



Bid Number/बोली क्रमांक (बिड संख्या): GEM/2023/B/3924083 Dated/दिनांक : 06-09-2023

Bid Document/ बिड दस्तावेज़

Bid Details/बिड विवरण							
Bid End Date/Time/बिड बंद होने की तारीख/समय	20-09-2023 14:00:00						
Bid Opening Date/Time/बिंड खुलने की तारीख/समय	20-09-2023 14:30:00						
Bid Offer Validity (From End Date)/बिड पेशकश वैधता (बंद होने की तारीख से)	60 (Days)						
Ministry/State Name/मंत्रालय/राज्य का नाम	Ministry Of Chemicals And Fertilizers						
Department Name/विभाग का नाम	Department Of Chemicals And Petrochemicals						
Organisation Name/संगठन का नाम	Hindustan Organic Chemicals Limited						
Office Name/कार्यालय का नाम	Ambalamugal,ernakulam						
Total Quantity/कुल मात्रा	8						
ltem Category/मद केटेगरी	Complete Tray Assembly for C 2002 (Q3) , Complete Set of SS Tray Fasteners for C 2002 (Q3)						
Years of Past Experience Required for same/similar service/उन्हीं/समान सेवाओं के लिए अपेक्षित विगत अनुभव के वर्ष	3 Year (s)						
MSE Exemption for Years Of Experience/अनुभव के वर्षों से एमएसई छूट/	Yes						
Startup Exemption for Years of Experience and Turnover/ अनुभव के वर्षों से स्टार्टअप छूट	No						
Document required from seller/विक्रेता से मांगे गए दस्तावेज़	Experience Criteria, Past Performance, Certificate (Requested in ATC), OEM Authorization Certificate, Additional Doc 1 (Requested in ATC), Compliance of BoQ specification and supporting document *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer						
Past Performance/विगत प्रदर्शन	80 %						
Bid to RA enabled/बिंड से रिवर्स नीलामी सक्रिय किया	No						
Type of Bid/बिंड का प्रकार	Two Packet Bid						
Primary product category	Complete Tray Assembly for C 2002						

Bid D	Details/बिड विवरण							
Time allowed for Technical Clarifications during technical evaluation/तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय	2 Days							
Inspection Required (By Empanelled Inspection Authority / Agencies pre-registered with GeM)	No							
Evaluation Method/मूल्यांकन पद्धति	Total value wise evaluation							
EMD Detail/ईएमडी विवरण								
Required/आवश्यकता	No							
ePBG Detail/ईपीबीजी विवरण								
Required/आवश्यकता	No							
Splitting/विभाजन Bid splitting not applied/बोली विभाजन लागू नहीं किया गया. MII Purchase Preference/एमआईआई खरीद वरीयता								
MII Purchase Preference/एमआईआई खरीद वरीयता	No							
MSE Purchase Preference/एमएसई खरीद वरीयता								
MSE Purchase Preference/एमएसई खरीद वरीयता	Yes							
exempted from the requirement of "Bidder Turnove	r latest definitions under MSME rules, the bidder shall be er" criteria and "Experience Criteria" subject to meeting of							

- 1. If the bidder is a Micro or Small Enterprise as per latest definitions under MSME rules, the bidder shall be exempted from the requirement of "Bidder Turnover" criteria and "Experience Criteria" subject to meeting of quality and technical specifications. If the bidder is OEM of the offered products, it would be exempted from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. In case any bidder is seeking exemption from Turnover / Experience Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer.
- 2. Experience Criteria: In respect of the filter applied for experience criteria, the Bidder or its OEM {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU / Public Listed Company for number of Financial years as indicated above in the bid document before the bid opening date. Copies of relevant contracts to be submitted along with bid in support of having supplied some quantity during each of the Financial year. In case of bunch bids, the category of primary product having highest value should meet this criterion.
- 3. Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for

Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% (Selected by Buyer)of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for 25%(selected by Buyer) percentage of total QUANTITY. The buyers are advised to refer the OM No.F.1/4/2021-PPD dated 18.05.2023 OM No.1 4 2021 PPD dated 18.05.2023 for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017. 4. Past Performance: The Bidder or its OEM {themselves or through re-seller(s)} should have supplied same or similar Category Products for 80% of bid quantity, in at least one of the last three Financial years before the bid opening date to any Central / State Govt Organization / PSU / Public Listed Company. Copies of relevant contracts (proving supply of cumulative order quantity in any one financial year) to be submitted along with bid in support of quantity supplied in the relevant Financial year. In case of bunch bids, the category related to primary product having highest bid value should meet this criterion.

