

**HINDUSTAN AERONAUTICS LIMITED**  
**SUKHOI ENGINE DIVISION, KORAPUT**

**INDIGENISATION DEPARTMENT**

NOTIFICATION NO: HAL/KPT/UDS/1-1/2018/197

DATE: 02.02.2018

**INVITATION OF EOI (EXPRESSION OF INTEREST) FOR TITANIUM CASTING COMPONENTS HAVING AERO-ENGINE APPLICATION.**

1. Hindustan Aeronautics Limited, SUKHOI Engine Division – Koraput (**hereinafter referred to as HAL**) is a premier Public Sector Undertaking, under Ministry of Defence, Government of India. The Division specializes in manufacture and overhaul of Aero-Engines and Air Borne Units.

**2. PURPOSE OF THIS NOTIFICATION:**

2.1. Invitation of intent / interest from **Indian** Industrial Houses / OEMs (herein after referred to as Intending Organization) having required facilities and willingness to execute the work as defined under Scope of Work.

2.2. HAL shall issue **REQUEST FOR SUBMISSION OF QUOTATION** to those intending Indian organizations who are found suitable for carrying out the work as defined under Scope of Work.

**3. SCOPE OF WORK:**

Manufacturing of Titanium casting, having aero-engine applications.  
Make: Titanium Alloy of grade BT-20L.

Raw material required for Titanium casting is to be procured by the vendor. In case not available with vendor, it shall be supplied by HAL during prove out batch only. However for production batches (batches to be supplied after prove out) required raw materials are to be procured by the vendor using its own resource, **ONLY FROM HAL APPROVED SOURCES**. Proof of procurement of same from HAL approved sources is required to be submitted by the vendor to HAL during supply of batches. List of approved sources of HAL for procurement of raw material is appended at **Annexure-I**.

**4. REQUIREMENT:**

For the purpose of identification of suitable supplier and release of Limited Tender Notification thereafter, intending Organization(s) shall furnish details as below:

**4.1. MANDATORY REQUIREMENTS:**

4.1.1. Organization Details indicating the following:

Name of the Organization:

Address for Correspondence:

Contact Person Name:

E-Mail ID:

Telephone No. :

Mobile No. (if any) :

Fax No. (if any) :

4.1.2. The Intending Organization shall have the experience in manufacturing Titanium casting for aerospace application or other customer requirement within the last 05 years. Documentary evidence of such order(s) executed and supplied to customer(s) (minimum 02 sets of any single order) are to be enclosed.

**NOTE:-**

In case of reservation in sharing proprietary and confidential information, such data therein can be blanked / erased before submitting to HAL.

4.1.3 Availability of Quality Management System like ISO-9001 or AS-9100 or any other Quality Management certificate. Certificate copy to be forwarded.

4.1.4. Intending Organization is required to indicate willingness to accord permission to HAL or its authorized representative(s) to associate in establishing credentials of the Intending Organization, if so required.

4.1.5. Only Indian vendor having facility to manufacture the Titanium casting can participate in this RFI (Request for Interest). Interest from the Indian Dealers or authorized dealers/OEM from foreign party need not participate in this RFI as they are liable to rejection, if shown interest

4.1.6. List of Mandatory Machine/Facilities available for executing the scope of work. The list shall indicate the following:

- Titanium alloy melting furnace :Machine Type and Make ( Submit a copy of Spec)
- Pattern Making facility (Wax/ Polystyrene): Machine Type & Make (Submit a copy)
- Casting mould/shell making facility: Submit a copy of the Process Chart.
- Hot Iso-static pressing (HIP) equipment: Equipment specification and make (Submit a copy)
- Test facilities for checking the soundness of Titanium casting and properties like Chemical, Mechanical, Metallurgical and NDT. (Submit the facility details)
- Heat treatment furnace: Equipment specification and make (Submit a copy)
- CAD software used for Modeling and Type of software.

#### 4.2 DESIRABLE REQUIREMENTS:

4.2.1. List of Machine / Facilities available for executing Scope of work. The list shall indicate the following:

- Vacuum welding for Titanium welding defect correction; Equipment specification and make.
- Russian alloy application and experience for casting if any; furnish the type of alloy.

4.2.2 List of Man Power available for executing the Scope of Work. The List shall indicate the following:

- No. of Executives
- No. of Operators
- No. of Quality Control Personnel
- Trade/Basic Qualification of the man power

4.2.3 Financial Health of the Intending Organization for executing the scope of work. The list shall indicate the following:

- Balance Sheet of last Three Years

#### 5. IMPORTANT NOTE:

5.1. The Intending Organization is required to **necessarily furnish information / details as indicated against Mandatory Requirements. Absence of such information / details shall render the intent document as invalid and shall not be processed further.**

5.2. The Intending Organization is also required to **furnish information / details as indicated against Desirable Requirements. HAL Technical Committee shall study the information provided and take due decision about suitability or otherwise.**

5.3. HAL technical committee will visit the Intending organization if found suitable based on the above requirements submitted for verification and decision of HAL Technical Committee shall be final and binding for qualifying to execute the scope of work.

6. The Intending Organization shall forward by e-mail the detailed requirements as indicated herein to mail ID [faisal@hal-india.com](mailto:faisal@hal-india.com) or send by post / courier to the address below **so as to reach us by 17:00 Hours (Indian Standard Time) on or before 26<sup>th</sup> Feb,2018.**

**To,**

**CHIEF MANAGER (PURCHASE)  
HINDUSTAN AERONAUTICS LIMITED  
SUKHOI ENGINE DIVISION – KORAPUT  
SUNABEDA- 763 002  
DIST: KORAPUT  
ODISHA, INDIA**

**MOBILE NO. : +91-9338178858**

**LAND LINE NO:06853-221086**

## **ANNEXURE-1**

Following are the Russian suppliers for Titanium alloy, BT-20 material:

**1) JSC Rosoboronexport**

Add: Post Address: 27, Stromynka St., Moscow,  
Russian Federation, 107076

**2) Aviazapchast PLC**

Add: 48, Ivan. Franko Str., Moscow,  
Russia, 121351

**3) Elektrostal Metallurgical Plant JSC**

Add: 53, Gilyarovskogo St., Entrance #1, Office #4, Moscow,  
Russia, 129110

**4) Avitronic Ltd.**

Add: 16/22 Krivoarbatskiy per., Moscow,  
Russia, 119002