

Mandatory Pre-Qualification Requirements (Technical) for Labyrinth Ring Castings

Material Grade: EN-AC-ALSi10Mg (a) (material no. EN 1706 AC-43000-D-T6)

Material code: W93413901494 (HW19989) (Drg.11393500053)

Material code: W93413901478 (HW19989) (Drg.11391200054)

(Points 1 to 4 are mandatory requirements. Offers not meeting these requirements will not be considered.)

1. Vendor should have following experience of manufacturing & supplying aluminum castings of above grade by **gravity die casting or low pressure die casting process**:

- i. For material code W93413901494, vendor must have manufactured at least **3 castings** with above process, each of weight **> 37 kg**, in last **5 years** (on the date of enquiry).
- ii. For material code W93413901478, vendor must have manufactured at least **3 castings** with above process, each of weight **> 22 kg**, in last **5 years** (on the date of enquiry).

In support of this, vendor shall furnish following details:

- a. Experience list of at least **3 castings** in material grade ALSi10Mg (a) T6 using **gravity die casting or low pressure die casting process** (minimum weight of each casting as per (i) & (ii) above), as per the following format:

Sl. No.	Weight (kg) #	Material Grade	Qty	PO No.	Name & Address of customer	Date of supply

- b. Vendor must furnish copy of unpriced PO & corresponding test certificates (chemical composition, mechanical properties & dimensional reports) of at least **3 castings** from the experience list. The test certificates must be certified by third party inspection agency or accepted by customer. The weight of the supplies must be clearly evident in either drawing/ PO/ test certificates.
2. a. Vendor should have suitable in-house manufacturing facilities for handling, melting and casting (by **gravity die casting or low pressure die casting**) for enquired castings. Details of above facilities to be provided.
- b. Vendor to furnish details of facilities for machining and heat treatment available in-house. In case of out-sourcing, details of sub-contractor and its facilities to be provided. The facilities (Machining + Heat Treatment) should be suitable to manufacture castings of enquired grade and weight.
3. a. Vendor should have in-house test facilities, accredited by NABL for performing destructive and non-destructive testing of these castings.
- b. In case of non-availability of facilities under clause 3a, outsourcing of these tests from NABL accredited is also acceptable. Details of facilities to be provided.
4. Vendor must provide confirmation to meet all the requirements given in above BHEL specification and BHEL drawings.

Notes:

- A. Vendor shall provide photographs/ drawings of the castings specified by them in the experience list at clause 1a.
- B. All the documents shall be submitted in consolidated manner and should be in English language.