



GRSE

AN ISO 9001:2015 COMPANY



**“Uttar Pradesh Defence Expo-2018” (UPDEX-2018)
Chandra Shekhar Azad University of Agriculture & Technology
Kanpur, U.P.**



FLOW

- Company Profile
- Product Profile
- Integrated Shipbuilding Facility
- Business Opportunities
- Shipbuilding Projects
- Vendor Development
- Registration Procedure & Contact Details



GRSE AT A GLANCE



Founded in 1884. Taken over by Govt of India in 1960



Pioneer Shipbuilder – Built First Indigenous Warship, INS AJAY in 1961



1st Warship Export of Country- CGS Barracuda to Mauritius in 2014



Profit Making & Dividend paying PSU for last 24 years

Mini Ratna Category 1 Company. 2800 Employees

Best Performing Defense Shipyard for Four Consecutive Years (from 2010-11 to 2013-14)



COMPANY PROFILE



COMPANY PROFILE

SHIPBUILDING DIVISION



- MAIN WORKS, KOLKATA
- FITTING OUT UNIT, KOLKATA
- RAJA BAGAN DOCKYARD, KOLKATA

ENGINEERING DIVISION



- PORTABLE BRIDGE UNIT, KOLKATA
- DECK MACHINERY UNIT, KOLKATA

ENGINE DIVISION



- DIESEL ENGINE PLANT (RANCHI)

THE SEVENTH UNIT IN KOLKATA IS A TECHNICAL TRAINING CENTRE

IN PURSUIT OF EXCELLENCE & QUALITY IN SHIPBUILDING



TECHNICAL TRAINING CENTRE

- ✘ TOOK OVER “DEVELOPMENT WORKSHOP” OF INDIAN STATISTICAL INSTITUTE (ISI)
- ✘ CONVERTED TO TECHNICAL TRAINING CENTER WEF FROM 1995
- ✘ CERTIFIED AS ISO 9001:1994 & ISO 9001:2000
- ✘ CONDUCTS TRAINING FOR FOLLOWING TRADES :
 - TRADE APPRENTICES
 - ELECTRICIAN, FITTER, MACHINIST, PIPE FITTER & WELDER
 - GRADUATE/ DIPLOMA ENGINEER APPRENTICESHIP
 - TRAINEE MARINE ENGINEER





SHIPBUILDING FACILITY

MAIN UNIT



EQUIPPED WITH 02 DRY DOCKS, 02 BUILDING BERTHS, WET BASIN & 02 JETTIES

IN PURSUIT OF EXCELLENCE & QUALITY IN SHIPBUILDING



SHIPBUILDING FACILITY

FITTING OUT UNIT

NAVAL JETTY AREA OF 229 M X 10M
FINGER JETTY AREA OF 184.5 M X 11.43 M

WORKSHOPS



FACILITY FOR POST LAUNCH FITTING OUT AND TRIALS OF WARSHIPS

IN PURSUIT OF EXCELLENCE & QUALITY IN SHIPBUILDING



SHIPBUILDING FACILITY

RAJABAGAN DOCK YARD

02 DRY DOCKS, 02 JETTIES & 550 M OF RIVER FRONT



DEDICATED FACILITY FOR CONSTRUCTION OF MEDIUM & SMALL WARSHIPS

IN PURSUIT OF EXCELLENCE & QUALITY IN SHIPBUILDING



PRODUCT PROFILE



PROVEN TRACK RECORD IN SHIPBUILDING

TOTAL DELIVERIES AS ON DATE	690 + 88*
NAVAL SHIPS	65
COAST GUARD SHIPS	31
EXPORT - SHIP	01
OTHERS	593
HIGH SPEED FRP INTERCEPTOR BOATS FOR MHA	88*

CURRENTLY AT 97 WARSHIPS - CENTURY MARK SHORTLY

IN PURSUIT OF EXCELLENCE & QUALITY IN SHIPBUILDING



SHIPS CONSTRUCTED BY GRSE

MAJOR WARSHIPS PRODUCED

FRIGATES (03 NOS.)

MISSILE CORVETTES (06 NOS.)

ASW CORVETTES (03 NOS.)



L- 125.6M, B- 14.4M,
DRAUGHT - 4.05M

INDIGENOUS DESIGN
TONNAGE – 3650 T



L- 91.16M, B- 10.45M,
DRAUGHT – 3.01M

INDIGENOUS DESIGN
TONNAGE – 1370 T



L- 109.10M, B- 14.17M,
DRAUGHT – 4.5M

INDIGENOUS DESIGN
TONNAGE – 3250 T

IN PURSUIT OF EXCELLENCE & QUALITY IN SHIPBUILDING



SHIPS CONSTRUCTED BY GRSE

OTHER CLASS OF WARSHIPS PRODUCED

FLEET TANKER (01 NO.)



L- 172M, B- 23M,
DRAUGHT – 9.10M

DESIGNED BY BV, GERMANY
TONNAGE – 24600 T

LANDING SHIP TANK (05 NOS.)



L- 124.8M, B- 17.5M,
DRAUGHT – 3.50M

INDIGENOUS DESIGN
TONNAGE – 5650 T

LANDING CRAFT UTILITY (04 NOS.)



L- 62.8M, B- 11M,
DRAUGHT – 1.87M

INDIGENOUS DESIGN
TONNAGE – 910 T



SHIPS CONSTRUCTED BY GRSE

OTHER CLASS OF WARSHIPS PRODUCED

**WATER JET FAST ATTACK CRAFT
(14 NOS.)**



L- 48.9M, B- 7.5M,
DRAUGHT – 2.17M

**INDIGENOUS DESIGN
TONNAGE – 315 T**

**SURVEY VESSEL
(06 NOS.)**



L- 85.77M, B- 12.8M,
DRAUGHT – 3.34M

**INDIGENOUS DESIGN
TONNAGE – 1929 T**

**PATROL VESSELS
(45 NOS.)**



L- 48M, B- 7.5M,
DRAUGHT – 2M

**INDIGENOUS DESIGN
TONNAGE 280-304 T**

IN PURSUIT OF EXCELLENCE & QUALITY IN SHIPBUILDING



SHIPS CONSTRUCTED BY GRSE

OTHER VESSELS PRODUCED

**HOVERCRAFT
(06 NOS.)**



L- 21.15M,
BEAM OVERALL-11.30M ,
DRAFT – 0.32M

**TOT WITH GRIFFON, UK
TONNAGE – 30 T**

**OFFSHORE PATROL VESSEL
(01 NO.)**



L- 74.10M, B- 11.40M,
DRAUGHT – 3.50M

**INDIGENOUS DESIGN
TONNAGE – 1350 T**

**BOATS FOR MHA
(88 NOS.)**



12T - L- 13M, B- 3.7M,
5T-L-9.85M, B-3.38M

**INDIGENOUS DESIGN
TONNAGE – 5 & 12 T**



FEW COMMERCIAL VESSELS BUILT BY GRSE



BULK CARRIER 26,000 T (03 NOS) DELIVERED TO SHIPPING CORPORATION OF INDIA



PASSENGER CUM CARGO VESSEL (03 NOS) SUPPLIED TO ANDAMAN ADMINISTRATION



SELF-PROPELLED ORE CARRYING BURGE (750T)



OFFSHORE-CUM-PATROL VESSELS (03 NOS) SUPPLIED TO ONGC



GRSE's ENGINEERING PRODUCTS

MORE THAN 5100 BRIDGES SUPPLIED TO INDIAN ARMY, BRO & STATE GOVTS.

