

DEFENCE PUBLIC SECTOR UNDERTAKINGS

DEPARTMENT OF
DEFENCE PRODUCTION
MINISTRY OF DEFENCE
GOVERNMENT OF INDIA

Defence Public Sector Undertakings

There are nine Central Public Sector Undertakings under the administrative control of the Department of Defence Production, Ministry of Defence.

- HINDUSTAN AERONAUTICS LIMITED (HAL)
- BHARAT ELECTRONICS LIMITED (BEL)
- BHARAT DYNAMICS LIMITED (BDL)
- BEML LIMITED (BEML)
- MISHRA DHATU NIGAM LIMITED (MIDHANI)
- MAZAGON DOCK SHIPBUILDERS LIMITED (MDL)
- GARDEN REACH SHIPBUILDERS AND ENGINEERS LIMITED (GRSE)
- GOA SHIPYARD LIMITED (GSL)
- HINDUSTAN SHIPYARD LIMITED (HSL)

HINDUSTAN AERONAUTICS LIMITED (HAL)

- **Hindustan Aeronautics Limited (HAL)**, a Navratna Company, is the largest DPSU under the Department of Defence Production, Ministry of Defence, India.
- HAL has 20 Production Divisions, 11 R&D Centres and one Facility Management Division spread across the Country.
- It has so far produced 15 types of aircraft from in-house R&D and 14 types under license.
- Major aircraft/helicopters in the current production range are **SU-30MKI Multi-role Fighter, Hawk - Advanced Jet Trainer, Light Combat Aircraft (LCA), Dornier-228 Light Transport Aircraft, Dhruv- Advanced Light Helicopter and Cheetal- helicopters.**
- The Company has a comprehensive Design and Development capability in the field of aerospace. Out of 31 types of Aircraft produced so far, 17 have been of indigenous design.
- The Company has long experience in design and manufacture of a diversified range of aircraft and its systems.



Hindustan Aeronautics Limited



भारत इलेक्ट्रॉनिक्स

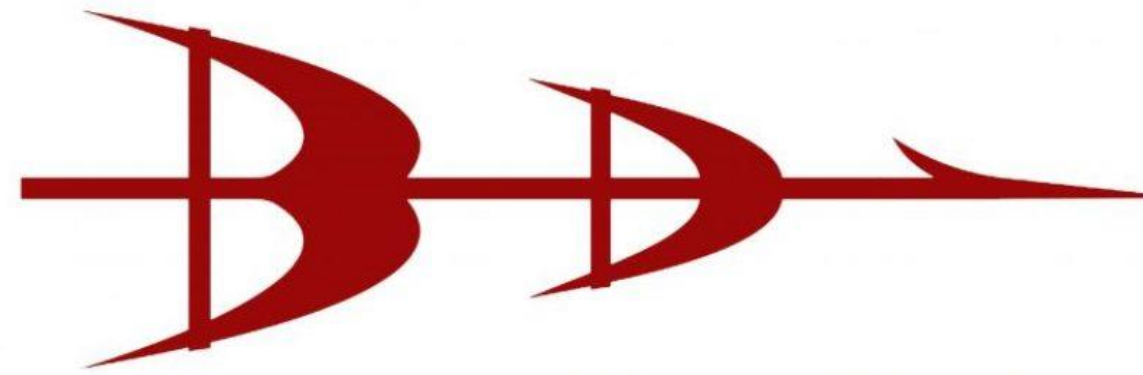
BHARAT ELECTRONICS

BHARAT ELECTRONICS LIMITED (BEL)

- BEL, a Navratna Company, established in 1954 under MoD and has nine Units across India.
- BEL has core competencies in Defence sector in areas of Radars & Weapon Systems, Sonars, Communication, EWS, Electro-Optics and Tank Electronics.
- In Non-Defence sector, BEL's product range includes EVMs, Tablet PCs, ICs, Hybrid Microcircuits, Semiconductor devices, solar cells etc.
- BEL has set up R&D facilities in all nine Units to achieve self-reliance.
- On an average 10 new Products are introduced annually. BEL spends around 8% of its turnover on R&D.
- Some of the major indigenously developed products in recent past include **Schilka Air-Defence System (Army), Software Defined Radio (Navy), Communication Network (Link II Mod III), Unit Level Switch Board Mk-III, Advanced Composite Communication System (Navy), Ship Data Network for P16A, Simulator for Akash Weapon System, Missile Warning System (Army), New Generation Sonars (Navy)** etc.
- To bridge the Technology gaps, BEL is systematically indigenizing the components & sub-assemblies of ToT products in a phased manner.
- BEL has also been consistently investing in modernisation of facilities which is essential for successful indigenization efforts.



