

NIPER-G/PUR/GLOBAL-2/2018-19/01

Technical Specification for Micro Compounder Hot Melt Extruder (HME)

S. No.	Specification as per the Tender Notification in Chapter 4	Amended Specifications as per the Pre Bid meeting held on 09-10-2018 in Chapter 4
1.	Co-rotating twin screw extruder system, with screws inside a stationary cylindrical or conical barrel with arrangement to feed material into barrel and extrudate it out as granules, pellets, filaments, films depending on end plate die.	No change
2.	Should has the capacity to work with smaller sample size (as low as 5-10 g and lesser is better).	No change
3.	The system should consist of a suitable motor of appropriate capacity as drive unit.	No change
4.	The equipment should have facility to operate at different zones (heating zone, mixing zone and cooling zone) with minimum quantity of material.	No change
5.	Heating and cooling system arrangement should be provided controlling and maintaining the temperature of different zones/barrel with chiller or equivalent arrangement.	No change
6.	Suitable sensor should be provided at each place to monitor the temperature.	No change
7.	Heating temperature from ambient to 300°C or above.	No change
8.	Should allow removal of barrel in a short time with ease and preferably without use of any tools for cleaning barrel or change of dies.	No change
9.	Material of construction for the contact parts should be Stainless steel SS-316 or Pharma grade stainless steel which is non-corrodible and inert.	No change
10.	Non-contacting parts with material should be pharma grade stainless steel or equivalent material acceptable for pharmaceutical processing.	No change
11.	The system built up should withstand the high torque and pressure produced in the barrel.	No change
12.	The equipment especially barrel, shaft should be heat resistant, chemical resistant.	No change
13.	Control panel on machine or software	No change

	driven via computer or equivalent arrangement for operating, controlling and monitoring various process parameters should be provided.	
14.	The equipment quoted should have the following specification <ul style="list-style-type: none"> ➤ Screw speed range 1-350 rpm or more ➤ Extruder volume: 4-6 cm³ ➤ Feeding: Manual ➤ Motor Power: 400-500 W ➤ Torque per screw: 4-6 Nm or more ➤ Provision of different die assembly ➤ Different kinds of die plate assembly 	No change
15.	Suppliers are expected to quote separately for the following downstream processing equipment's Roller chiller and film forming rollers.	No change
16.	A set of co-rotating screws, removable upper barrel and tools for easy material handling & easy cleaning.	No change
17.	Additional optional Features	Recirculating backflow channel for material recirculation to achieve efficient mixing and to control residence time precisely (optional but preferable)
18.		Feasibility of getting extrusion data in respect to torque vs time plot (optional but preferable).
19.		Pressure rating for barrel: 200 bar or more (optional but preferable).
20.		System should be quoted with suitable branded PC & LaserJet Printer (Mandatory requirements).
21.	A. Power requirements <ul style="list-style-type: none"> • Power: 220-240Volt; 0-300 watts; AC: 50-60 Hz; Frequency: 50 kHz. 	No change

B. Qualification criteria & other aspects

- The vendor should have supplied minimum three HME in India in reputed Govt. organization and details should be furnished.
- Should have agents in India to provide after sales service, support and maintenance.
- The machine should be guaranteed for a period of 3 years from the date of commissioning. During warranty period, if there is any repair to be carried out at the supplier's works, transportation cost of equipment/component besides repair / replacement charges, if any, should be borne by the supplier.
- Photograph and catalogue related to each and every item should be enclosed.
- Dimensions of equipment, weight and space requirements to be given.
- Installation & Commissioning should be carried out at NIPER Guwahati, Assam. Pre-installation requirements should be furnished.
- Commissioning charges, if any, to be indicated.
- Mention also about any hidden charges
- Compliance statement of specification to be submitted along with the offer. Failure to give compliance statement, the offer is liable to be rejected. All tender specifications to be compared with machine offered line by line and documentary evidence must be enclosed by the supplier along with quotation.
- One hard copies of all the operational manuals related to the instrument should be provided.
- The supplier should ensure that the spares are made available for the next 5 years.
- System price should be quoted door delivery basis inclusive all cost like custom duty, tax, and delivery up to NIPER Guwahati.

General Terms and Conditions applicable to all 06 tenders published in newspaper on 28th September, 2018 and exhibited in NIPER Guwahati website.

Following additional information is provided for the information of prospective bidders for 06 different items for which tender inquiry is issued:

1. Payment terms:

Considering the request made by few prospective bidders during the pre-bid conference held in the institute on 9th October 2018, regarding payment terms related with foreign suppliers it is clarified that the **indicated payment terms in the tender documents still remains unchanged.** However Director, NIPER Guwahati **at his own discretion** can consider any other mode of payment requested by suppliers based on the reputation, credentials of foreign suppliers in the field and also protecting the interests of NIPER Guwahati. **No request for advance payment will be considered.**

2. Clarification with regard to projecting the cost implications of free delivery of the item at NIPER Guwahati premises.

Subsequent to the Pre-bid conference with regard to projection of price for items coming from abroad, the following guidelines may be followed:

- A) The F.O.B. C.I.F., C.I.P. prices as per the suppliers quote should be indicated in foreign currency only
- B) The additional cost towards payments of custom duty against duty exemption certificate provided by the institute, clearance charges, forwarding consignment from port of clearance to NIPER Guwahati premises etc. can be quoted in Indian currency.

For comparing the price with other bids, the institute at the time of preparing comparative chart for the tenders, the total F.O.B., C.I.F., C.I.P. cost will be converted into equivalent Indian currency at the exchange rate prevailing on the date of tender opening i.e. 30th October 2018 at 15:00 hours IST and add the equivalent Indian currency value to the clearance and forwarding charges indicated by the supplier.
