

HEAVY ENGINEERING CORPORATION LTD.
CORPORATE MARKETING DIVISION

NO. HEC/CM/2020/EOI/3000

29th MAY 2020

Notice Inviting Expression of Interest (EOI) for Globally acclaimed Companies in Engineering Sector for Joint Collaboration under Make in India.

HEC is seeking manufacturing and technology partnerships with global OEMs/companies looking to establish or expand their supply chains/production base in India for the manufacture of various engineering goods and/or service business in India including for Heavy Engineering Equipments & Machine Tools, Process Plant Equipments, Mining Machineries & Equipment, Steel Plant Projects, Steel Plant Machineries & Equipments, Defence (Army, Navy, Air-force) Equipments & Machineries, Nuclear & Aerospace Projects & Equipments, Transportation & Railway Machineries & Equipments, Other Capital Goods Machineries & Equipment etc.

1.0 India a Land of Economic Opportunity

Due to current Covid-19 pandemic and subsequent lockdown world over, world is witnessing a major impact on all economic activities, including manufacturing. Apart from manufacturing there are breakdowns in logistics/supply chain in many sectors, the adverse results of which are becoming more pronounced in near future. For a world to rise on its feet, it must quickly adapt to the new normal, it is highly imperative that manufacturing/production activities are quickly resumed and ramped up, which would help in restoration of normalcy and avoiding shortages that may adversely affect worlds economic recovery. As key lesson for businesses, emerging from the Covid-19 pandemic aftermath, the zone/area wise de-risking of manufacturing will have to be adopted as a major strategy to mitigate disruption risks associated with concentrated and specific location preference for operations.

India currently presents a very young energetic, talented, dynamic population to the World. Its demographic is such that it can easily adapt and become adept to world manufacturing factory. India being one of the fastest growing economies in the world, offers a wide range of opportunities. Government of India envisions India as a key engine of global growth, and is putting in place various supporting initiatives to make India a US\$ 5 trillion economy. HEC, which is one of the largest and experienced engineering enterprises in the country, would like to offer its state of the art manufacturing capacities and resources, for forging long term partnerships in manufacturing of technology based critical equipments, machineries and systems with globally acclaimed companies.

2.0 Overview of HEC's Capabilities

Heavy Engineering Corporation Ltd. (HEC) a Central Government, Public Sector Enterprise, established in 1958. HEC has played a pivotal role in shaping the engineering and manufacturing capability in India across several sectors, including Steel, Mining, Railways, Aerospace, Defence, Power etc. HEC has established strong linkages with other Public Sector Undertakings as well as Research Institutes in the country and is also having technology tie-ups with leading companies in various sectors. HEC also has extensive experience in executing EPC projects in Mining Sector, Steel and other material handling projects.

A brief overview of HEC's core capabilities and strengths are detailed below.

a). **Manufacturing capability:**

i. Foundry Forge Plant (FFP): It is the largest foundry and forging complex in India and one of the largest of its kind in the world. The area of the Plant is 13,16,930 sq.m accommodating 76,000 tonnes of installed machinery to cope up with the various operations effectively. This Plant is the manufacturer of Heavy ferrous & Non Ferrous castings and forgings for various HEC make equipments related to Steel plant, Defense, Power, Nuclear energy, Mining etc. Manufacturer of Forged Rolls for Steel Plants, Crank Shafts for Railway Loco, Propeller shafts for Naval applications etc. It is having all requisite facilities like Primary Melting Unit, Secondary Refining Unit, Forging Presses, Machine shop to manufacture various equipments. Our Existing Steel melting capacity is approx 87,000MT per annum.

ii. Heavy Machine Building Plant (HMBP) The Plant has a fenced area of 5,70,000 sq.m and a floor area of nearly 2,00,000 sq.m. It is well equipped with sophisticated machine tools and handling equipments to undertake manufacture of heavy machinery and equipment of top quality. HEC's state-of-the-art facilities specialize in engineering, manufacturing, fabrication, testing and aftermarket services for equipments and components for Steel Plant, Mining, Mineral Processing, Crushers, Material Handling, Cranes, Power, Cement, Aluminium, Space Research, Nuclear Power etc.

iii. Heavy Machine Tools Plant (HMTP). Set up in collaboration with M/s Skoda Export Czechoslovakia, HMTP is the most modern and sophisticated of its kind in the country which produces machine tools in heavier ranges. The Plant covers an area of over 2,13,500 sq.m. It designs and manufactures medium & heavy duty CNC. Manufactures conventional & special purpose Machine Tools for Indian Railways. It is an established supplier of special machine tools for Defense, Ordnance factories, HAL, Space and other strategic sectors.

iv. Projects/EPC Division- Design, Engineering and execution of Turnkey Projects related to Bulk Material handling, Steel Plant Projects, Cement Plant and other sectors.