BHARAT DYNAMICS LIMITED(BDL)



भारत डायनामिक्स लिमिटेड
BHARAT DYNAMICS LIMITED

- Bharat Dynamics Limited (BDL), a Mini Ratna Category-I Company was incorporated in the year 1970 under the Ministry of Defence.
- A pioneer in the manufacture of Anti-Tank Guided Missiles (ATGM) in the country, BDL is now involved in manufacturing ATGMs of new generation, Surface-to-air weapon systems, strategic weapons, launchers, underwater weapons, decoys and test equipment.
- BDL is fully geared up to meet the demands of the Armed Forces by capacity augmentation of all Major projects including ATGMs and SAMs by establishing new units at Amravati, Maharashtra and Ibrahimpatnam, Ranga Reddy District, Telangana State.
- BDL's three Units at Kanchanbagh, Bhanur and Visakhapatnam have ISO 14001 Certification.
- BDL's Production Divisions, Design & Engineering and Information Technology Divisions have obtained ISO 9001:2008 accreditation.
- BDL has integrated LRSAM missile for Indian Navy for which HOT (Home On Target) test has been conducted and two LRSAM Missiles have been test fired successfully from Indian Warship in Dec 2015. BDL is also the Lead Integrator for MRSAM(Army). Currently Akash Weapons System (AWS) is one of the major products indigenously produced by BDL with DRDO as designer, which is being supplied to Indian Army and Air Force.
- BDL is putting constant and determined efforts towards indigenisation of ATGMs being manufactured with an objective of increasing self-reliance, reduction of foreign exchange and cost reduction. BDL has achieved indigenization upto 90%, 76.4% and 71% in respect of Konkurs-M ATGM, Invar ATGM and Milan-2T ATGM respectively.



BEML LIMITED (BEML)

- BEML, established in 1964, is a Mini-Ratna (Category-1) Public Sector Undertaking.
- The Company has nine manufacturing units located at Bengaluru, Kolar Gold Fields (KGF), Mysuru and Palakkad and subsidiary steel Foundry - Vignyan Industries Ltd, in Tarikere, Chikmagalur District and engaged in design, development, manufacturing, sales and after sales activities of a wide range of areas of Mining & Construction, Defence and Rail & Metro products.
- The Company's International Business covers over 58 countries in Asia, Africa, and Latin America.
- The Company has a focused approach on in-house R&D, spending around 3% of its turnover towards R&D.
- The in-house R&D developed products have contributed on an average of 50% of the total turnover in the last 3 years.
- Indigenization level is over 90% in respect of Mining & Construction products and Rail products and 50% for Metro cars.
- In case of Defence products, viz., PMS Bridge, ATT, Aircraft weapon loader, 50T trailer etc., the company achieved 100% indigenization.