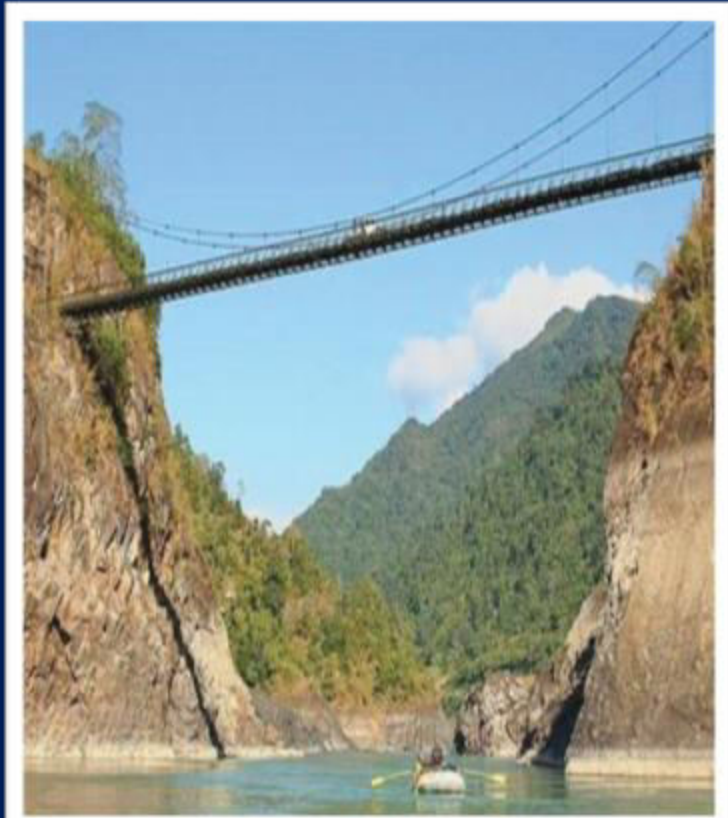
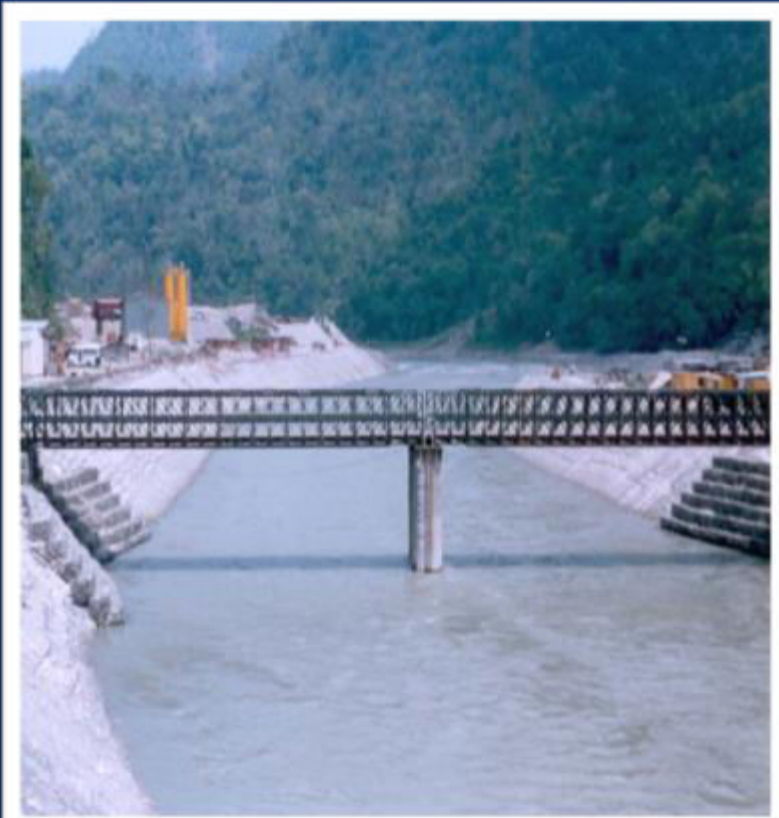


SUSPENSION BRIDGE

- ❖ **PIONEER IN MANUFACTURING PRE-FABRICATED STEEL BRIDGES IN INDIA SINCE 1968**
- ❖ **GRSE HAS OVER 60% MARKET SHARE**
- ❖ **EXPORTED TO NEPAL, BHUTAN, MYANMAR & SRI LANKA**
- ❖ **ERECTED AT HIGHEST ALTITUDE OF 5602 METRES AT KHARDUNGLA, LADAKH WHICH HAVE A MENTION IN GUINNESS BOOK OF WORLD RECORDS**



GRSE's ENGINEERING PRODUCTS



PRE-FABRICATED STEEL BRIDGES PLAY VITAL ROLE IN DISASTER MANAGEMENT

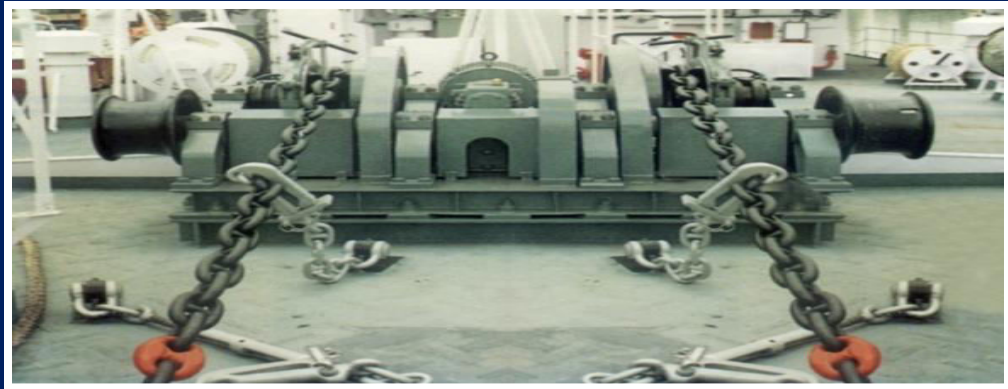
05 Nos. TO SRI LANKA IN 2005	12 Nos. TO ANDAMAN & NICOBAR IN 2005
06 Nos. TO PWD, LEH IN 2010	36 Nos. TO PWD, UTTARAKHAND IN 2013
17 Nos. TO J&K IN 2014	

