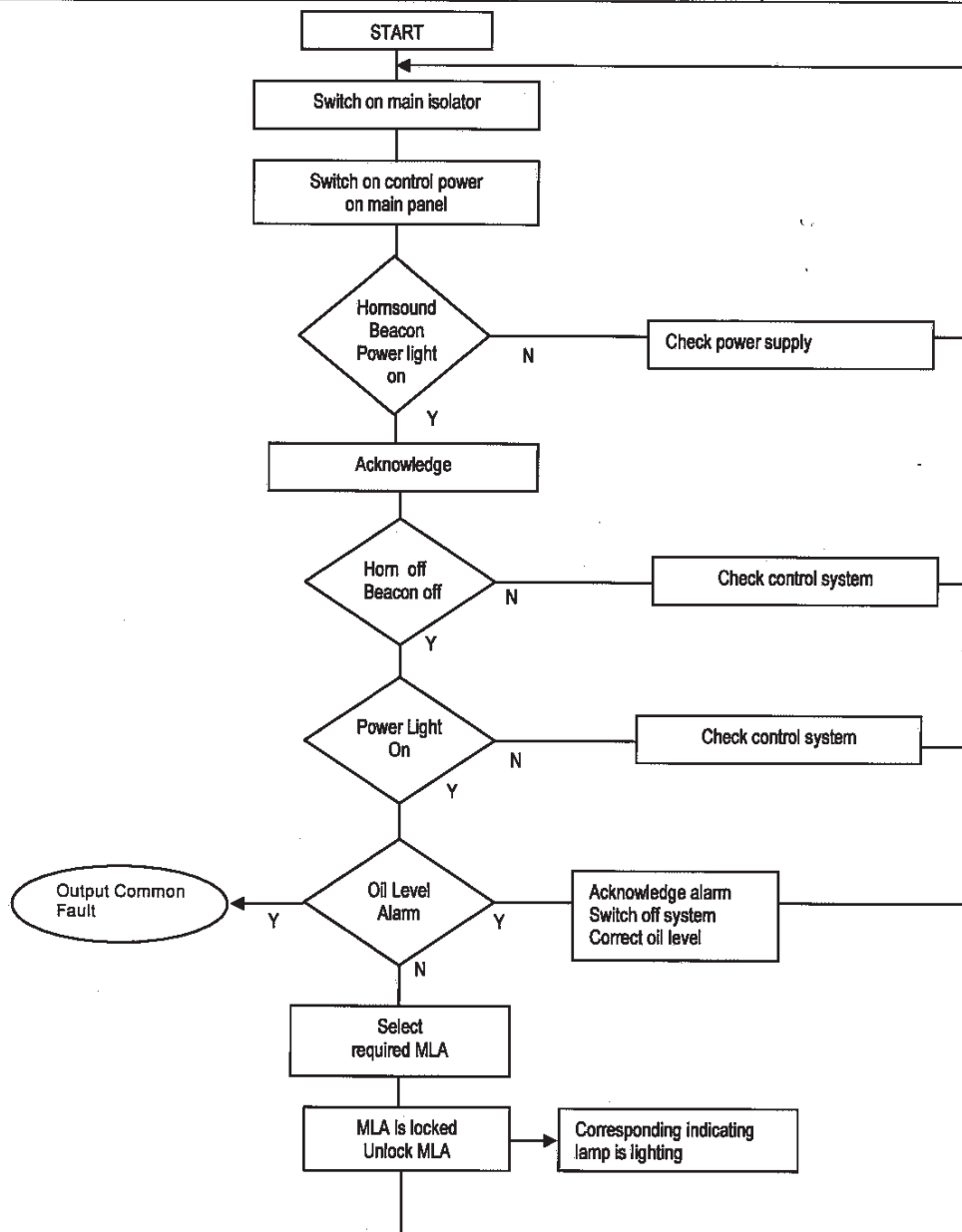


SKETCH 1 OPERATING ENVELOPE

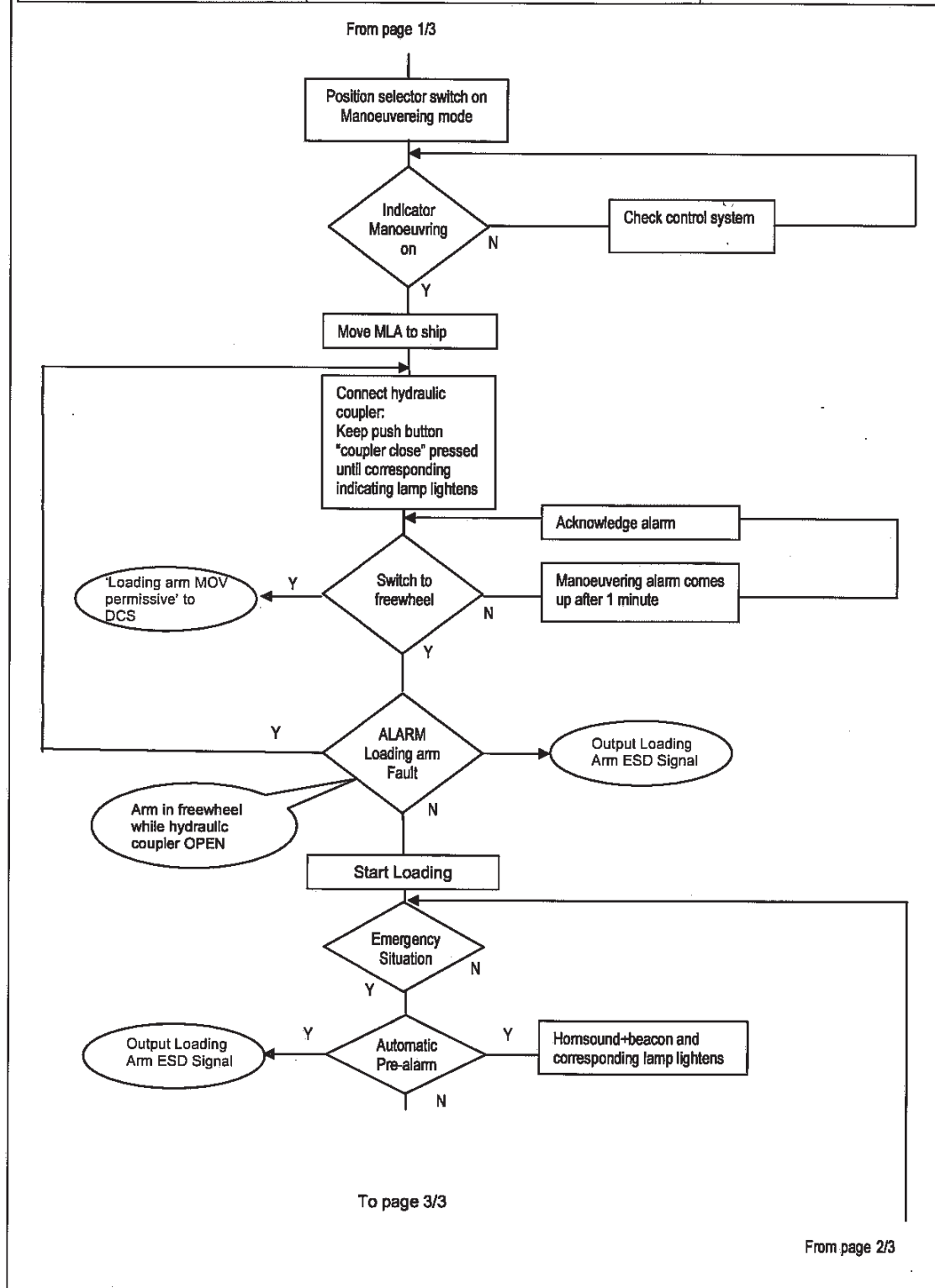


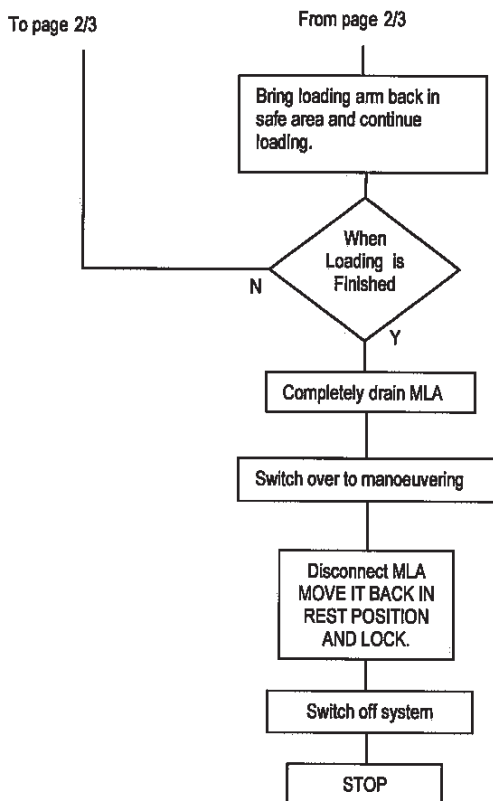
•Operating envelope projected on flat surface 500mm above factory ground level.





To page 2/3





	F.A.T. PROCEDURE MLA 260		Doc.: P062032-FAT K10 Rev.1
	TECHNIP FOR DUNG QUAT REFINERY MLA 260 10" 300# without ERC		DATE:
SUBJECT	PREPARATIONS	OBJECTIVES/CHECKS	O.K.
Test of position of the presentation flange. Centerline standpost to triple assy flange Max 4000 mm	Arm in stormlocked position	Check/verify present. Flange is in vertical plane. (90° ±5°). Check/verify coupler flange does not extend beyond jetty face.	
Start up	Start up according sheet 3 and 4 of this document	Maneuvering will be possible	
