



CENTRE OF PROPULSION TECHNOLOGY (CoPT)
INDIAN INSTITUTE OF TECHNOLOGY MADRAS
CHENNAI – 600036, INDIA

Ref. No. ASE/MUAY/136/SRCH/033

Date: 10.06.2020

Item name: High Pressure Pump - 1 No.

Due Date: 01.07.2020

1. Quotations are invited in **two-bid system** for the item described overleaf (in Annexure I). The offers /bids should be submitted as Technical bid and Financial bid separately. The Technical bid should consist of all technical details / specifications only. The Financial bid should indicate item-wise price for each item and it should contain all Commercial Terms and Conditions including Taxes, transportation, packing & forwarding, installation, guarantee, payment terms, pricing terms etc. The Technical bid and Financial bid should be put in separate covers and sealed. Both the sealed covers should be put in a bigger cover. The words "Tender for supply of High Pressure Pump" should be written on the left side of the Outer bigger cover and sealed.x
2. **Earnest Money Deposit:** Earnest money deposit of Rs.30,000 payable by Demand Draft drawn on any Nationalised Bank of India favouring "Registrar, IIT Madras" is to be submitted along with the technical bid. Waiver of EMD for vendors with valid MSME/MSE certificate is permitted.x
3. The quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
4. The total cost of the equipment in terms of CIP Chennai should be clearly mentioned .
5. Terms of warranty and guarantee should be explicitly mentioned.
6. Packing and delivery charges, customs and clearance duty should be clearly stated.
7. Goods shall not be supplied without an official supply order.
8. Local firms : Quotations should be for free delivery to this institute. If quotations are for ex-godown, delivery charges should be indicated separately.
9. Firms outside Chennai: Quotations should be for F.O.R. Chennai. If F.O.R. consignor station, freight charges by passenger train / lorry transport must be indicated. If ex-godown, packing, forwarding and freight charges must be indicated. If the required good is to be imported, delivery with CIP upto Chennai airport must be made. All relevant documents for customs clearance and other import formalities have to be provided well in advance.x
10. If the required good is to be imported, delivery with CIP upto Chennai airport must be made. All relevant documents for customs clearance and other import formalities have to be provided well in advance.x
11. IIT Madras is eligible for concessional rate of GST 5%(for purchase of equipments, parts and consumables used in research). Concessional GST certificate will be issued after issue of purchase order.



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12. The rate of sales / general taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for sales / general taxes will be admitted at any stage and on any ground whatsoever. x
13. Payment : Payment is after delivery of goods. Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later. Advance payment will be considered only in special cases.
14. Delivery of the material to IIT Madras should not exceed 4 weeks from the date of purchase order release.
15. IIT Madras is eligible for concessional rate of customs duty. Necessary certificate will be issued on demand.
16. IIT Madras has the right to accept the whole or any part of the tender or portion of the quantity offered or reject it in full without assigning any reason.
17. The sealed quotation may be sent to:
The Purchase Manager,
CoPT OFFICE, NCCRD Building
Behind Aerospace Engineering Dept., IIT Madras,
Chennai – 600036, Ph. (O) +91-44-22579863

ANNEXURE 1:

High pressure pump specification

1. High pressure pump for the existing mass flow controlling system
2. Fluid - Aviation fuel (JET-A1) Please refer the following link for more information on the fluid.
<https://www.iocl.com/Products/ATFSpecifications.pdf>
3. Fluid temperature - 15 to 40 deg C
4. Fluid density @ 15 deg C - 775 to 850 kg/m³
5. Fluid viscosity at -20 C (max) - 8.0 mm²/s
6. Required differential Pressure - 0 to 40 bar
7. Material - Wetted parts SS316L
8. Lubricity WSD mm max - 0.85
9. Classification - IP55
10. Coefficient of variation should be less 1% of the set flow rate
11. Flow Pulsation should be less 6 % of the set flow rate



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12. 0.5HP Variable Frequency Drive (GEFRAN - BD150-1004-KXX-2M-P-F) is available with us. However, the supplier can recommend and quote a different VFD or controller to ensure smooth operation.
13. The supplier has to test the pump at their facility for the specified operating conditions before delivery.
14. The supplier can use the mass flow meter available with us to test the pump at the specified operating conditions before delivery. Please note that the mass flow controller output is 0 to 10V and the PID values can be tuned.
15. If the Pump is imported, the Supplier shall quote only in the currency of the origin country since IIT Madras is eligible for concessional customs duty.
16. The supplier should have supplied this model in the past and the references with contact details have to be provided with the quotation.
17. Warranty period: 12 Months

Contact person for technical clarifications:

1. Baladandayuthapani N
2. E-mail: baladandayuthapani@yahoo.com

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