IN PURSUIT OF EXCELLENCE & QUALITY IN SHIPBUILDING



GRSE's ENGINEERING PRODUCTS

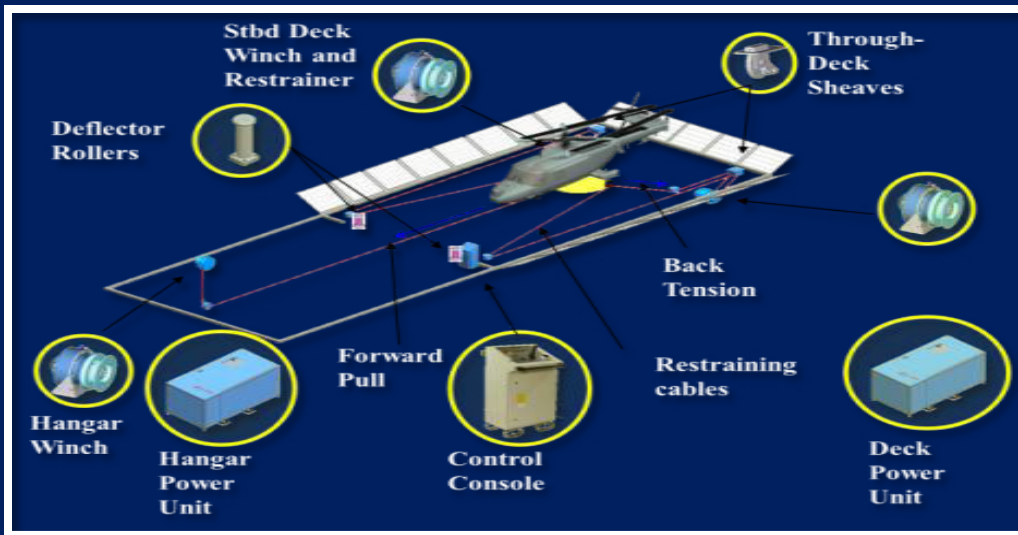
DECK MACHINERY ITEMS



CAPSTANS



HYDRAULIC DAVITS



RAIL LESS HELO TRAVERSING SYSTEM



MARINE PUMPS

IN PURSUIT OF EXCELLENCE & QUALITY IN SHIPBUILDING



INTEGRATED SHIPBUILDING FACILITY



INTEGRATED SHIPBUILDING FACILITY

(MODULAR CONSTRUCTION AT GRSE MAIN WORKS)

BEFORE MODERNISATION



▶ ERSTWHILE SLIPWAY OF 900 T CAPACITY



AFTER MODERNISATION

FACILITIES MODERNISED AT A COST OF RS. 605 CR. IN LINE WITH BEST IN WORLD

- ▶ GOLIATH CRANE (250 T, 116M)
- ▶ DRY DOCK (10000 T, 180M)
- ▶ INCLINED BERTH (4500 T, 180M)
- ▶ MODULE HALL
- ▶ PAINT CELL
- ▶ PORTABLE SHELTERS

IN PURSUIT OF EXCELLENCE & QUALITY IN SHIPBUILDING



SHIPBUILDING CAPACITY ENHANCED

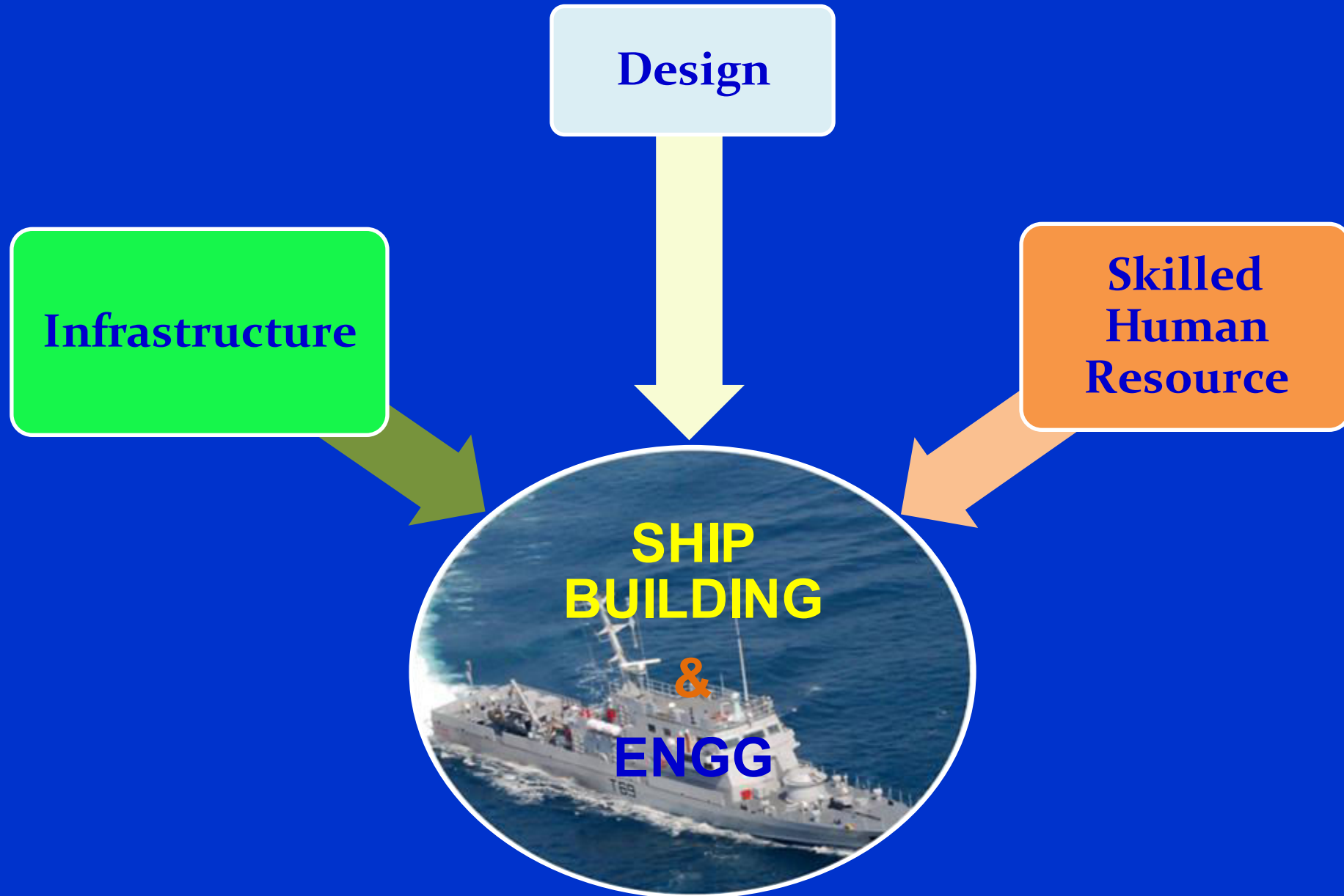
**POST MODERNISATION,
CAPACITY ENHANCED TO
CONSTRUCTION OF
18 SHIPS CONCURRENTLY**