The above plants and projects are located in same place, wherein we can offer items/equipments/machineries right from raw material/foundry stage to finished machined product stage.

MAJOR CONTRIBUTIONS OF HEC:

STRATEGIC SECTOR: Developed special grade clean steel for nuclear sector Forgings of Nuclear grade for defense/naval applications, developed Special Steel and Heat treatment technology for Plates to be used in Naval Ships, Made Magnet Poles (High Magnetic Soft Iron Forgings) for Super Conducting Magnet, Manufactured and supplied more than 150 nos. Machine Tools of higher capacity with CNC feature to VSSC, HAL, BHEL and Ordnance Factories. Developed and supplied Mountain Gun, Forged Armour Plates, Fabricated Hull, Turret and Trunion for tanks, Turret Casting for Tanks, Propeller Shaft, Rudder stock, Intermediate and Tail shafts, Thrust block and shafts and other Deck machineries for Ships.

STEEL SECTOR: Supplied over 8Lakh MT of equipment & spares to major steel plants of the country and has special contribution in, setting up of Bokaro Steel Plant, Establishing Vizag Steel Plant, Expansion of Bhilai Steel Plant, Modernisation of Rourkela Steel Plant and supply of special heavy duty EOT cranes for steel Mills applications. Supplied Blast Furnaces, Coke Ovens, Continous casting Machines for Blooms/Slabs, Steel Plant Cranes upto 450T capacity, Rolling Mills of various types & sizes, Steel Melting Converters, Mixers, Sinter Plant Equipment etc.

AEROSPACE : Supplied vital infrastructure for Nation's Second Launch Pad Project for Launching Medium and Heavy Size PSLV and Medium Size GSLV and other space application like 400/60T & 200/30 T EOT Cranes, 10T Tower Crane at the ht. of 80m of Umbilical Tower, Folding-Cum-Vertically Repositionable Platform (FCVRP), Horizontal Sliding Doors, Mobile Launching Pad for GSLV Mark-III, 6-Axis CNC Double Column & 3-Axis CNC Single Column Vertical Turning & Milling machine.

MINING SECTOR: Pioneered manufacturing of heavy earth moving machineries in the country. Over 598 nos. of 5 cum Shovel have been supplied out of which more than 200 nos. are in operation. 34 nos. of 10 cum Shovel have been supplied. A total of 15 nos. of Draglines have been supplied and commissioned. HEC has supplied numerous Gyrotory Crushers, Cone Crushers, Jaw Crushers, Two Roll Crushers, Four Roll Crushers, Single Roll Sinter Crushers, Reversible Hammer Mills, Vibrating Screens, Apron feeders, Rod & Ball Mills etc.

RAILWAY SECTOR: Supplied various conventional & special purpose Machines for Indian Railways, Surface wheel lathe, under floor wheel lathe, Axel Journal turning & burnishing machine.

b. **Manpower:** HEC is credited as one of India's good employers, in the engineering sector with ~3,000 highly skilled employees which includes 900 engineers along with 100 designers with qualifications, experience and skills spanning a wide range of technology areas. HEC's employees have been one of

the strongest pillars in building this successful business.

c. **Technology Partnerships**: HEC has collaborated with several global players in establishing over large number of technology collaborations over the years. These partnerships have helped both parties, fruitfully benefited by sharing technology, know-how and resources.

d. **Land**: The Company has a vast land bank of over 1,000 hectare which is centrally located in Ranchi, India having good logistical support along with its existing manufacturing facilities and easy access to major Air, Rail, Road and Sea Ports. Our plants are located in same place, wherein we can offer items/equipments/machineries right from raw material/foundry stage to finished machined product stage. HEC is having branch offices in New Delhi and Kolkata. Kolkata office is operational for facilitating custom clearances and related formalities for export/import through sea/air route. Spare land can be utilized to scale up manufacturing setup.

e. **Respect & Goodwill**: HEC's dedicated role since last 60 years in supporting the country's development as one of the leading public sector enterprises in the country, has amassed credibility to advocate big shifts in the country in close association with the Government, Research and Educational institutions, other public and private companies and industry associations.

3.0 Areas of Partnership:

HEC is actively seeking partnerships with global equipment manufacturing players looking to establish or expand their sourcing/manufacturing footprint in India. With extensive manufacturing facilities located at eastern part of India, highly skilled and experienced manpower, presence and reach through its wide network of offices and divisions in India, a successful model of collaborating with world OEMs and being a majority government owned company, HEC is ideally placed to be the partner in India for cooperation in various areas of Manufacturing, Servicing, EPC, Technology, Design & Engineering etc.

