



Ref: AME/PQR/PDC/01

DATE: 23/11/19

PRE-QUALIFICATION CRITERIA

ITEM : Die and low pressure Al die cast frames for electric motors.

Application : water cooled enclosure for housing electric motor components

Material Specification : Aluminium Alloy (AlSi10Mg-T6)

Quality Assurance Plan : BHEL approved vendor QAP shall be applicable

Requirement : As per Table 1

S.NO	ITEM DESCRIPTION	DRAWING DETAILS	QUANTITY REQUIRED (1 Set)
(1)	Die suitable for low pressure die castings of Al alloy & cast stator frames (machined).	<p>As per <i>BHEL manufacturing drawing</i>.</p> <p>Two no sketches of stator frame (machined and un-machined) are provided to assess feasibility of manufacturing. Eligible vendors may obtain <i>BHEL manufacturing drawing</i> after signing NDA (Non-disclosure agreement).</p> <p>This NDA is separately provided along with RFQ. Snapshot of specified motor is attached for reference.</p>	<p>Die (suitable to produce min 10000 castings through low pressure die casting process) – 1 no</p> <p>Machined Low pressure die cast stator frames – 5 nos</p>

Table-1

Note:

- (1) The future requirements are expected to increase manifold. Snapshot of motor is also attached for reference purposes.
- (2) The cut-off date for time period, wherever mentioned in the document shall be 31/03/2019.



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A. Qualification Criteria

Sl. No.	Description	Vendor to comment	
		Supporting Documents required	Complied (Yes/No)
1.	Vendor should be manufacturer of the item. Dealer / Authorised agents are not acceptable.	Company details to be submitted.	
2.	The firm must have adequate manufacturing facility at their works /in-house for manufacturing pressure die castings as per BHEL requirement, refer Table-1 of Pre- qualification criteria	Detailed Organization chart and plant & machinery facility available along with photographs, for manufacturing of similar items, at manufacturer's works to be provided. Self-declaration that the facilities are owned by the party to be furnished.	
3	<p>Castings for stator frame shall be as per BHEL manufacturing drawing for stator frame machined and un-machined.</p> <p>Note:</p> <p>(1) BHEL manufacturing drawings are not provided along with RFQ at this juncture.</p> <p>(2) Sketches for stator frame (machined and un-machined) are provided to check manufacturing capability of vendor. If specified castings fall in vendor' s manufacturing range, vendor may obtain BHEL manufacturing drawing after submitting signed NDA (Non-disclosure agreement). This Non-disclosure agreement is separately provided along with RFQ.</p> <p>Deviations, if any, to be clearly spelt out along with quotation</p>	<p>Confirmation to BHEL manufacturing drawings (stator frame machining and un-machining)</p> <p>Supplier to furnish deviations separately in case of deviations to BHEL manufacturing drawings.</p>	



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4	<p>(A) Die shall be suitable for manufacture 10,000 castings minimum. The material and process used for die making to be clearly mentioned in technical offer.</p> <p>(B) It will be the responsibility of vendor to ensure appropriate design and manufacturing of die so that final casting obtained is as per drawing. Vendor to prove the die by manufacturing sample casting meeting all technical requirements as per BHEL drawing. Price for same to be accounted in die cost. After proving of die, vendor to manufacture five castings as per BHEL drg as per RFQ.</p> <p>(C) Die will be the property of BHEL and vendor will cast number of pieces as per BHEL's requirement. For this die will be made available to vendor.</p>	Acceptance to be given by supplier.	
5.	<p>Vendor shall submit QAP for incoming / raw material, in process and final stage inspection covering chemical, mechanical testing & NDT on integral castings.</p> <p>In case of incoming / raw material - vendor internal test report / material test report.</p> <p>In case of in process inspection – vendor internal reports / (BHEL / TPIA inspection).</p> <p>In case of final inspection – Vendor / BHEL / TPIA inspection.</p> <p>BHEL approved vendor specific QAP shall be applicable.</p>	Vendor confirmation required.	
6.	<p>a. Availability of Testing facilities required to conduct all the tests as per drawing/specifications is desirable with the firm, preferably in-house.</p> <p>b. List of testing facilities along with their</p>	Records to be furnished .	



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	photographs to be submitted. All testing facilities have to be duly calibrated. c. List of outsourced facilities (if any) to be submitted. Outsourced labs/firms should necessarily be NABL accredited.		
7.	Test certificates to be provided for BHEL review before dispatch as per approved QAP.	Vendor confirmation required.	
8.	Vendor should have qualified persons for conducting various tests as per specification. Organization chart with qualification and experience of personal to be submitted.	Records to be furnished.	
9.	Vendor should have experience of manufacturing low pressure die castings of similar items for at least 3 years.	POs to be submitted for last 3 years.	
10.	Vendor should have minimum turnover of rupees 50 lacs (per annum) for last three financial years from sales of similar items.	Audited balance statements certified by Chartered sheet with profit and loss accountant.	
11.	Vendor to have ISO 9000 to be certification (Desirable)	Valid ISO certificate provided.	
12.	Vendor to furnish non-disclosure agreement (NDA) along with their quotation. Format for NDA is attached separately along with RFQ.	Signed NDA to be furnished	
13	If the supplier is registered in any other unit of BHEL, the details to be submitted along with vendor code and material category.	BHEL vendor code and material category to be submitted.	



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14	Vendors who qualify above pre-qualification criteria may be required to register themselves with BHEL as per guidelines given on BHEL website https://supplier.bhel.in .	Vendor confirmation required	
15.	Manufacturing facilities assessment may be carried out by BHEL at supplier's works if required. Vendor to confirm the same.	Vendor confirmation required	

Note:

- Compliance to above pre-qualification requirements is mandatory. In absence of compliance of above requirements vendor's offer may not be considered
- BHEL reserves the right to verify the information submitted by the vendor. In case the information submitted is found false or incorrect, the offer will be rejected.

Prepared by

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23 Nov 2019
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