Complete Tray Assembly For C 2002 (3 set)

Technical Specifications/तकनीकी विशिष्टियाँ

Buyer Specification Document/क्रेता विशिष्टि दस्तावेज़	Download
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Additional Specification Documents/अतिरिक्त विशिष्टि दस्तावेज़

DrawingDocument1	<u>View</u>
DrawingDocument2	<u>View</u>

Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	Abhilash M S	682302,HINDUSTAN ORGANIC CHEMICALS LTD, AMBALAMUGAL ERNAKULAM	3	45

Complete Set Of SS Tray Fasteners For C 2002 (5 set)

Technical Specifications/तकनीकी विशिष्टियाँ

Buyer Specification Document/क्रेता विशिष्टि दस्तावेज़	<u>Download</u>

Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	Abhilash M S	682302,HINDUSTAN ORGANIC CHEMICALS LTD, AMBALAMUGAL ERNAKULAM	5	45

Buyer added Bid Specific Additional Scope of Work

S.No.क्र.सं •	Document Title	Description	Applicable/रिवर्स प्रभार के अनुसार जीएसटी i.r.o. Items		
1	Specification Document <u>View</u>	Complete Technical Specification document including project specs.	Complete Tray Assembly For C 2002(3),Complete Set Of SS Tray Fasteners For C 2002(5)		

The uploaded document only contains Buyer specific Additional Scope of Work and / or Drawings for the bid items added with due approval of Buyer's competent authority. Buyer has certified that these additional scope and drawings are generalized and would not lead to any restrictive bidding.

Buyer Added Bid Specific Terms and Conditions/क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें

1. Generic

OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent of bid quantity at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity by up to 25% of the contracted quantity during the currency of the contract at the contracted rates. Bidders are bound to accept the orders accordingly.

2. Generic

After award of contract – Successful Bidder shall have to get Detailed Design Drawings approved from buyer before starting fabrication. Successful Bidder shall submit Detailed Design Drawings for Buyer's approval, within 7 days of award of contract. Buyer shall, either approve the drawings or will provide complete list of modification required in the drawings within 7 days. Seller shall be required to ensure supply as per approved Drawings with modifications as communicated by Buyer. If there is delay from buyer side in approval of drawing– the delivery period shall be refixed without LD for the period of delay in approval of Drawing.

3. Generic

Bidders are advised to check applicable GST on their own before quoting. Buyer will not take any responsibility in this regards. GST reimbursement will be as per actuals or as per applicable rates (whichever is lower), subject to the maximum of quoted GST %.

4. Generic

Bidder financial standing: The bidder should not be under liquidation, court receivership or similar proceedings, should not be bankrupt. Bidder to upload undertaking to this effect with bid.

5. Generic

Bidder shall submit the following documents along with their bid for Vendor Code Creation:

- a. Copy of PAN Card.
- b. Copy of GSTIN.
- c. Copy of Cancelled Cheque.
- d. Copy of EFT Mandate duly certified by Bank.

6. Generic

Data Sheet of the product(s) offered in the bid, are to be uploaded along with the bid documents. Buyers can match and verify the Data Sheet with the product specifications offered. In case of any unexplained mismatch of technical parameters, the bid is liable for rejection.

7. Generic

Experience Criteria: The Bidder or its OEM {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU / Public Listed Company for 3 years before the bid opening date. Copies of relevant contracts to be submitted along with bid in support of having supplied some quantity during each of the year. In case of bunch bids, the primary product having highest value should meet this criterion.