Test of the outboard balance during normal maneuvering. Test of the inboard balance during normal maneuvering.	Move empty arm in arbitrary position inside working area and switch to freewheel mode Move empty arm in arbitrary position inside working area and switch to freewheel mode	Inboard- and outboard arm shall lift upwards very slowly, or stay steady.	
Maneuvering controls	Manoeuver arm from: Central Control Console & Pendant	All movements shall be possible on selected point of operation only.	
Hydraulic coupler function	Open coupler Close coupler Proceed from Central control console & Pendant	The coupler claws must reach their extreme position (OPEN or CLOSED) simultaneously with a maximum delay delay between 1 st and last claw if 2 sec.	
Alarm settings (according sheet 2 of this document)	Slew arm left Slew arm right Increase Apex	First stage alarm will raise (pre-alarm)	
Output signals control	By any of the mentioned alarms on above flow chart, control presence of the related output.	# output common fault # output loading arm MOV # output loading arm ESD	
Complete hydraulic system	Visual & compliance inspection Wiring check Automatic pump start-up initiated by accumulator pressure drop		

	F.A.T. PROCEDURE MLA 260	Doc.: P062032-FAT K10 Rev.1 7/7
	TECHNIP FOR DUNG QUAT REFINERY MLA 260 10" 300# without ERC	DATE:

Approvals

Customer : TECHNIP FOR DUNG QUAT REFINERY

Signature :

Manufacturer : Kanon Loading Equipment Sdn Bhd

Address : Lot 203G, Gebeng Industrial Estate, 26080, Kuantan.

Fabr. Nr. : P062032K10, LA-8134

Signature :

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	F.A.T. PROCEDURE MLA 260	Doc.: P062032-FAT F10 Rev.1
	TECHNIP FOR DUNG QUAT REFINERY MLA 260 12" 300# without ERC	1/7 DATE:

**THIS PERFORMANCE TEST PROCEDURE CONTAINS THE
FOLLOWING ELEMENTS:**

PAGE: 2:

OPERATING ENVELOPE PROJECTED ON FLAT SURFACE 500 MM
ABOVE FACTORY GROUND LEVEL

PAGES: 3, 4, 5:

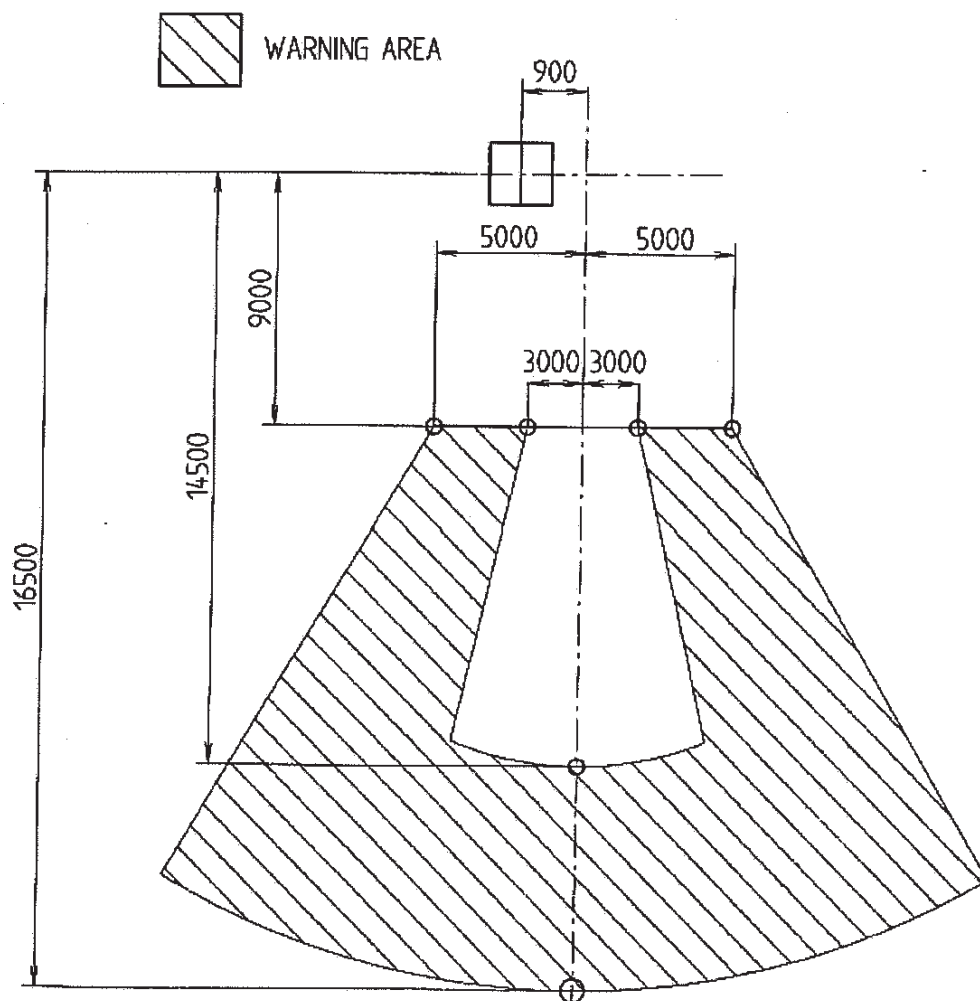
OPERATIONAL FLOW CHART

PAGES: 6:

ACCEPTANCE CRITERIA & RESULTS

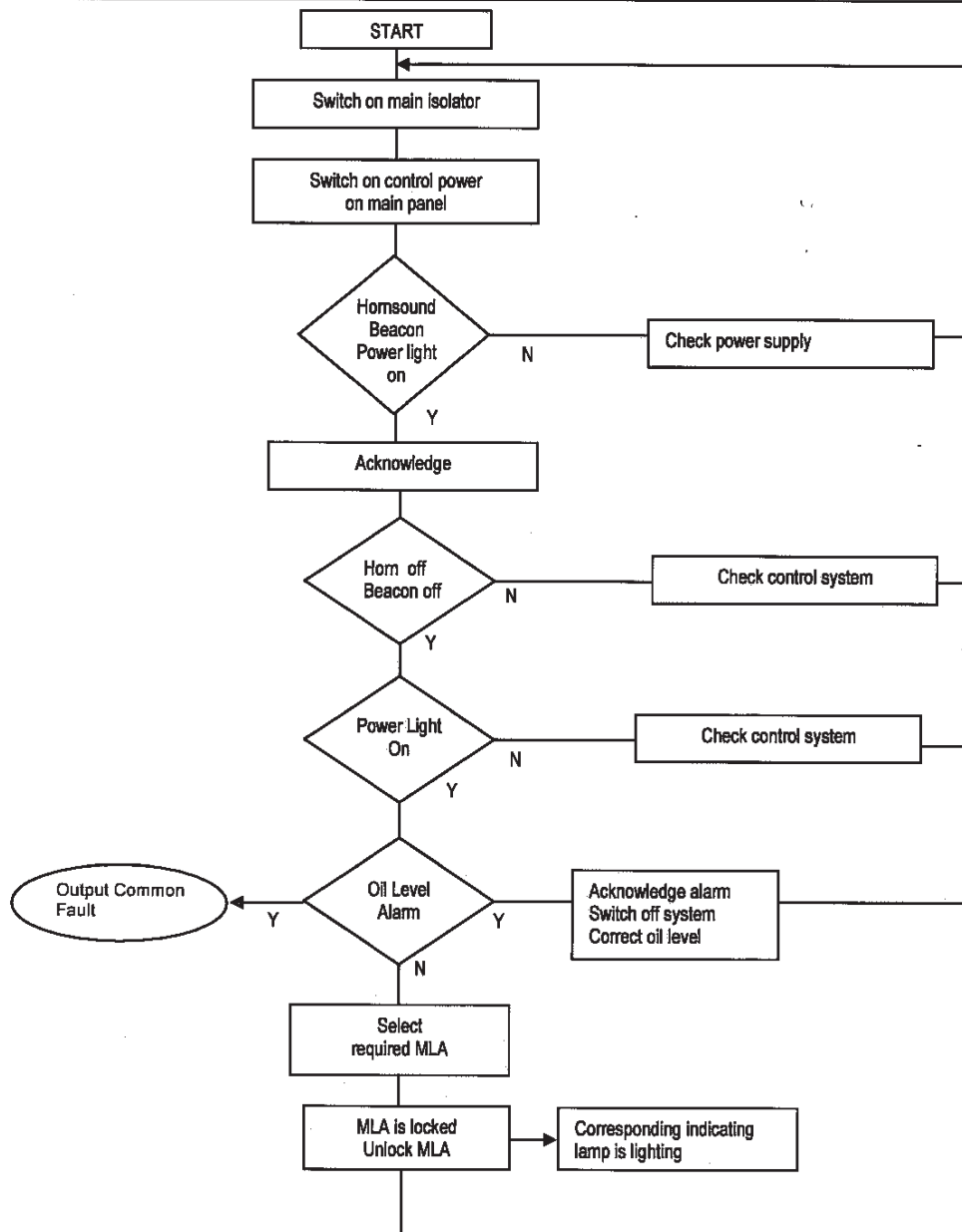


SKETCH 1 OPERATING ENVELOPE

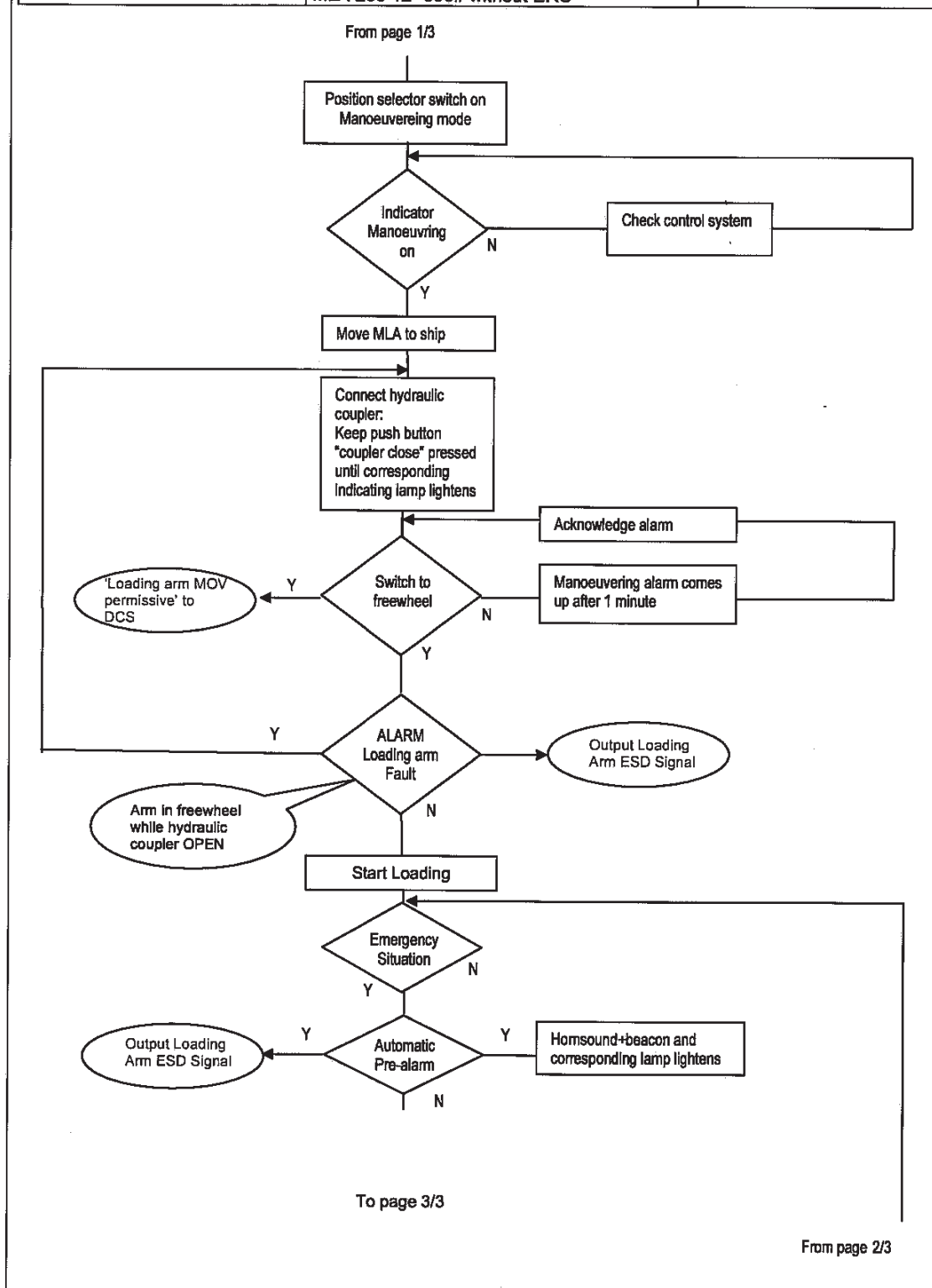


•Operating envelope projected on flat surface 500mm above factory ground level.



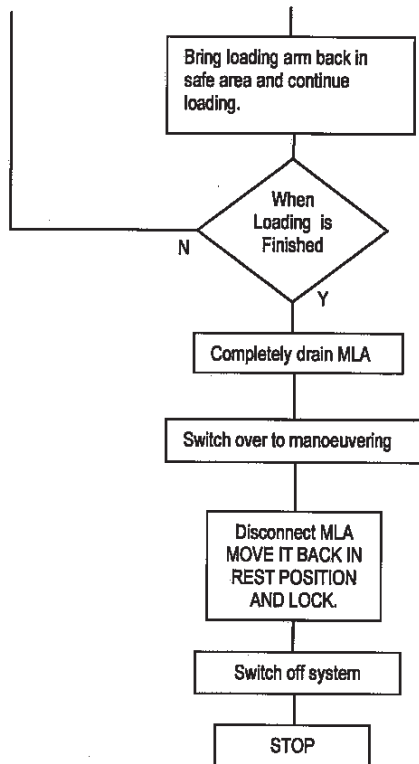


To page 2/3



To page 2/3

From page 2/3



	F.A.T. PROCEDURE MLA 260		Doc.: P062032-FAT F10 Rev.1
	TECHNIP FOR DUNG QUAT REFINERY MLA 260 12" 300# without ERC		DATE:
SUBJECT	PREPARATIONS	OBJECTIVES/CHECKS	O.K.
Test of position of the presentation flange. Centerline standpost to triple assy flange Max 4000 mm	Arm in stormlocked position	Check/verify present. Flange is in vertical plane. (90° ±5°). Check/verify coupler flange does not extend beyond jetty face.	
Start up	Start up according sheet 3 and 4 of this document	Maneuvering will be possible	
Test of the outboard balance during normal maneuvering. Test of the inboard balance during normal maneuvering.	Move empty arm in arbitrary position inside working area and switch to freewheel mode Move empty arm in arbitrary position inside working area and switch to freewheel mode	Inboard- and outboard arm shall lift upwards very slowly, or stay steady.	
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	F.A.T. PROCEDURE MLA 260	Doc.: P062032-FAT F10 Rev.1 7/7
	TECHNIP FOR DUNG QUAT REFINERY MLA 260 12" 300# without ERC	DATE:

