

SAVITRIBAI PHULE PUNE UNIVERSITY DEPARTMENT OF PHYSICS

Ref. No./Quot./PHY/55

Date: 23/01/2019

Name of the Administration Branch/Department:

Quotations are invited for the supply of following goods/carrying out the work, so as to reach this office on or before

09/02/2019

| Sr. No. | Description of Material/Item/work | Approximate Quantity | Rate Per unit | Amount (Rs.) | Remark |
|------------|---|-------------------------|------------------|--------------|--------|
| <u></u> | Secondary Chamber cum heat exchanger | | | | |
| 6 | Scrubber and Exhaust | \ | | | |
| | | | | | |
| | | | | | |

- Octroi Exemption Certificate will be issue for the goods supplied from the places outside Pune Municipal Corporation Limits.
- 2. Excise duty, Custom duty Exemption Certificate will be issued if applicable. Note: For other terms and conditions see overleaf.

| Head, | Departi | nent of | Physics |
|-------|---------|---------|---------|

| neau, bepartment of the | |
|-------------------------|----------------|
| Administrative Branch | Signature |
| | (Supplier) |
| | (With Stamp) |
| Pune – 411 007. | |

1. Technical Specifications for Scrubber

TECHNICAL SPECIFICATIONS FOR SCRUBBER

| | | V | Ventury Scrubber | |
|----|--------------------------------|---------|---------------------|--|
| SN | Parameters | Unit | | |
| A | GENE | CRAL | | |
| 1 | Make | | | |
| 2 | Model | | | |
| 3 | Equipment name | | VS 1 | |
| 4 | Application | | Plasma Gasification | |
| 5 | Type of Scrubber | Туре | Ventury Scrubber | |
| 6 | Volume Of Scrubber | m3/hr | 300 | |
| 7 | Operating Temperature | DegC | 45 | |
| 8 | Design Temperature (MAX) | DegC | 100 | |
| 9 | Water Pressure | psig | 20 | |
| 10 | System Pressure Drop | mmwc | 140 | |
| 11 | Dust load at Inlet | gms/Nm³ | 30 | |
| 12 | Dust Emission at outlet | mg/Nm³ | 30 | |
| 13 | Dust output at Discharge (MAX) | Kg/hr | 1 | |
| 14 | Separation efficiency | % | 90 | |
| 15 | Gas Velocity inlet | m/s | 11 | |
| 16 | Velocity at outlet | m/s | 11 | |
| 17 | Scrubbing Media | | 8 to 10 % NaOH | |
| В | CONSTRUCTIONAL DETAILS | | | |
| С | Main Body | | | |
| 1 | Material of Construction | | SS 316 | |
| 2 | Thickness | mm | 2 | |
| D | Inlet and Outlet | | | |
| 1 | Material of Construction | | SS 316 | |
| 2 | Thickness | mm | 2 | |
| E | Venturi & Divergent Duct | | | |

dothe

| 1 | Material of Construction | 1 | SS 316 | |
|---|---|--------|--------------------------------------|--|
| 2 | Thickness | mm | 33 310 | |
| F | Surface Finishing | 111111 | 2 | |
| G | Painting | | Mirror polished | |
| | | | PU (Only for structural and support) | |
| H | FRP layer to Scrubber - No of Coats applied | mm | | |
| G | Water Recirculation Tank | | NA | |
| 1 | Capacity | Ltrs | 361 | |

Whethe

2. Technical Specification for Centrifugal Fan

| Client | | SP Pune University | | |
|--------|---|--------------------|---------------------------------|--|
| | Equipment name Centri | | | |
| | Equipment Size | 300 | | |
| SN | Qty | | 1 | |
| 1 | Parameters | Unit | Centrifugal Fa | |
| 2 | Make | | | |
| 3 | Model | CFY | | |
| 4 | Air Handling Capacity | m3/Hr | 300 | |
| 5 | Design Pressure | mmwc | 350 | |
| | Operating Temperature | deg C | 45 | |
| 6 | Static Efficiency | % | 53 | |
| 7 | Fan Speed | RPM | 2880 | |
| 8 | Drive Arrangement | | Direct | |
| 9 | Impeller GD2 | kg-m2 | 0.32 | |
| 10 | Shaft Power at operating Temp | HP | 0.76 | |
| 11 | Shaft Power at 20 Deg C | HP | 0.90 | |
| 12 | Motor | HP | 2 | |
| 13 | Motor Speed | RPM | 2880 | |
| 14 | Inlet Damper | Dia | 91 | |
| 15 | Fan Weight | Kg | 88 | |
| 16 | Material of construction (Casing, Impeller) | MOC | SS 316 | |
| 17 | Material of construction (Pedestal, Base frame) | MOC | MS | |
| 18 | Casing | MM | 2 | |
| 19 | Impeller(Cone, Back plate) | MM | | |
| 20 | Shaft | MM | | |
| 1 | Base Frame | MM | EN 8 | |
| 2 | Surface Finishing | 141141 | PROVIDED Cr. 140 | |
| 3 | Painting | | Gr 140 PU (only for Structural) | |
| 4 | Acid Cleaning | HCL Cleaning | Applicable | |
| 5 | socket plug | Steming | 1/4" BSP | |
| 6 | Ant vibration pads | Polybond | | |
| 7 | Foundation bolts | Toryboliu | NA NA | |

Whother

3. Painting Specifications:- (Structure and Support parts only)

: PU

Paint Type Finish Paint Shade

: Clients Selection

wood.