8. Generic

Manufacturer Authorization: Wherever Authorised Distributors/service providers are submitting the bid, Authorisation Form /Certificate with OEM/Original Service Provider details such as name, designation, address, e-mail Id and Phone No. required to be furnished along with the bid

9. Generic

Supplier shall ensure that the Invoice is raised in the name of Consignee with GSTIN of Consignee only.

10. Generic

The successful bidder has to supply all essential accessories required for the successful installation and commissioning of the goods supplied. Besides standard accessories as per normal industry practice, following accessories must be part of supply and cost should be included in bid price:

Should be all inclusive of GST,P&F,Freight, TPI Inspection & testing charges, etc.

11. Generic

- 1. The Seller shall not assign the Contract in whole or part without obtaining the prior written consent of buyer.
- 2. The Seller shall not sub-contract the Contract in whole or part to any entity without obtaining the prior written consent of buyer.
- 3. The Seller shall, notwithstanding the consent and assignment/sub-contract, remain jointly and severally liable and responsible to buyer together with the assignee/ sub-contractor, for and in respect of the due performance of the Contract and the Sellers obligations there under.

12. Generic

Without prejudice to Buyer's right to price adjustment by way of discount or any other right or remedy available to Buyer, Buyer may terminate the Contract or any part thereof by a written notice to the Seller, if:

- i) The Seller fails to comply with any material term of the Contract.
- ii) The Seller informs Buyer of its inability to deliver the Material(s) or any part thereof within the stipulated Delivery Period or such inability otherwise becomes apparent.
- iii) The Seller fails to deliver the Material(s) or any part thereof within the stipulated Delivery Period and/or to replace/rectify any rejected or defective Material(s) promptly.
- iv) The Seller becomes bankrupt or goes into liquidation.
- v) The Seller makes a general assignment for the benefit of creditors.
- vi) A receiver is appointed for any substantial property owned by the Seller.
- vii) The Seller has misrepresented to Buyer, acting on which misrepresentation Buyer has placed the Purchase Order on the Seller.

13. Generic

While generating invoice in GeM portal, the seller must upload scanned copy of GST invoice and the screenshot of GST portal confirming payment of GST.

14. Scope of Supply

Scope of supply (Bid price to include all cost components): Only supply of Goods

15. Purchase Preference (Centre)

Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for percentage of 25% of total value.

16. Service & Support

Availability of Service Centres: Bidder/OEM must have a Functional Service Centre in the State of each Consignee's Location in case of carry-in warranty. (Not applicable in case of goods having on-site warranty). If service center is not already there at the time of bidding, successful bidder / OEM shall have to establish one within 30 days of award of contract. Payment shall be released only after submission of documentary evidence of having Functional Service Centre.

17. Service & Support

Dedicated /toll Free Telephone No. for Service Support : BIDDER/OEM must have Dedicated/toll Free Telephone No. for Service Support.

18. Service & Support

Escalation Matrix For Service Support : Bidder/OEM must provide Escalation Matrix of Telephone Numbers for Service Support.

19. Inspection

Nominated Inspection Agency: On behalf of the Buyer organization, any one of the following Inspection Agency would be conducting inspection of stores before acceptance: Pre-dispatch Inspection at Seller Premises (applicable only if pre-dispatch inspection clause has been selected in ATC):

M/S. BUREAU VERITAS (INDIA) PVT. LTD

Post Receipt Inspection at consignee site before acceptance of stores: M/s. Hindustan Organic Chemicals Ltd

20. Inspection

Pre-dispatch inspection at Seller premises (Fee/Charges to be borne by the BUYER): Before dispatch, the goods will be inspected by Buyer / Consignee or their Authorized Representative or by Nominated External Inspection Agency (independently or jointly with Buyer or Consignee as decided by the Buyer) at Seller premises (or at designated place for inspection as declared / communicated by the seller) for their compliance to the contract specifications. Fee/Charges taken by the External inspection Agency and any external laboratories testing charges shall be borne by the Buyer. For in-house testing, the Sellers will provide necessary facilities free of cost. Seller shall notify the Buyer through e-mail about readiness of goods for pre-dispatch inspection and Buyer will notify the Seller about the Authorized Representative/ Nominated External Inspection Agency and the date for testing. The goods would be dispatched to consignee only after clearance in pre-dispatch inspection. Consignee's right of rejection as per GTC in respect of the goods finally received at his location shall in no way be limited or waived by reason of the goods having previously been inspected, tested and passed by Buyer/ Consignee or its Nominated External Inspection Agency prior to the goods' shipment. While bidding, the sellers should take into account 7 days for inspection from the date of email offering the goods for inspection. Any delay in inspection beyond 7 days shall be on the part of the buyer and shall be regularised without Liquidated Damages.

