PEOPLES STEEL MILLS LIMITED
Manghopir, Karachi.
REQUEST FOR QUOTATION

M/s. PEOPLES STEEL MILLS LIMITED

RFQ NO. SSAMC/BU-2/LP-33/PR-396488
ISSUED ON 29-NOV-18
DUE ON 10-DEC-18

Dear Sirs,

We invite you to quote for the following material on F.O.R PSM site basis inclusive of all Government taxes and levies on the terms and conditions attached herewith valid for 45 days. Your offer must reach the office of the undersigned by the date mentioned above.

<table>
<thead>
<tr>
<th>S. NO.</th>
<th>DESCRIPTION</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FREQUENCY INVERTER PANEL 415VAC, 3PH 50HZ VAC. TYPE: FIXED FRONT ACCESS. FLOOR MOUNTED (FREE STANDING CUBICAL DESIGN) 16 SWG JP: 31, AMB TEMP: 45C, DIMENSIONS: H2200 X W800 X D600, WITH ACCESSORIES: (AS ATTACHED FILE)</td>
<td>1 Eac</td>
</tr>
</tbody>
</table>

NOTE: Offer on F.O.R. Basis Must Be Sent To the Attention of Head (Procurement) On Fax No. (92 21) 36770112, 5206764 or By Courier Service at the Factory Address PABX No (92 21) 36770126-27-28 Procurement Direct No. (92 21) 36770121 or email: ahsan@psmltd.com, nauman@psmltd.com.

PSM will take delivery of order material from supplier premises having value upto Rs 20,000/- through own arrangement.

Yours Sincerely
For PEOPLES STEEL MILLS LIMITED

Deputy General Manager
(PROCUREMENT).
TENDER DOCUMENT

FREQUENCY INVERTER CONTROL PANEL FOR COOLING FAN & EXHAUST FAN MOTOR OF PIERCER

AT

PEOPLES STEEL MILLS LTD
KARACHI
SCOPE OF WORK:

- The bidder should vet the drawings provided by the client and submit offer after proper selection of equipments which include component rating, distribution scheme etc.
- Complete metering, controlling, interlocking of logics are included in the scope of work.
- Complete wiring with Copper cable as per the Single line diagram provided by the client.
- The bidder should give complete specification for all equipments installed in each Panel.
- Cubical size (H X W XD) (2200 X 800 X 600) in mm, Cubical color SIEMENS standard and Cubical sheet Gauge 16 SWG.
- Bidder should submit Power and Control drawing of each distribution panel at the time of delivery.

OTHER REQUIREMENTS:

- The company must have a complete solution of designing, Equipment Supply, Installation, Testing and commissioning and also have backup services.
- The Major components (i.e. Inverter, Circuit breakers, contactor & relay) should be European Brand.
- The company should provide the Authorization letter of panel manufacturing using Schneider or Siemens Equipments from their respective principal.
- All the equipment should be as per IEC standards.
- FAT Test of panel will be witnessed by PSM Engineers before delivery.
- PSM has the right to visit the manufacturing facility to assess the manufacturing standards and capability of supplier.
- Bidder should provide the details of client list where they have supplied, successfully tested and commissioned the LV panels.
- The Bidder has to submit warranty certificate and routine test report at the time of delivery.
- PSM has the right to increase or decrease the quantity at the time of order.
- Validity of offer must be at least 45 days.
FREQUENCY INVERTER CONTROL PANEL FOR MOTORS

SPECIFICATION:
- Non compartmentalized, fixed type
- IP-31
- Front access
- Floor mounted free standing cubical design
- Ambient temperature: 45°C
- Suitable for 400V, 3 Phase, 4 Wire, 50HZ VAC
- Control Voltages: 220Vac & 24Vdc

EQUIPMENTS TO BE INSTALLED IN ABOVE PANEL (AS PER ATTACHED SLD)

<table>
<thead>
<tr>
<th>S/ NO</th>
<th>EQUIPMENT</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FREQUENCY INVERTER INP VOLT: 415VAC RATED OUTPUT: 18.5KW, FEATURES: DIGITAL I/Os &amp; ANALOG 4-20Ma, 0-10VDC</td>
<td>02</td>
</tr>
<tr>
<td>2</td>
<td>MCCB, 500V, 100 Amp 3 pole 25KA,</td>
<td>01</td>
</tr>
<tr>
<td>3</td>
<td>CONTACTOR 22KW, 415V, COIL VOLTAGE 220V</td>
<td>02</td>
</tr>
<tr>
<td>4</td>
<td>MCCB, 500V, 40A, 3 POLE, 50HZ, 25KA</td>
<td>02</td>
</tr>
<tr>
<td>5</td>
<td>MCB, 500V, 10A, 2POLE, 50HZ, 25KA</td>
<td>01</td>
</tr>
<tr>
<td>6</td>
<td>MCB, 500V, 6A, 2 POLE, 50HZ, 25KA</td>
<td>02</td>
</tr>
<tr>
<td>7</td>
<td>MCB, 500V, 4A, 2 POLE, 50HZ, 25KA</td>
<td>01</td>
</tr>
<tr>
<td>8</td>
<td>ISOLATION TRANSFORMER 415V/ 220V</td>
<td>01</td>
</tr>
<tr>
<td>9</td>
<td>POWER SUPPLY OUTPUT 24VDC 10A</td>
<td>01</td>
</tr>
<tr>
<td>9</td>
<td>CONTROL RELAY: 2NO + 2NC COIL VOLTAGES 24VDC</td>
<td>06</td>
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</tbody>
</table>

Note: Space must be allocated on panel door for addition of following equipment in future.

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</tr>
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<tbody>
<tr>
<td>01</td>
<td>TEMPERATURE CONTROLLER SIZE 98MM X 98MM MAKE: SHINKO</td>
<td>01</td>
</tr>
</tbody>
</table>
Measurement and indications on main incomer

Following Equipments Will Be Required On Panel Door

- Digital Energy Meter (3Ph- Voltages, Amp, K.W)
- Ampere meter For Motor # 1
- Ampere meter For Motor # 2
- Auto / Manual selector
- Frequency (Hz) Display meter for inverter # 1
- Frequency (Hz) Display meter for inverter # 2
- Variable Pot for manual speed adjustment for motor # 1
- Variable Pot for manual speed adjustment for motor # 2
- Main motor Over Temperature indication

For Motor # 1 these signals will be required
  - On Push Button
  - Off Push Button
  - Start/ Run Inverter Push Button
  - Reset Push Button
  - On Indication
  - Off Indication
  - Ready Indication
  - Trip Indication

For Motor # 2 these signals will be required
  - On Push Button
  - Off Push Button
  - Start/ Run Inverter Push Button
  - Reset Push Button
  - On Indication
  - Off Indication
  - Ready Indication
  - Trip Indication