

TECHNICAL SPECIFICATIONS AND OTHER ALLIED REQUIREMENTS

Sl No.	Description of items	Quantity
File No. PUR/05/ERTG/RK/E/2024-25		
1	SUPPLY, INSTALLATION, COMMISSIONING, SUPERVISION AND DEMONSTRATION OF SILICA PLASTIC BLOCK COMPACT RE-PURPOSING MACHINE (DETAILED SPECIFICATIONS AS PER ANNEXURE – I)	1 No.

1. INSTALLATION, COMMISSIONING, SUPERVISION AND DEMONSTRATION:

The installation, commissioning, supervision and demonstration are to be completed within 90 days from the date of issue of Purchase Order. The installation and commissioning shall be carried out by your expert- engineers of supplier/Manufacture. During installation & commissioning necessary training on operation and maintenance of the goods/system shall be imparted to relevant Scientist/Engineer/Technicians.

2. PAYMENT TERMS:

100% payment shall be paid within 30 days after delivery, installation, commissioning, supervision and demonstration of silica plastic block compact re-purposing machine and acceptance of the material upon submission of claim supported by the acceptance certificate issued by the purchaser.

3. BID SECURING DECLARATION FORM:

Bid Securing Declaration is to be submitted by the Bidder as per the format prescribed in the tender document.

4. WARRANTY:

24 Months warranty will be provided by the supplier from the date of satisfactory installation and commissioning of ordered goods.

5. MANUFACTURER AUTHORITY FORM:

Manufacturer Authorisation Form will be provided by the supplier.

6. PLACE OF DELIVERY:

CSIR- Central Mechanical Engineering Research Institute, M.G. Avenue, Durgapur- 713209, West Bengal.

7. MAKE IN INDIA CERTIFICATE FOR LOCAL CONTENT

Certificate for local content to be provided by the supplier in form 14 (Format attached along with Tender Document). Percentage of value addition & Name and address of the factory where the value addition was made should be mentioned clearly in the Form 14.

Silica Plastic Block Compact Re-purposing Machine

Usage: Re-purposing waste plastic and silicon of Solar Panels

Output Capacity of the machine: 5 - 10 kg/h

Machine is to be provided with:

- a) Heating & Melting unit for softening of Plastic Waste. Heating unit to be provided with insulation and guard. Heating arrangement: Electric with a capacity of 1.8 kW (minimum) using strip heaters. The machine should have provision for chain drive, tensioning adjustment and chain guard for safety. Screw for mixing of dry mix at input to the machine. Geared Motor and Drive unit duly assembled on one frame. Rated capacity of the geared motor: 1.5 HP, 415V \pm 10%, 50 Hz \pm 5%, 1440 RPM, make: SEW-EURODRIVE/PBL/Equivalent. Provision for the measurement of temperature using thermocouples at least at two different points.
- b) Water scrubber with ducting and hood to trap any emissions from the process at input and output of the machine.
- c) Hydraulic compression moulding press of capacity 35 MT with hydraulic power pack and electrically operated valve. High pressure hydraulic pump, make: Yuken/Dowty and Flow control valve, make: Rexroth/Yuken with pressure reducing valve.
- d) One number die for 100 x 100 x 20 to 40 mm thick square paver block production.
- e) Electrical switchgear and control panel, remote push buttons, temperature controller with indicator for HMU and Hydraulic Press. Electrical switchgear: Siemens/Schneider/C&S Electric, Temperature controller: Selectron/Equivalent.

Machine structure: Frame to be made from MS Channel 75 \times 40, MS pipe 50 \times 50 mm and MS angle 50 \times 50 \times 5 of Tata/JSL or equivalent.

Incidental services:

The supplier shall be required to perform the following services:

1. Installation & Commissioning, Supervision and Demonstration of the goods;
2. Provide at least two printed hard copy of operating manual for the machine;
3. Onsite training to Scientists/Technicians/Staff is to be provided by Supplier for at least 03 (three) days for operation of the equipment to the complete satisfaction of the user department;
4. All safety requirements are to be incorporated during the installation & commissioning and demonstration of the goods at CSIR-CMERI.

Unloading of the item at CSIR-CMERI: In the scope of supplier

NB: The supplier will be required to provide the warranty card of all the motors and pumps used to build the machine.