When there is requirement of submission the advance sample, the seller shall inform the buyer promptly through emails about the date of submission of sample to the buyer nominated Inspection agency.

21. Certificates

Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid document, ATC and Corrigendum if any.

22. Certificates

Material Test Certificate Should Be Sent Along with The Supply. The Material Will Be Checked by Buyer's Lab & the Results of the Lab will be the Sole Criteria for Acceptance of the Item.

23. Certificates

The bidder is required to upload, along with the bid, all relevant certificates such as BIS licence, type test certificate, approval certificates and other certificates as prescribed in the Product Specification given in the bid document.

24. Warranty

Warranty period of the supplied products shall be as given in specifications from the date of final acceptance of goods or after completion of installation, commissioning & testing of goods (if included in the scope of supply), at consignee location. OEM Warranty certificates must be submitted by Successful Bidder at the time of delivery of Goods. The seller should guarantee the rectification of goods in case of any break down during the guarantee period. Seller should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service group in INDIA for attending the after sales service. Details of Service Centres near consignee destinations are to be uploaded along with the bid.

25. Warranty

Successful bidder will have to ensure that adequate number of dedicated technical service personals / engineers are designated / deployed for attending to the Service Request in a time bound manner and for ensuring Timely Servicing / rectification of defects during warranty period, as per Service level agreement indicated in the relevant clause of the bid.

26. Warranty

Timely Servicing / rectification of defects during warranty period: After having been notified of the defects / service requirement during warranty period, Seller has to complete the required Service / Rectification within 3 days time limit. If the Seller fails to complete service / rectification with defined time limit, a penalty of 0.5% of Unit Price of the product shall be charged as penalty for each week of delay from the

seller. Seller can deposit the penalty with the Buyer directly else the Buyer shall have a right to recover all such penalty amount from the Performance Security (PBG). Cumulative Penalty cannot exceed more than 10% of the total contract value after which the Buyer shall have the right to get the service / rectification done from alternate sources at the risk and cost of the Seller besides forfeiture of PBG. Seller shall be liable to re-imberse the cost of such service / rectification to the Buyer.

27. Buyer Added Bid Specific ATC

Buyer Added text based ATC clauses

DOCUMENTS SATISFYING ELIGIBILITY CRITERIA

- 1. DULY SIGNED AND STAMPED TENDER TERMS AS PER ANNEXUREII. IF ANYDEVIATION, PL. INDIC ATE SEPARATELY
- 2. DULY FILLED AND SIGNED COMMERCIAL TERM FORMAT AS PER ANNEXURE III-A.B.C.D
- 3. DULY FILLED AND SIGNED BID SECURITY DECLARATION & CLAUSE COMPLIANCE AS PER ANNEX URE -IV,V
- 4. PARTY HAS TO SUBMIT THE DRAWINGS & QAP FOR APPROVAL PRIOR TO MANUFACTURE
- 5. MTC AND GUARANTEE CERTIFICATES SHOULD BE PROVIDED ALONG WITH SUPPLY.
- 6. DETAILED TECHNICAL SPECIFICATION OR CATALOGUE OF OFFERED PRODUCT SHOULD BE SUL BITTED ALONG WITH TECHNICAL BID
- 7. PARTY SHOULD PROVIDE 3 SET OF DRAWINGS IN HARD COPIES AND 1 SET OF DRAWING IN S
 OFT COPIES ALONG WITH THE SUPPLY.
- 8. THIRD PARTY INSPECTION: PLEASE NOTE THAT THIRD PARTY INSPECTION WILL BE APPLICAB LE IN THIS PROCUREMENT. THIRD PARTY INSPECTION IS REQUIRED FOR 100% QUANTITY. OUR APPROVED THIRD PARTY AND THEIR DETAILS ARE AS UNDER.