Some possible areas of partnership could be into Heavy Engineering Equipments & Machine Tools, Process Plant Equipments, Mining Machineries & Equipment, Steel Plant Projects, Steel plant Machineries & Equipments, Defence (Army, Navy, Air-force) Equipments & Machineries, Nuclear & Aerospace Projects & Equipments, Transportation & Railway Machineries & Equipments, Other Capital Goods Machineries & Equipment etc.

a. **Heavy Engineering Equipments**: As a leading manufacturer of Nuclear, Thermal, Renewal Power generation equipments, HEC has high synergy in manufacturing a wide range of equipment in this segment. It will provide impetus to synergy in critical ranges of forgings & castings to various material grades for above application, along with performing complete fabrication of such equipments at single location.

b. **Heavy Machine Tools**: HEC has been pioneer in CNC machines for various critical operations and can provide synergy wider ranges of machine tool manufacturing along with Complete Design and Engineering which can be scaled up easily.

- c. Process Plant Equipments: As a manufacturer of equipment parts like Reactors & Pr. vessels, Columns, Process Heat Exchangers for the process industries, HEC has high synergy in manufacturing other equipment in this segment and also taking up EPC jobs for various packages with suitable tie-ups in association with engineering companies looking for a partner in these areas.
- d. Mining Machineries & Equipments: HEC has been in forefront in developing complete range of solutions for mining machines and equipments at its state of the art manufacturing centre. It envisages expanding its product portfolio in entire value chain of mining equipments right from over ground to underground equipment ranges, thus synergy with customer centric approach towards development and trials and after sales service supports for expansion in this sector can be provided.
- e. Steel Plant Projects, Machineries & Equipments: HEC was born to provide support in setting up the Indian steel industry and it has performed its job very efficiently. Synergy in this sector can be provided towards value addition in EPC projects in this segment along with Manufacturer to various critical equipments of BOF, Coke plants, Sinter, SMS, Casters, HSM, CRM, Long Products etc.
- f. Defence (Army, Navy, Air-force) Equipments & Machineries: HEC has done reverse engineering, also has developed various metallurgical grades of steel and has provided mission critical equipments for such strategic sectors. Synergy and thrust can be provided towards "Make in India" effort where Design, Engineering, Manufacturing and testing can be done at same premises. Global OEM can also look to diversify products in India like Tanks, Artilleries, Guns, Armoured Vehicles, Tactical Vests & Jackets, Tracked Dozers, Drones etc. along with spares development.
- g. Nuclear & Aerospace Projects & Equipments: HEC is supporting in developing equipments for Nuclear and Aero Space division through its R&D centre and Manufacturing units. Synergy to team can be provided in terms of enhancement/scale-up of such critical equipments and EPC projects in such strategic sector.
- h. Transportation & Railway Machineries & Equipments: HEC has been serving the transportation sector in India for decades and synergy with HEC will provide ready market access for manufacturing of rolling stocks and allied equipment for this sector, along with specialized machine tools for railways.
- i. Other Capital Goods Machineries & Equipments: HEC has served various machine & equipments developments in sectors like Tools & die making, Coal & bulk material handling equipments, and other allied industries. We look to provide synergy in these segments by leveraging our customer reach and ease of manufacturing facility.
- j. Any other area of manufacturing to leverage its existing assets and resources.

4.0 Models of collaboration

HEC will welcome global OEMs/contractors, Design & Engineering organisations and Equipment manufacturer for discussions towards partnering with it, interested organizations through a range of cooperation modes including but not limited to the following:

- a. Joint manufacturing
- b. Contract manufacturing

- c. Technology licensing
- d. Know-how transfer arrangement.

Further details about company and its infrastructure facilities can be obtained at www.hecltd.com.

For any further information/clarification may contact: ajaykumar@hecltd.com
ssanandwar@hecltd.com

5.0 Information/documents to be submitted:

Interested partners shall submit their EOI alongwith the following details & documents:

1. General Information: Complete Particulars of Company.
 - a. Name of Firm, its registered head office address and contact details along with local India Office details (if any).
 - b. Name and Details of authorized Contact person/s.
 - c. Incorporation details of Firm like- Registration, CIN and MOU.
 - d. Status of firm: Government Holding /Public Limited /Private Limited / Limited Liability Company /Partnership Company /Any other.
 - e. Details about top level Management including Chairman, Directors.
 - f. Auditors report and Balance Sheet of last 3 years.
 - g. Solvency certificate from your bankers, Net worth report.
2. Technical Details:
 - a. Areas/field of Interest and synergy.
 - b. Firms experience & expertise in above area/s of their interest - List of valuable information like- Reference list, experience list, Supply list, Customers appreciation in relevant field of expertise.
 - c. Organisation chart.
3. Others:
 - a. Expertise and Experience in Global and Indian Market.
 - b. Proposed Modalities of Tie-up/ Partnering.

6.0 Contact Details:

Interested parties may contact the undersigned to initiate further discussions

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