Approvals

Customer : TECHNIP FOR DUNG QUAT REFINERY
 Signature :
 Manufacturer : Kanon Loading Equipment Sdn Bhd
 Address : Lot 203G, Gebeng Industrial Estate, 26080, Kuantan.
 Fabr. Nr. : P062032F10, LA-8122
 Signature :





Kanon Loading Equipment (M) Sdn. Bhd.

Lot 203G, Gebeng Industrial Estate, 26080

Kuantan, Pahang

Malaysia

Tel.: +60 (09) 583 3338

Fax: +60 (09) 583 3456

Section 1.2.2

Introduction to Balance a Loading Arm

Customer;

TPC Partnership

20 Raffles Place, Ocean Tower, #14-04, 048620 Singapore

PO No.: 8474L-081-PO-4026-051-53019

for

Vietnam Oil and Gas Corporation
Dung Quat Refinery

2

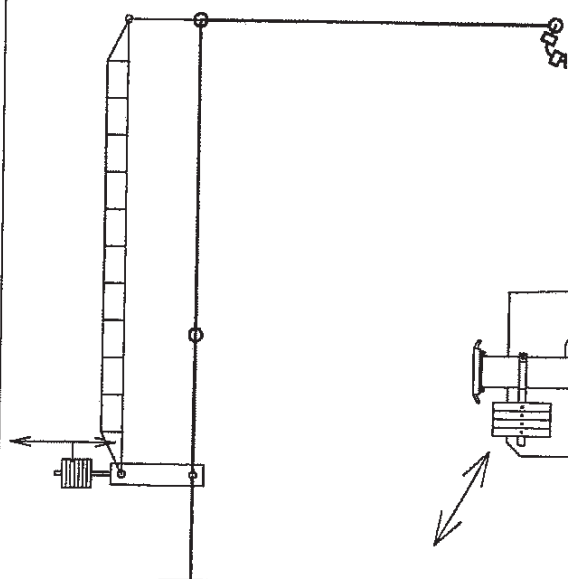


INSTRUCTIONS TO BALANCE MARINE LOADING ARM

Marine loading arm MLA260, MLA270 & MLA280

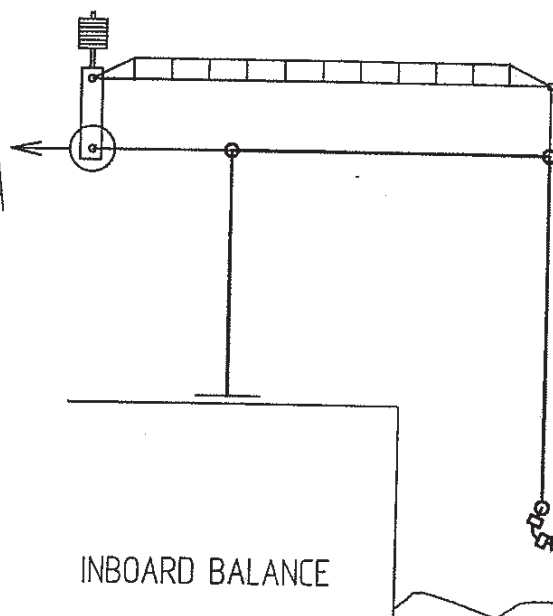
Kanon reference

260038



OUTBOARD BALANCE

MOVE THE WEIGHTS ON THE
COUNTERWEIGHT TILL OUTBOARD ARM
IS IN BALANCE
(REMOVE OR ADD WEIGHTS
IF NECESSARY)



INBOARD BALANCE

REMOVE OR ADD WEIGHTS AT
TURNING POINT COUNTERWEIGHT
TILL INBOARD ARM IS IN
BALANCE