M/S. BUREAU VERITAS (INDIA) PVT. LTD, JOMER SYMPHONY, D/NO. 48/1744C39 UNIT 5, 6TH FLOOR, PONNURUNNI NORTH VYTTILA P.O, KERALA - 682019.

CONTACT PERSONS

MR. PETER PRAVEEN, EXECUTIVE

PHONE: +91 9895111743/**53**

MOB: +91 9895005639,

E MAIL: PETER.PRAVEEN@BUREAUVERITAS.COM

MATERIALS WILL HAVE TO BE INSPECTED AT THE VENDOR'S WORKS PRIOR TO DESPATCH AND SHALL BE DESPATCHED ONLY AFTER THE INSPECTION & APPROVAL BY THE TPI. HOWEVER THE INSPECTION CHARGES TO THE THIRD PARTY SHALL BE BORNE BY HOCL AS PER HOCL'S AGREE MENT WITH THE THIRD PARTY. HOWEVER WHATEVER COST INCURRING FOR INSPECTION OF M ATERIAL (LIKE NDT ETC.) SHOULD BE BORNE BY THE SUPPLIER. HENCE AS PER THE GEM TENDE R TERMS THE RATE QUOTED SHALL BE ALL INCLUSIVE

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28. Buyer Added Bid Specific ATC

Buyer uploaded ATC document Click here to view the file.

Disclaimer/अस्वीकरण

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization, whereby Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specifications and / or terms and conditions governing the bid. Any clause(s) incorporated by the Buyer regarding following shall be treated as null and void and would not be considered as part of bid:-

- 1. Definition of Class I and Class II suppliers in the bid not in line with the extant Order / Office Memorandum issued by DPIIT in this regard.
- 2. Seeking EMD submission from bidder(s), including via Additional Terms & Conditions, in contravention to exemption provided to such sellers under GeM GTC.
- 3. Publishing Custom / BOQ bids for items for which regular GeM categories are available without any Category item bunched with it.
- 4. Creating BoQ bid for single item.
- 5. Mentioning specific Brand or Make or Model or Manufacturer or Dealer name.
- 6. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
- 7. Floating / creation of work contracts as Custom Bids in Services.
- 8. Seeking sample with bid or approval of samples during bid evaluation process.
- 9. Mandating foreign / international certifications even in case of existence of Indian Standards without specifying equivalent Indian Certification / standards.
- 10. Seeking experience from specific organization / department / institute only or from foreign / export experience.
- 11. Creating bid for items from irrelevant categories.
- 12. Incorporating any clause against the MSME policy and Preference to Make in India Policy.
- 13. Reference of conditions published on any external site or reference to external documents/clauses.
- 14. Asking for any Tender fee / Bid Participation fee / Auction fee in case of Bids / Forward Auction, as the case may be.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

This Bid is also governed by the General Terms and Conditions/ यह बिड सामान्य शर्तों के अंतर्गत भी शासित है

In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws./जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद पर प्रतिबंध के संबंध में भारत के साथ भूमि सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास पंजीकृत हो।बिड में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध को तत्काल समाप्त करने और कानून के अनुसार आगे की कानूनी कार्रवाई का आधार होगा।

---Thank You/धन्यवाद---



HINDUSTAN ORGANIC CHEMICALS LIMITED (A GOVERNMENT OF INDIA ENTERPRISE) AMBALAMUGAL, ERNAKULAM DISTRICT, PIN – 682 302 PHONE: (0484) 2720911, FAX No. (0484) 2720893