CATEGORY	PRE LAUNCH	POST LAUNCH
LARGE SHIPS	4	4
SMALL SHIPS	3	7



Capacity & Capabilities





Capability - Design



- **EXPERIENCED TEAM OF 100 SHIP DESIGNERS:**
 - **NAVAL ARCHITECTS**
 - **MECHANICAL / MARINE ENGINEERS**
 - **ELECTRICAL / ELECTRONICS ENGINEERS**

- **MOU WITH IIT (KHARAGPUR) FOR KNOWLEDGE**



Capability – Human Resource

- **EXPERIENCED & MOTIVATED WORK FORCE OF 2800 PERSONNEL**
- **HIGHLY SKILLED TRADESMEN**



SHIPBUILDING CAPACITY

**AFTER MODERNISATION,
CAPACITY ENHANCED TO 20 SHIPS AT A TIME**



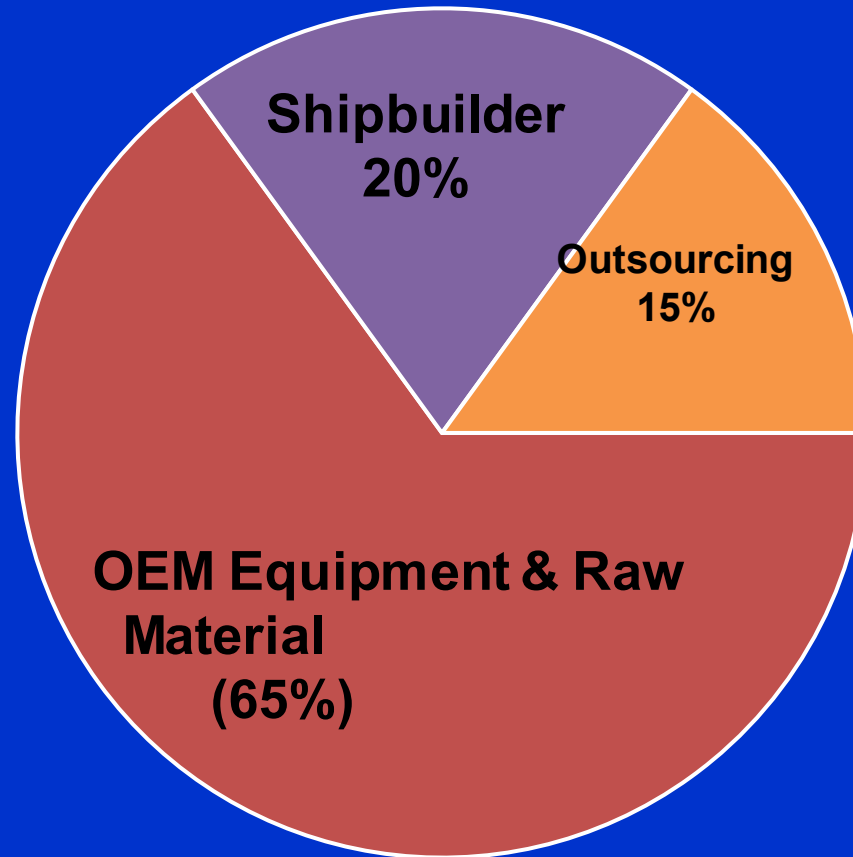
CATEGORY	PRE LAUNCH	POST LAUNCH
LARGE SHIPS	4	4
SMALL SHIPS	5	7



BUSINESS OPPORTUNITIES



BUSINESS OPPORTUNITIES IN WARSHIP CONSTRUCTION





SHIPBUILDING PROJECTS

Ships	No	Balance	Customer
ORDERS IN PROGRESS			
ASWC (P-28)	04	01	INDIAN NAVY
LCU	08	04	INDIAN NAVY
FPV	05	05	INDIAN COAST GUARD
P17A	03	03	INDIAN NAVY
ORDERS IN PIPELINE			
SURVEY VESSEL (L)	04	04	INDIAN NAVY
Shallow ASWC	08	08	INDIAN NAVY
TOTAL	32	25	

Total Value of Confirmed Orders & Pipeline: Rs 29,000 Crores



SHIPBUILDING PROJECT



G.R.S.E. - SHIPS / CRAFTS DELIVERED

- ❖ **INDIGENOUS DESIGN**
- ❖ **COMPOSITE SUPERSTRUCTURE**
- ❖ **STEALTH CORVETTE**
- ❖ **COMPACT WEAPON PACKAGE**
- ❖ **ABILITY TO CARRY HELICOPTER**



ANTI-SUBMARINE WARFARE CORVETTE FOR INDIAN NAVY

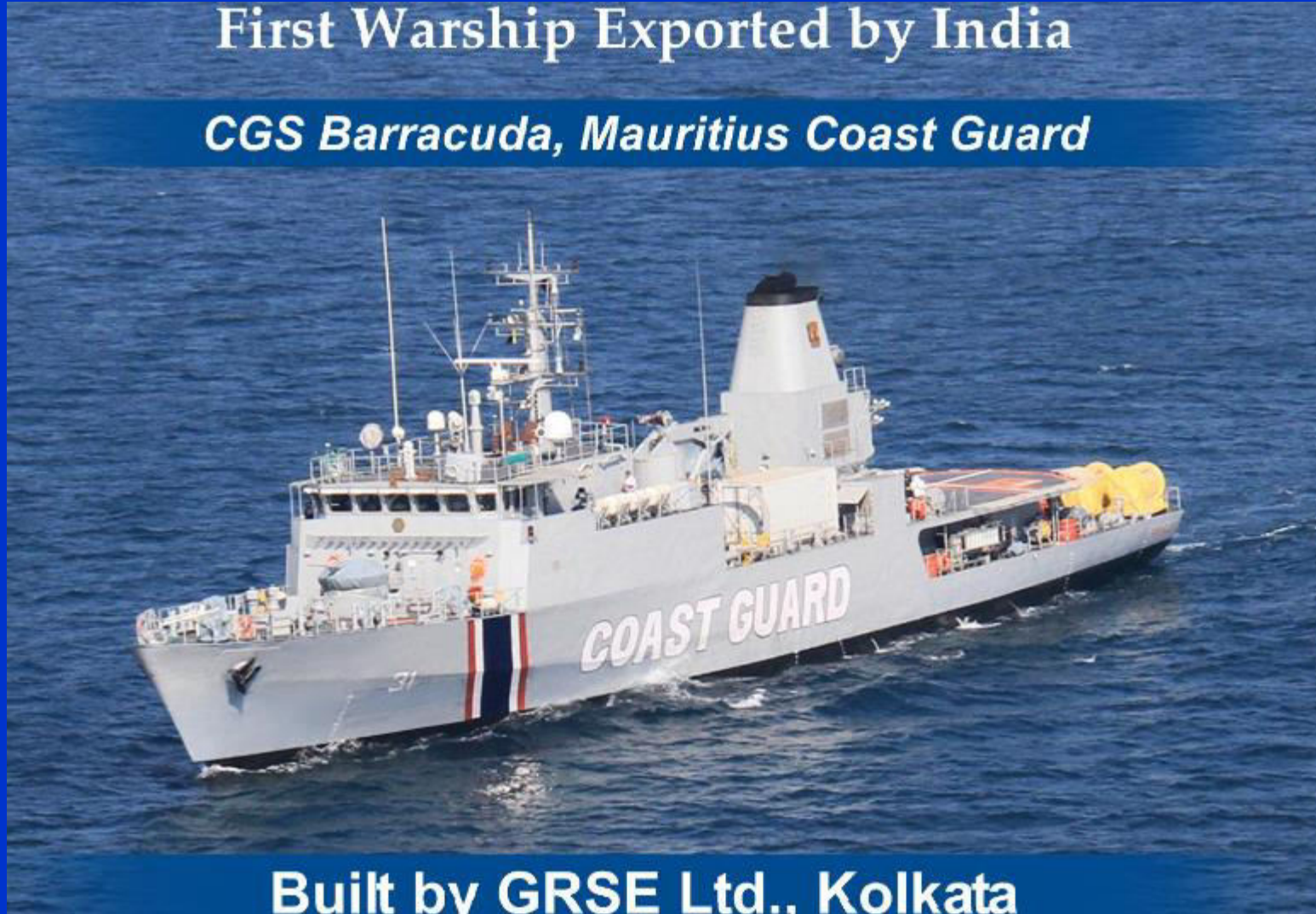
FIRST THREE SHIPS DELIVERED. 4th SHIP UNDER ADVANCED OUTFITTING.