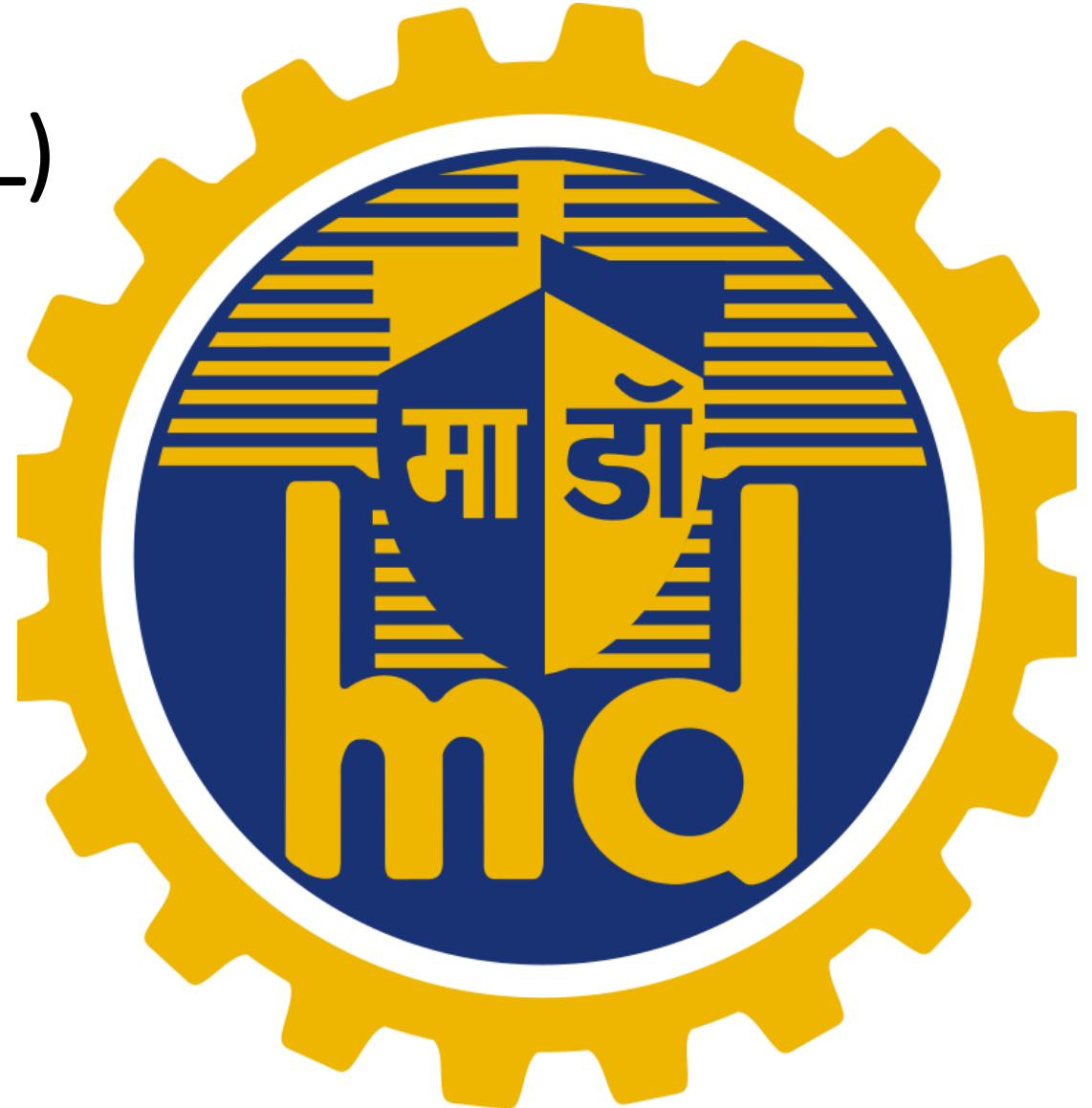
MISHRA DHATU NIGAM LIMITED (MIDHANI)

- MIDHANI, a Mini-Ratna company, was established in 1973 under the administrative control of Department of Defence Production & Supplies, Ministry of Defence to achieve self reliance in the Manufacture of a wide spectrum of critical and complex alloys like super alloys, titanium alloys, special steels & stainless steels, soft magnetic alloys etc. in variety of mill forms using state-of-art production facilities.
- MIDHANI caters to the needs of Defence, space, aeronautics, nuclear power, electronics, tele-communications and many other strategic sectors of the country.
- MIDHANI has developed, manufactured and supplied more than 105 grades of high-performance alloys in different shapes, sizes, forms towards programmes of national importance in the Defence, Space and Atomic Energy sectors.
- Most of the alloys/products manufactured in MIDHANI are import substitutes. Some of the recently developed products such as Superni42, Supercast55, steering gear assembly for ARIHANT submarine, Titan 26 discs for Adour engines, C103 sheets for satellite propulsion, etc., were manufactured using innovative manufacturing technology.
- Financial Performance: MIDHANI has achieved an impressive Compounded Annual Growth Rate (CAGR) of about 15% in sales over the past 10 years and has also continuously earned "Excellent" MoU performance rating.