Unit of Item Item **Item Description** Number Quantity Measure COMPLETE TRAY ASSEMBLY FOR C2002 AS PER ATTACHED DRAWING AND SPECIFICATION SINGLE PASS SIEVE TRAYS WITH DOWNCOMERS AND TRAY **FASTENERS** QTY REQUIRED:3 NOS,ie TRAY NO-6,7 & 8 1 TRAY MOC- A 283 GR C 3 NOS COLUMN ID - 972 MM COLUMN MANWAY ID - 476 MM COLUMN DESIGN PRESSURE - 22 KG/CM2G COLUMN DESIGN TEMPERATURE - 230 C VOLUME – 28 M3 2 COMPLETE SET OF SS TRAY FASTENERS FOR C2002 5 SET

NOTE:

- PARTY HAS TO SUBMIT THE DRAWINGS & QAP FOR APPROVAL PRIOR TO MANUFACTURE
- MTC AND GUARANTEE CERTIFICATES SHOULD BE PROVIDED ALONG WITH SUPPLY.
- DETAILED TECHNICAL SPECIFICATION OR CATALOGUE OF OFFERED PRODUCT SHOULD BE SULBITTED ALONG WITH TECHNICAL BID
- PARTY SHOULD PROVIDE 3 SET OF DRAWINGS IN HARD COPIES AND 1 SET OF DRAWING IN SOFT COPIES ALONG WITH THE SUPPLY.
- THIRD PARTY INSPECTION: PLEASE NOTE THAT THIRD PARTY INSPECTION WILL BE APPLICABLE IN THIS PROCUREMENT. THIRD PARTY INSPECTION IS REQUIRED FOR 100% QUANTITY. OUR APPROVED THIRD PARTY AND THEIR DETAILS ARE AS UNDER.

M/S. BUREAU VERITAS (INDIA) PVT. LTD, JOMER SYMPHONY, D/NO. 48/1744C39 UNIT 5, 6TH FLOOR, PONNURUNNI NORTH VYTTILA P.O, KERALA – 682019.

CONTACT PERSONS

1) MR. PETER PRAVEEN, EXECUTIVE PHONE: +91 9895111743/53 MOB: +91 9895005639,

E MAIL : PETER.PRAVEEN@BUREAUVERITAS.COM

MATERIALS WILL HAVE TO BE INSPECTED AT THE VENDOR'S WORKS PRIOR TO DESPATCH AND SHALL BE DESPATCHED ONLY AFTER THE INSPECTION & APPROVAL BY THE TPI. HOWEVER THE INSPECTION CHARGES TO THE THIRD PARTY SHALL BE BORNE BY HOCL AS PER HOCL'S AGREEMENT WITH THE THIRD PARTY. HOWEVER WHATEVER COST INCURRING FOR INSPECTION OF MATERIAL (LIKE NDT ETC.) SHOULD BE BORNE BY THE SUPPLIER. HENCE AS PER THE GEM TENDER TERMS THE RATE QUOTED SHALL BE ALL INCLUSIVE

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VESSEL TRAYS

THE FOLLOWING GENERAL NOTES APPLY TO ALL ITEMS LISTED ON INDIVIDUAL SPECIFICATION

A. All items shall comply with the requirements, terms and conditions of UOP Specification 3-18-/

All trays are numbered from top (#1) to bottom.

- Material abbreviations: C.S. = carbon steel, 410 = 12% chromium alloy, 304 = 18-8 stainless steel.
- D. If there is agreement by UOP for purchase of proprietary valve type trays in lieu of sieve trays, such trays shall be designed in accordance with the tray data on individual specification sheet and accompanying sieve tray layout. Downcomer dimensions as shown for sieve tray layout shall be followed as closely as possible. Minor deviations to adjust for proprietary cap arrangement will be accepted. All valve parts shall be Type 410 chromium alloy for carbon steel trays and chromium alloy trays. Valve parts for higher alloy trays shall match the tray metallurgy.

System of measurement is metric; all dimensions are to be in millimeters except as noted.

F. For columns where the specified I.D. is indicated to be minimum (Min.), adjustitutes in tray dimensions to accommodate the final I.D. selected shall be to the chord heights of side downcomers which are also indicated as minimum (Min.). For consistency with this dimensional adjustment, the I.D. of the top (or suitable) manway of the column must be equal to or greater than the largest downcomer chord height or width plus 100 mm, to avoid tray joints under downcomers.