G.R.S.E. - SHIPS / CRAFTS DELIVERED

First Warship Exported by India

CGS Barracuda, Mauritius Coast Guard



**MAURITIUS
OFFSHORE
PATROL
VESSEL**

Built by GRSE Ltd., Kolkata



LCU

(08 SHIPS)

- ❖ GRSE IN-HOUSE DESIGN
- ❖ CAN CARRY 02 TANKS / 04 TRUCKS
- ❖ CAN CARRY 160 TROOPS
- ❖ LOW DRAFT





PROJECT 17A FRIGATE



**HULL FABRICATION PROCESS ALREADY STARTED
THREE SHIPS BY GRSE. FOUR SHIPS BY MDL.**



G.R.S.E.'S PROCUREMENT ON A GROWTH PATH

➤ MAJOR AREAS OF SOURCE AUGMENTATION :-

❑ SUPPLIES

- ❖ EQUIPMENTS / ITEMS LIKE PUMPS, ANCHOR, HAND PUMP, DISTRIBUTION TRANSFORMERS - 5 TO 20 KVA, ETC.

- ❖ MECHANICAL OUTFIT ITEMS LIKE FLANGES, DECK BULKHEAD PIECES, CLAMPS, SWITCH SOCKETS, GLANDS, TEE PCS, REDUCERS, DISTANCE PIECES, MS / AL. BRONZE FASTENERS / HIGH TENSILE FASTENERS, AIR WHISTLE, THIMBLES, SHACKLES, EYE BOLT (RIGGING ITEMS), TALLY PLATES, SHIP NAME PLATES, GAUGE GLASS, RUBBER MOULDED ITEMS, ALUMINIUM / STEEL LADDERS AS PER DRAWING, EARTHING STUD, TOOLS, STEEL FURNITURE, ETC. (DETAILED LIST AVAILABLE FOR CIRCULATION).



G.R.S.E.'S PROCUREMENT ON A GROWTH PATH

➤ MAJOR AREAS OF SOURCE AUGMENTATION :-

□ SUPPLIES

- ❖ ELECTRICAL ITEMS LIKE, CABLE TRAY BENDS, CABLE TRAY SUPPORTS, DECK BULKHEAD GLANDS, M.S. PADS, MOUNTING BRACKETS, TANK FITTINGS, NON WATER-TIGHT PENDANTS, COMMERCIAL JUNCTION BOXES, SWITCH SOCKETS, CABIN FANS, CIRCUIT BREAKER, LT CONDUCTOR, CABLE STOWAGE BUCKET, CABLE REELING DRUM, ETC. (DETAILED LIST AVAILABLE FOR CIRCULATION).



G.R.S.E.'S PROCUREMENT ON A GROWTH PATH

➤ MAJOR AREAS OF SOURCE AUGMENTATION :-

❑ SERVICES

- ❖ CABLE LAYING TO THE TUNE OF 4 TO 5 KM PER MONTH
- ❖ SEATING ARRANGEMENTS FOR EQUIPMENTS
- ❖ PLUMBING / LAYING PIPE LINES – CU-NI / MS PIPE.
(APPROX. 1 KM PER MONTH).
- ❖ INSULATION WORK - APPROX. 500 M² PER MONTH
- ❖ ELECTRICAL CONNECTORIZATION



Business Opportunity : Equipment & Fittings

• Hull Equipment

- Davits
- Boats
- Anchor Capstan
- Winches
- Helo traversing system
- Scuttles
- Deck Crane
- Stairs & ladders
- Awnings and Covers
- Modular Accommodation
- Galley Equipment etc

• Hull Items

- ✓ Structural steel plate & Section
- ✓ Seamless & ERW Steel pipes
- ✓ Copper & Cu-Ni Pipes
- ✓ CI & Steel Grits
- ✓ PVC Fabric
- ✓ Flax Canvas
- ✓ Insulating materials
- ✓ Nylon / Steel Rope
- ✓ Moulded Furniture
- ✓ Marine Paints





SAMPLE ITEMS FOR SUPPLIES



G.M. FLANGE



FORGED REDUCERS





SAMPLE ITEMS FOR SUPPLIES



CABLE REELING DRUM



SEMI ROTARY HAND PUMP



AIR WHISTLE



SAMPLE ITEMS FOR SUPPLIES



GUN METAL STRAINER



ANCHOR



G.R.S.E. - ACTIVE PARTICIPATION IN M.S.E. ENCOURAGEMENT

❖ ACTIVITIES :

- LIST OF ITEMS BEING PROCURED FROM M.S.E.s UPLOADED IN G.R.S.E.WEBSITE
- NEWSPAPER ADVERTISEMENT INVITING PARTICIPATION / REGISTRATION FROM MSES

❖ POLICY FACILITATION:

- EXEMPTION FROM SUBMISSION OF EMD & TENDER FEES
- PURCHASE PREFERENCE [20% OF TENDERED QUANTITY PROVIDED QUOTE OF M.S.E.s ARE WITHIN 15% OF THE NON-M.S.E. L-1 RATE]
- 4% PURCHASE PREFERENCE TO SC/ST M.S.E. ENTREPRENEURS OUT OF 20% TOTAL PURCHASE PREFERENCE



GRSE FULLY COMPLIES WITH POLICIES FOR MSEs 2012

- GRSE IMPLEMENTED PPP FOR MSEs ORDER 2012.
- ENCOURAGE PARTICIPATION OF MSEs IN SHIPBUILDING EFFORT ACTIVELY.
- CONTRIBUTION BY SME VENDORS AMOUNTS 31% OF TOTAL VALUE OF NON-CORE PRODUCTS PROCURED ANNUALLY.
- LIST OF ITEMS (358 ITEMS) MANDATORILY PROCURED FROM MSE SOURCES DETAILED IN GRSE WEB SITE.