MAZAGON DOCK SHIPBUILDERS LIMITED (MDL)

- Mazagon Dock Shipbuilders Limited (MDL) is the leading Shipyard amongst all Defence PSU Shipyards engaged in construction of Warships and Submarines.
- MDL is presently constructing Missile Destroyers, Stealth Frigates and Scorpene Submarines in order to achieve self-reliance in warship production for the Indian Navy.
- MDL has successfully completed the augmentation of its infrastructure through Mazdock Modernization Project (MMP).
- MDL plans to expand its Shipbuilding and Submarine facilities at Alcock Yard, Outfit Assembly Shop in Alcock Yard, Extension of Track of Goliath Crane, Deepening of Ritchie Dry Dock and Construction of the Submarine Section Assembly (SSA) Workshop.
- MDL has already set-up a dedicated Indigenization Department to boost the Government's "Make-In-India" initiative and to take up the task of progressively increasing the indigenization content in Warships and Submarines.
- MDL's commitment towards indigenization is evident from the fact that percentage of indigenization in the ships built by MDL has increased from 42% (Delhi Class) in the year 1997 to approximately 78% (Kolkata Class) in the year 2015-16.



GARDEN REACH SHIPBUILDERS AND ENGINEERS LIMITED (GRSE)

- Garden Reach Shipbuilders and Engineers Ltd (GRSE), a Mini-Ratna Category-I Company is a profit making & dividend paying DPSU since its inception.
- It has kept pace with India's expanding maritime interests and is established as a leading Shipbuilding yard.
- Presently, 14 warships are under construction in GRSE which include two Anti-Submarine Warfare Corvettes (ASWC), eight Landing Craft Utility (LCU) ships and four Water Jet Fast Attack Crafts (WJFAC). The Second ASW Stealth Corvette (INS Kadmatt) was delivered on 26 Nov 2015. GRSE also completed the Hull and 'Launched' five Warships during the current year.
- The Shipyard has been modernised to implement Modular Shipbuilding in construction of three (03) Stealth Frigates under Project 17A. The yard is undertaking first stage of Modular Shipbuilding on fifth ship of LCU Project.





गोवा शिपयार्ड लिमिटेड
GOA SHIPYARD LTD

GOA SHIPYARD LIMITED (GSL)

- Goa Shipyard Limited (GSL), a Mini-Ratna Group-I status company, is capable of indigenously designing and building sophisticated high technology ships for Indian Defence Forces and other varied clients including export markets.
- GSL prides itself in timely delivery of ships at 'fixed cost' and enjoys very strong execution skills.
- Make in India Initiative: GSL has been selected for indigenous construction of 12 Mine Counter Measure Vessels (MCMVs) under 'Make in India' initiative.
- Accordingly, Yard 'Infrastructure Augmentation Plan for MCMV' is being executed, on completion of which GSL will be able to build GRP Hull MCMVs with Transfer of Technology. Simultaneously yard has also worked out manpower augmentation plan to undertake the project.
- GSL is consistently investing in R&D activities and developing new generation platforms with improved features, like better fuel efficiency, higher endurance and higher speeds for varied operational roles and stealth features.
- GSL has successfully developed the design for 29 M, 50 Knots Interceptor Boats (IB) and delivery of first 105 M OPV (ICGS Samarth) has further validated the in-house design capability of GSL

HINDUSTAN SHIPYARD LIMITED (HSL)



- HSL is the largest and a strategically located shipyard.
- HSL's design capability embraces a wide spectrum of general and special purpose vessels like the medium size Bulk Carriers of size up to 70,000 DWT, as well as product tankers, container vessels, dredgers, passenger ferries, survey vessels etc.
- HSL is the first yard in the country to obtain ISO 9001-2000 accreditation. The yard is ISO 9001 - 2015 certified from IRQS for undertaking "Design and Construction of all categories of Defence Ships/ Crafts/Boats, Commercial Vessels upto 80,000 DWT and Repairs of all categories of Ships/ Crafts/ Boats/ Rigs and allied services".
- The Quality Division of HSL has developed comprehensive 'Quality Management System' which ensured successful completion of the MR of INS Sindhuvir conforming to stringent quality norms stipulated in Russian Repair Documents.
- In keeping with its image as a premier shipyard and with all these initiatives, HSL is ready to take up further challenges in a big way, cater to the growing needs of the Defence Sector and marching ahead towards its vision 'To be a National Leader in Building & Repairs of Ships and Submarines'.