THE FOLLOWING NOTES APPLY ONLY WHEN LISTED FOR INDIVIDUAL ITEM OF SPECIFICATION SHEET:

- Two pass, center downcomer.
 Four pass, intermediate downcomer. Two pass, center downcomer. 2X. Two pass, side downcomer. 1. One pags.
- 4X. Four pass, side and center downcomers. Three pass.
- Support rings, downcomer and upcomer bars, and other parts welded to vessel shall match the metallurgy of the vessel shell or lining, whichever is the higher alloy.
- Downcomer(s) shall conform to transition cone of vessel, contractor to furnish cone details.
- Tray(s) shall be liquid tight by seal welding, except at manway(s) use gasketing.
- Trav(s) including downcomer(s) shall be liquid tight by seal welding, Manway(s) shall be gasketed.
- Weirs shall be level. Use adjustable weirs which are sealed against leakage.
- 10. Do not provide drain holes. Tray(s) shall be liquid tight.
- 11. Stiffeners and support members transverse to the liquid flow direction shall not exceed 2 inches in depth and shall not be located above upcomers, or within a lateral distance from upcomers equal to one tray space.
- 12. Trays shall be assembled on rods and spacers or arranged in cartridges with trap attached to downcomer of bottom tray.
- 13. Trap shall be located in transition cone of vessel and properly feed the tray or accumulator below.
- 14. All tray assemblies shall be designed for installation and removal from top and bottom.
- 15. Each tray shall have froth initiator(s) in accordance with UOP Std. Dwg. No. 3-130-
- 16. Trap(s) below tray shall be baffled, or alternately tray shall have vapor tunnel(s) in downcomers to allow vapor flow across tray.

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OF SHEET 5

APP'D

DATE

RESERVE AND ASSESSMENT	QUAN.			FLUENT RE	DWG. NO. OR SHEET NO.		C-200	NOTES
NO.	(ASSEM.)	VESSEL	RIAL	DESCRIPTION	SHEET NO.		NOS.	
,	7	950 (Min)	c. s.	SIEVE TRAYS	6		1-7	1,5
2	1	950 (MW.)	C. S.	SIEVE TRAY	6		8	1,5,6
_		9.50		TRAP	7	++-	BELOW	5
3	/	(MM)	C. S.	//X//-	- /		3	
		2. 6	5.8	gr er a se				
				2 2				
	-			, , , , , , , , ,				
						11		

For notes 1 thru 16 see sheet	2.				
THE FOLLOWING NOTES	APPLY	ONLY	WHEN	SPECIFIED	ABOVE.

VESSEL TRAYS

177	Bubble caps	aball	ha in	annovden on	mith	TIOP Std	Dwa	No	Type No
1 4 -	DUDDIE CAUS	SHALL	111	accordance	WILLI	COL DIU.	DWE.		1 1 10

Bolts and nuts for manway(s) shall be Type 304 (ASTM A193 Grade B8 for bolts and A194 Grade 8 for nuts), Type 410 (ASTM A193 Grade B6 or B6X for bolts and A194 Grade 6 for nuts).

19. Asbestos, Teflon-impregnated asbestos, neoprene, ceramic packing and gasketing, shall be used as required for proper design and installation of tray(s) manway.

_diameter holes on approximately____square, equilateral 20. Each tray shall have a total of___ triangular pitch.

21. Each tray shall be designed for an upward pressure differential of ____

22. See sketch below.

___shall be _____mm deep and a minimum of _____mm wide and extend 23. Drawoff well(s) on tray No. ___ under entire downcomer area.