G.R.S.E. REGISTRATION PROCEDURE

- ❖ **ACCESS WEBSITE : www.grse.in**
- ❖ **SELECT “ONLINE REGISTRATION” -OR- Menu “VENDOR” for → MANUAL VENDOR REGISTRATION.**
- ❖ **FILL IN REQUISITE DATA / INFORMATION IN ONLINE/MANUAL FORM AND ATTACH/ENCLOSE RELEVANT DOCUMENTS**
- ❖ **SUBMIT**
- ❖ **SELF-ATTESTED HARD COPIES OF DOCUMENTS TO BE SUBMITTED TO VENDOR DEVELOPMENT CELL, CONTACT PERSON – SHRI. M. MAHENDRAN, SR. MANAGER, CONTACT NO. 9433338027 AND SHRI. D. BHATTACHARJEE, DEPUTY MANAGER, CONTACT NO. 9903682558 (VENDOR DEVELOPMENT CELL)**



G.R.S.E. REGISTRATION PROCEDURE

- ❖ G.R.S.E. VENDOR DEVELOPMENT DEPT. / VENDOR ASSESSMENT COMMITTEE WILL VERIFY THE DOCUMENTS AND VISIT (IF NECESSARY) THE PRODUCTION UNIT TO ASCERTAIN CAPABILITY.
- ❖ G.R.S.E. PROCURES THROUGH E-PROCUREMENT MODE.
- ❖ INTERESTED FIRMS WILL BE PROVIDED WITH REQUIRED INPUTS FOR E-PROCUREMENT.



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- ❖ INTERESTED M.S.E.s WILL BE PROVIDED WITH REQUIRED INPUTS FOR E-PROCUREMENT.



G.R.S.E. WEB SITE :- www.grse.in

Garden Reach Shipbuilders & Engineers Ltd. (GRSE) website interface. The page displays the company logo, name, and tagline: "A GOVERNMENT OF INDIA UNDERTAKING - MINISTRY OF DEFENCE" and "An ISO 9001:2015 Certified Company". Navigation links include HOME, OUR COMPANY, PRODUCT PROFILE, INFRASTRUCTURE, ACHIEVEMENTS, NEWS ROOM, POLICY / DIRECTIVES, VIGILANCE, RTI, PUBLIC GRIEVANCES, CSR, CONTACT US. The main banner features a large image of a naval ship (F31) on the sea. The Windows taskbar at the bottom shows various application icons and system tray information including the date 12-09-2018 and time 18:22.



G.R.S.E. – CONTACT DETAILS

- ❖ **Address : 43/46, Garden Reach Road, Kolkata – 700 024.
P2/2, Taratala Road, Kolkata – 700 088.**
- ❖ **Phone : (033) 2469 8100-14**
- ❖ **Website : www.grse.in**

- ❖ **M. VENKATESH MURTHY (General Manager - Materials)
landline : 2469 8123; mobile : 91633 61892; email : mtl.gm@grse.co.in**

- ❖ **CDR. BHASKAR SENGUPTA, IN(RETD.), General Manager (QA & VD)
Extn. : 508; mobile : 98310 61577; email : Sengupta.Bhaskar@grse.co.in**

- ❖ **SUCHITA NANDI (Addl. General Manager – Contract)
Extn. : 749; mobile : 84200 08800; email : Nandi.Sucheta@grse.co.in**



G.R.S.E. – CONTACT DETAILS

- ❖ **HARIHAR DAS (Dy. General Manager – Purchase)**
landline : 2489 3591; mobile : 91633 31757; email : Das.Harihar@grse.co.in
[nodal officer for MSEs owned by SC/ST entrepreneurs]
- ❖ **BHASKAR KARMAKAR (Sr. Manager – New Construction Machinery)**
landline : 2489 3652; mobile : 84200 08818; email : Karmakar.Bhaskar@grse.co.in
- ❖ **PARTHA SARATHI BOSE (Manager – Purchase)**
landline : 2469 8127; mobile : 94334 84780; email : Bose.ParthaSarathi@grse.co.in
[nodal officer for MSEs]
- ❖ **M. MAHENDRAN (Sr. Manager – Vendor Development)**
extn. : 706; mobile : 94333 38027; email : M.Mahendran@grse.co.in



Indigenization Effort

- List of items identified for Indigenisation details were available in GRSE website.
- List of items already Indigenised details were also available.
- List of items at present importing details also available.
- All the details were shared and available with DDP also.



Indigenization Effort

- Indigenization Programme/details, Uploaded and updated frequently in website.
- Details of Nodal Officer for Indigenization displayed.

ASSISTANCE

- Assistance during design, preparation of drawings & QAP finalization.
- Security of drawings & QAP and onward submission to customers.
- Obtaining comments/feedback from the customer on drawings/QAP and getting them approved.
- Helping in locating available facilities for conduct of different type tests.
- Explaining the exact scope of work to the vendors/suppliers, including visit onboard ships for clear understanding of the environment in which the equipment/items are required to operate.
- Explaining the technical requirements/specifications in detail.
- Providing the available copies of various applicable specifications/standards for manufacturing production.



