

## Technical Specifications of Laboratory Scale Aggregate Cone Crusher

### 1.0 Bidder Eligibility Criteria:

I	<b>Bidder Eligibility Criteria-I (Public Procurement – Preference to Make in India)</b>	<b>Class I / Class II</b>	<b>Local Content value</b>	<b>Reference, Page No.</b>
I	Only 'Class-I local suppliers' and 'Class-II local suppliers', as defined under DIPP, MoCI Order No. P-45021/2/2017-PP (BE II) dated 16 <sup>th</sup> September 2020 and other subsequent orders issued therein.			
<b>2.0</b>	<b>Bidder Eligibility Criteria-II</b>	<b>Complied/Not Complied</b>	<b>Reference Page No.</b>	<b>Remarks, If any</b>
1	The supplier/vendor must be an original equipment manufacturer or an authorized agent/dealer/seller of the item. The vendor should have supplied at least 5 similar units at other IITs or NITs, or national laboratories and research centres (DRDO/CSIR/BARC/IGCAR), or R&D centres of reputed multinational companies, or globally recognized universities, in the last 5 years. PO copy, or performance certificate, along with contact details (for these organizations) needs to be submitted.			

### 3.0 Technical Compliance:

Sl. No	Specification	Complied/Not Complied	Ref. Page no.
<b>General Specifications</b>			
1	The laboratory-scale cone crusher must be smaller than 1.0 m (length) x 1.0 m (width) x 1.5 m (height) and must have a product output capacity lesser than 1.5 tons per hour (TPH). It must be fully automatic (close circuit) and capable of breaking rocks/stones/aggregates into smaller fractions having varying grain size distribution between 3 mm to 0 mm in a single cycle of crushing.		
<b>Technical Requirements for Laboratory Cone Crusher</b>			
1.	The dimension should be smaller than 1.0 m (length) x 1.0 m (width) x 1.5 m (height)		
2.	The machine output capacity must be lesser than 1.5 tons per hour (TPH)		
3.	The operation of the machine must be fully automatic		
4.	The gross weight of the machine shall be less than 400 kg		
5.	Aggregate feed size shall not be smaller than 19 mm		
6.	The machine must be capable of breaking rocks/stones/aggregates into smaller fractions between 3 mm to 0 mm in a single cycle of crushing.		
7.	The outlet size from which the crushed aggregates will be coming (i.e. grinding fineness) must be adjustable to at least 5 settings		
8.	Provisions for precisely calibrating the grinding fineness must be provided		
9.	The machine shall have a funnel at the top for a continuous feeding facility		
10.	The cone mental should be made of high-quality steel and must have a hardened case of at least 3 mm thickness		
11.	The equipment shall be made of high-quality steel with reinforced joints and internal welds. The joints must be polished and ground		
12.	The machine must come with a separate dust extraction port		
13.	Facility of drawers for removal of the crushed material must be provided		

14.	The power of the motor shall be at least 3 HP		
15.	CE certificate must be supplied		
16.	The instrument should be able to run in 220-240V, 50 Hz AC with a single/three-phase power supply.		
<b>Accessories</b> :All the accessories required for safely operating this equipment shall be provided. Any other optional accessories, other than those mentioned below, suitable for the system may also be quoted.			
1.	Dust extraction port		
2.	2 drawers for crushed aggregates collection		
3.	Machine stand		
4.	Cleaning accessories		
5.	Electrical box with overload protection		
6.	<b>Warranty</b>	3 years	
7.		Optional Quote-1: Additional 2 years warranty may be quoted separately.	
8.		Optional Quote-2: AMC beyond 3 Years Warranty period	
9.	(Optional quotes will not be taken up for price bid comparison)		
<b>General Terms and Conditions</b>			
10.	The system should be delivered within 20-24 weeks from the opening of the letter of credit or issue of the purchase order, whichever is later.		
11.	Costs and related information should be given only in the financial bid.		
12.	The cost should include all delivery costs up to IIT Madras.		
13.	The warranty shall commence only from the date of equipment installation at IITM.		
14.	IIT Madras reserves the right to exclude some items from the purchase.		
15.	As part of tender technical evaluation, IIT Madras will approach the past end users for feedback and in case of any adverse feedback the bidder will be technically disqualified.		
16.	The system should be installed and commissioned with no additional cost.		
17.	Training at IIT Madras should be provided with no additional cost.		
18.	System manual should be provided in CD or pen drive form.		
<b>Technical Bid should comprise of the following:</b>			
19.	Detailed Technical brochure.		
20.	Detailed technical write up explaining how each of the Technical Specifications are complied with, indicating the location in the brochure.		
21.	The vendor should guarantee round the clock technical support not only during the warranty period but even beyond through an annual maintenance contract. Demonstration of having provided such satisfactory technical support to customers shall be enclosed with the technical bid.		
22.	The manufacturer must have a well-qualified technical support team.		

(Note: It is mandatory for the bidders to provide the compliance statement in tabular column format along with catalogue page number (comply/not comply) for the Above points with document proof as required. Failing which bidders will be technically disqualified)