TRAY DATA:

MAXIMUM ALLOWABLE OVERALL PRESSURE DROP FOR VESSEL O. 11 KG/cm

SERVICE UOP CATALYTIC CONDENSATION PROCESS

FOAMING TENDENCY - LOW

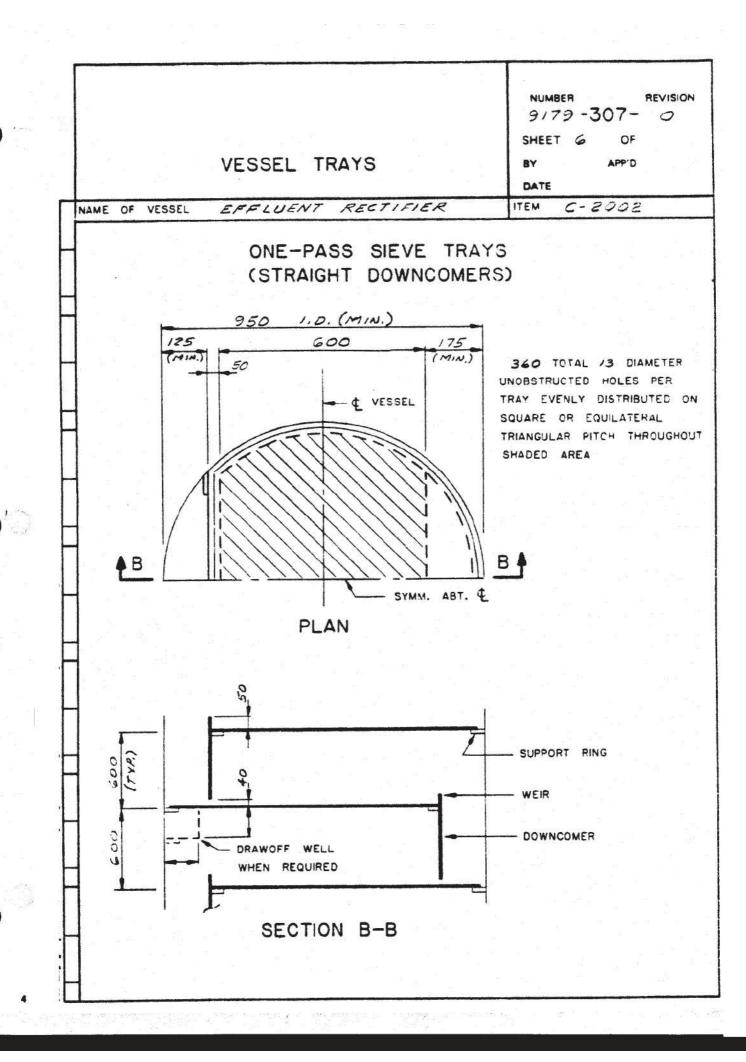
FLUID DESCRIPTION He BN

TRAY SPACING, mm 600 (TYP.)

1,		
LOADING FOR TRAYS	/- B	
OPERATING PRESS., KG/cm/(6)	19.35	
OPERATING TEMP., C	202	
STRUCTURAL DESIGN TEMP. C	230	
VAPOR RATE, Kg/h	28987	
VAPOR DENSITY, Kg/m3	44.4	
LIQUID RATE, Kg/h	3486	
LIQUID DENSITY Kg/m3	7/5	
SURFACE TENSION, DYNES/CM.	7.5	
	The state of the s	

ALL SECTIONS SHALL PASS THROUGH AN 18" I.D. VESSEL MANWAY.

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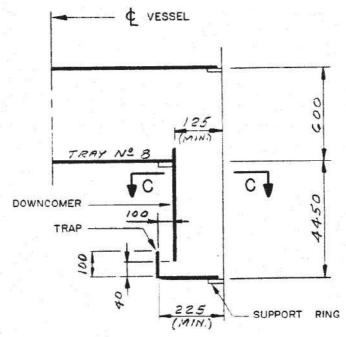
VESSEL TRAYS

NAME OF VESSEL

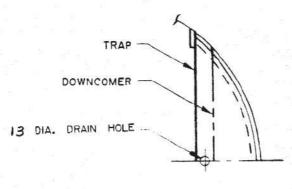
EFFLUENT RECTIFIER

ITEM C-2002

TRAPS (ONE-PASS OR TWO-PASS SIDE DOWNCOMER SIEVE TRAYS)



ELEVATION



SECTION C-C