FEW ITEMS
IDENTIFIED FOR INDIGENISATION



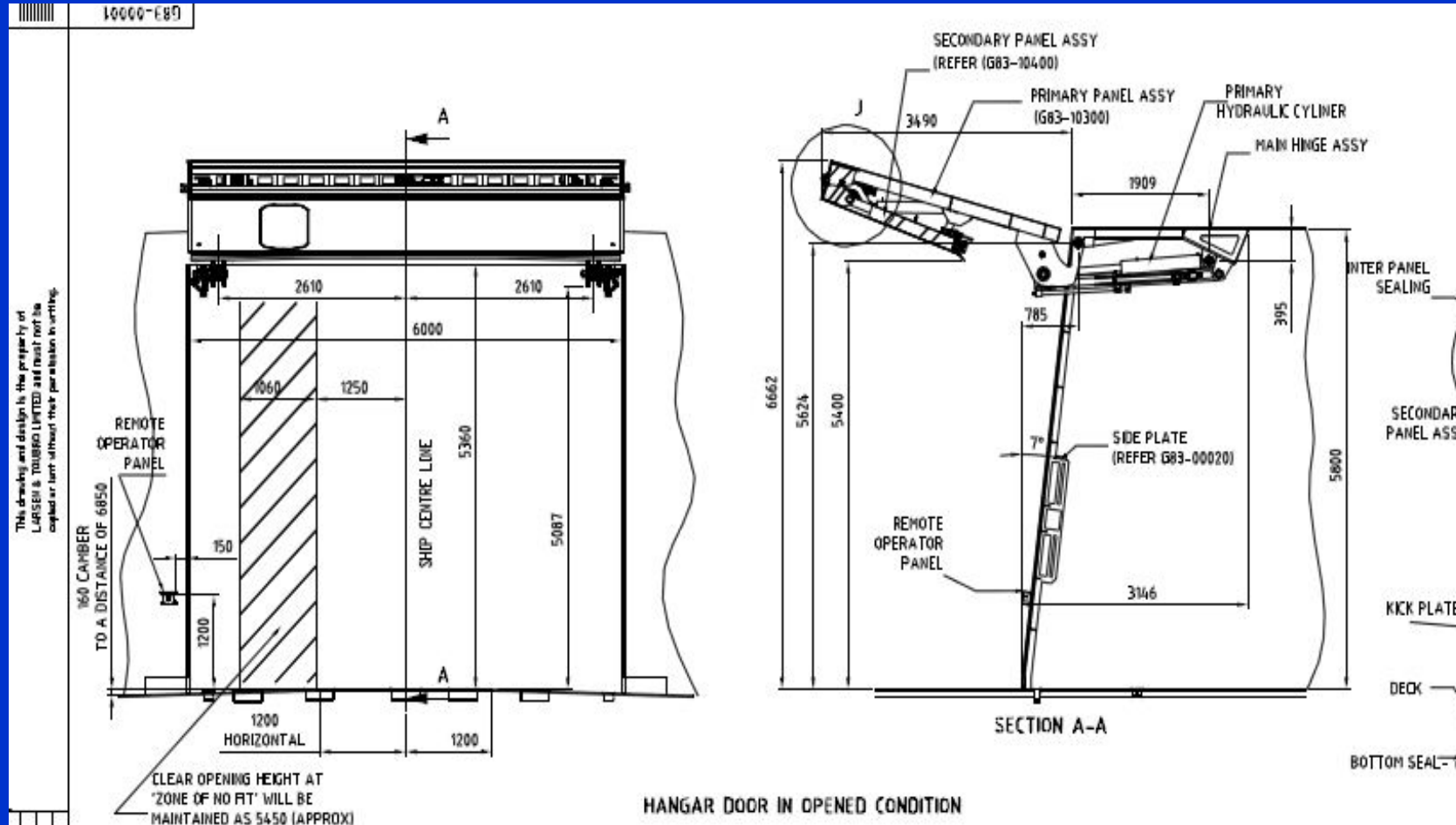
BRIDGE WINDOW GLASS

- Bridge Windows comprises laminated/chemically reinforced glasses, mounted in frame.
- The glasses are transparency, optical quality, hardness, durability.
- Glass sheet are made of Silica (70-72%), Soda (14% approx.), Lime (10% approx.) and various other oxides like Alumina and Magnesia to improve physical property.





COMPOSITE FOLDABLE SHUTTER HANGER DOORS





DECK CRANE OF 10 TON

- Boat to be handled:- Survey Motor Boats
- SWL:- 10T
- Working radius :- 7-14 M
- Hoisting/Lowering: – 18 -25 M/MIN
- Drive System: – Electro-hydraulic drive with Auto-Tensioning.
- Structure (Fabricated) : Steel: IS 2062





FIRE CLASS DOORS

- The doors are of non-watertight, fire-class and lockable type associated with hinges, clips, handles, rubber gaskets, locking arrangement, etc. provided with standard hydraulic door closure.
- Suitable door catch (magnetic type) or stainless steel door retainer with hook and eye are to be provided for all doors to prevent banging on adjacent bulkhead.





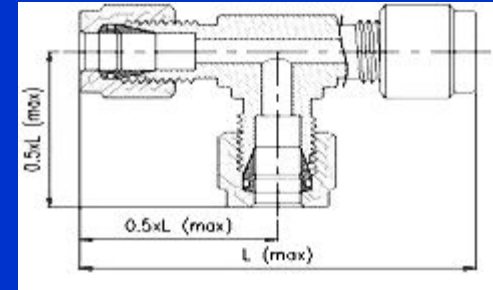
FIRE PUMP 10TPH

- These low noise pumps provide sea water for various ship borne services. The number of such pumps in each ship is 5 -10 depending upon size.
- Manufacturers are invited to participate in these critical items.

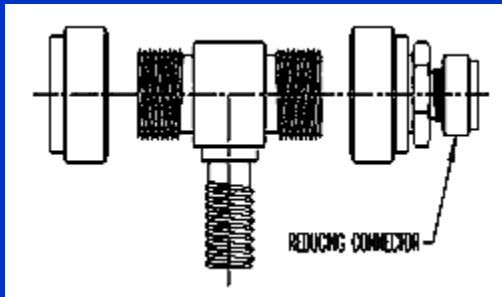




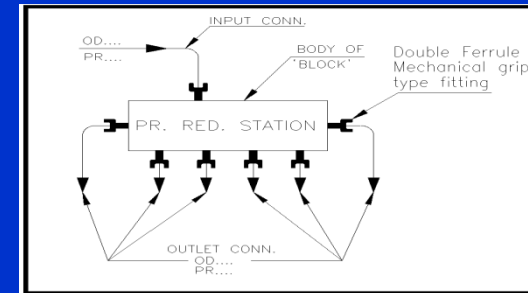
HP AIR FITTINGS



TEE PIECE ASSEMBLY (EQUAL ENDED)



TEE PIECE ASSEMBLY (UNEQUAL ENDED)



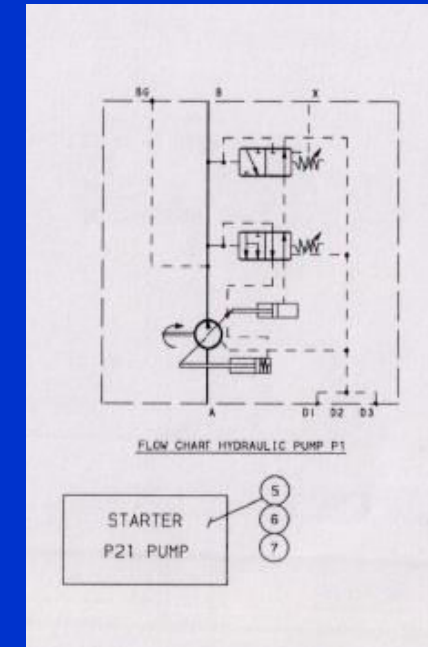
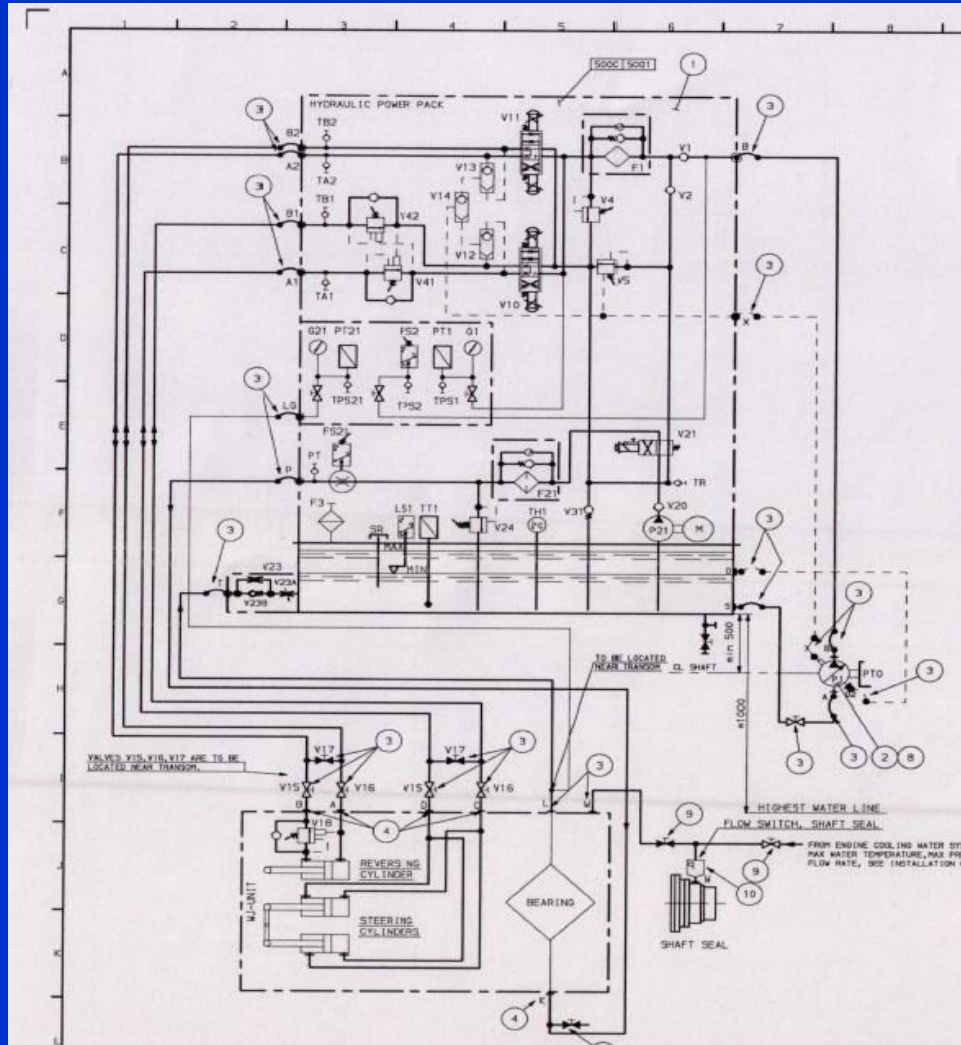
➤ PIPING MATERIAL

: 70/30 Cu- Ni Conforming

To NES 780 PART III



HYDRAULIC POWER PACK DETAILS



➤ Sample Hydraulic Power pack circuit diagram for controlling water jet Propulsion system



INCINERATOR

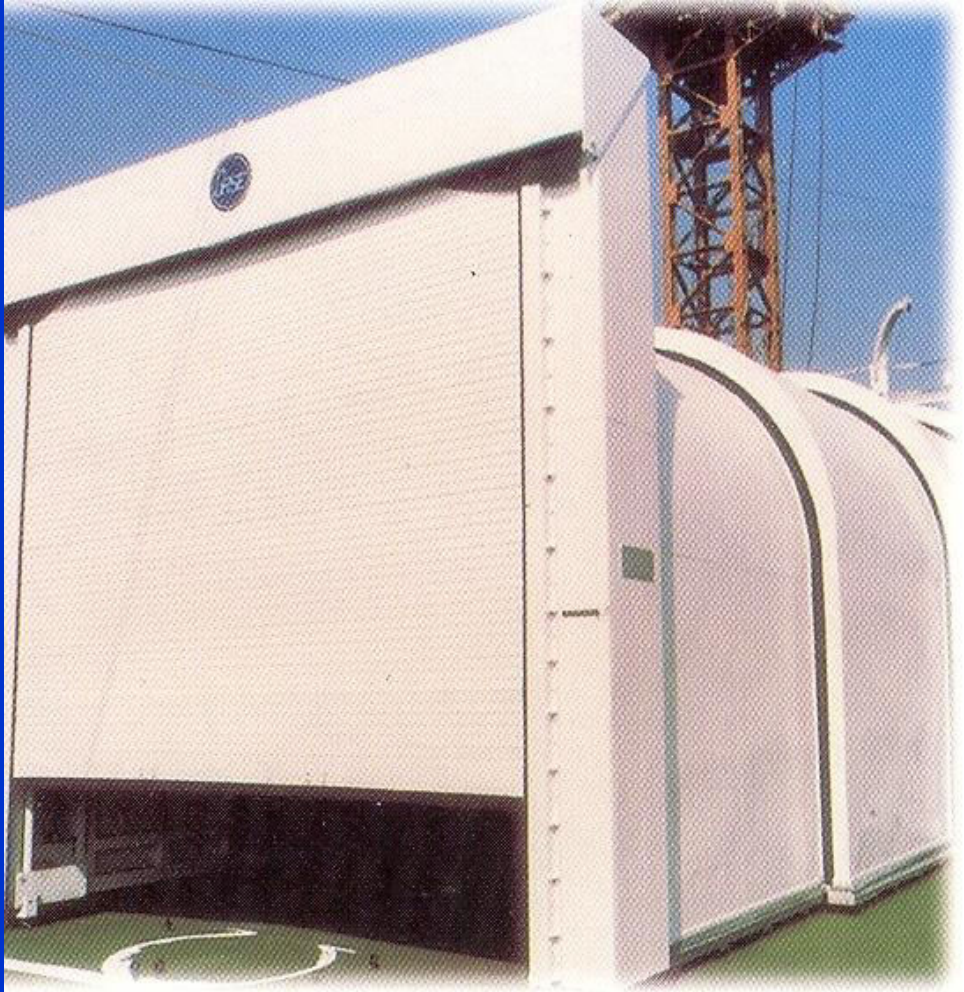
- Burning of food and other bio degradable waste is a regulatory requirement. All ships are required to have an incinerator to meet this requirement.

MARINE INCINERATOR





TELESCOPIC HELO HANGARS



**Structure
(Fabricated)**

**Aluminium Alloy
6061 Grade T6**



TOGETHER - MAKE IN INDIA



JAI HIND

