

# **PRODUCTS**

- **❖** BOP's, BOP & Diverter Control Systems
- **❖** Service & Support under 16AR specifications
- **❖** Valves & Wellheads Christmas trees
- **❖** High Pressure Systems & Rental Service
- **❖ High Pressure Tubing Fittings & Manifolds**
- **❖ Pump Integration & Systems Designs**









(B. Parthiban)

# **About HARSHU OIL TOOLS (HOT)**

**HARSHU OIL TOOLS PRIVATE LIMITED** formerly known as Worldwide Oilfield Machine Chennai (WOM Chennai) incorporated in 2017, which was an extended arm of WOM, USA founded in 1980, a vertically integrated company, which is a premier manufacturer of pressure control equipment for critical surface and subsea operations.

#### VISION

To make innovation in our products and to get recognized from customer

#### MISSION

HARSHU OIL TOOLS single objective is to provide the highest quality products, innovative designs, unsurpassed service and uncompromising reliability.

#### **COMMITMENT TO QUALITY**

**HARSHU OIL TOOLS** is committed to provide the highest quality products while maintaining the safety of its employees, having a clean working environment and timely inspections which will ensure customers receive the highest quality equipment manufactured / re-manufactured to the strictest specifications.

### QUALITY MANAGEMENT SYSTEM (QMS) ISO 9001: 2015 AND API-SPEC Q1.

**HARSHU OIL TOOLS** has established, implemented, and maintained the Quality Policy which includes our commitment to comply with the applicable requirements and continually improve the effectiveness of QMS per API Spec Q1 latest edition and ISO 9001:2015 latest edition.

# **QUALITY POLICY STATEMENT**

HARSHU is committed to upholding the best possible quality of service possible. The products we design and manufacture provide added value to our customers and reduce their operating risk. Our Quality Policy and its execution provide the assurance to our customers that they will have a consistent experience across all products and services.

### THE EXPERIENCE & EXPERTISE

**HARSHU OIL TOOLS** delivers the Customers, the Expertise from a trained team of Engineers & Technicians lead by **Mr. B. Parthiban** the Managing Director, Qualified with B.E and MS (Mech) from National University of Singapore (NUS) also known as **Parthi** in the Industry,

**We @ HARSHU.** Have about 30+ years of combined experience in Oil & Gas Upstream from world's leading MNC's besides EPC and Manufacturing in Well Control & Production equipments with special focus on Pressure Control Engineering and other related arenas Vastly experienced from Rig building down to installation of drilling and production equipments in Oil & Gas upstream with extensive knowledge & experience in managing HSE, QA&QC, machine shop, welding, blasting, painting, assembly & testing and shipment functions.

#### Who are,

- API-U Certified Practitioner in API Spec Q1-9th Ed and ISO9001-2015
- ❖ API-U Certified Lead Auditor
- **Familiar with,** NACE, ASME, ANSI and ASTM standards.
- \* Practiced Six SIGMA Black belt projects and Six SIGMA methods including Lean Kaizen
- Specialized in FEA

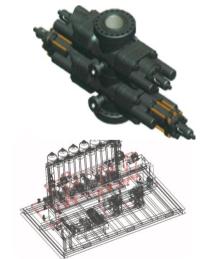
#### ENGINEERING & TECHNOLOGY CAPABILITIES

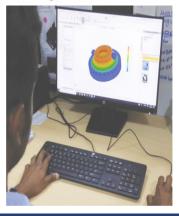
HARSHU OIL TOOLS has established, implemented and maintaining the documented procedure for Design Development to Product Validation including complete design packages in line with API Spec Q1 and ISO requirements for planning & controlling the Design & Development activities of the products and services thru, Design and Development Planning, Inputs, Outputs, Review, Verification and Final Review Validation & Approval and control on Design changes in line with API Spec Q1 and ISO requirements

**HARSHU OIL TOOLS** is supported by its In-house Engineering equipped with latest 3D and 2D CAD systems and Stress Analysis FEA systems for solutions required relating to manufacturing, remanufacturing and reconditioning activities.

**HARSHU OIL TOOLS** is capable of doing the Design for Surface and Subsea Well Head and Tree Equipment, Drill Through Equipment, Control Systems for Drilling Well Control Equipment and Diverter Equipment and Repair, Remanufacture, Refurbishment, and Overhauling of Drill Through Equipment

**HARSHU OIL TOOLS** is capable of doing the Design for control system with Hydro-Pneumatic, Electro-pneumatic and Hydro-Pneumatic-Electric system with PLC and HMI input controls right from diagnosing the process & application requirements, creation of P&ID's, System Design, Integration and Validation per relevant customer as well as code requirements









#### HARSHU PRODUCT CAPABILITIES

- ❖ HARSHU OIL TOOLS as "Center of excellence" from Design to Manufacture / Remanufacture in line with API Spec Q1 and ISO requirements can,
- Manufacture / Repair / Refurbish "BOP & Diverter Control Systems"
- ❖ Repair/ Refurbish Under 16AR specificities in Re-certification of well control equipment's like Ram and Annular Type Blow Out Preventers, Risers, Telescopic and Flex joints
- Manufacture / Repair/ Refurbish Drilling products like Ram & Annular BOPs, Flanges & Spools, Choke & Kill Manifolds Connectors.
- Manufacture / Repair/ Refurbish Gate Valves, Actuators, Xmas Trees, Conventional And Compact Wellheads & Wellhead Connectors. High Pressure Test Units of working pressure ranges up and above 30,000 PSI (2000 plus BAR) for Hydraulic, Oil and Gas Mediums.
- ❖ Manufacture complete range of **Tube fittings, adapters and pressure manifolds for high pressure & temperature applications,** specially designed up to 60000 PSI (4000 plus BAR) to match the performance of high-pressure systems valves and tubing in **Fluid and Gas** applications with pressure and temperature monitoring and recording systems.

### HARSHU PROCESS CAPABILITIES':

- \* HARSHU OIL TOOLS is fully capable of providing complete Design to manufacture solutions using fully validated procedures with state-of-the-art Test, Measure and Monitor equipments fully calibrated per API Spec Q1 and ISO requirements in,
- ♦ **Design and Develop** / Receiving, In-Process & Final **Inspections** / **NDE Inspection** on UT, RT, LP and MP Process and per ASNT and ASME standards and statutory compliances / **Welding** using process validated certifications by TPI's such as DNV, TUV on process qualifications per WS, WPS, PQR and WPQR in compliance with ASME section IX & AWS D1.1 / Welding of Low Alloy Steel, Carbon steel and Duplex steels / GMAW, GTAW & SMAW Welding operations using Machines which are duly Calibrated / Assemblies per the Assembly BOM & Drawings and procedures with Relevant Quality Control Checks as per the Quality Plans of HARSHU / **Pressure Testing** up and above 30,000 Psi Pressure Range to Validate the Product as per the Quality Requirements.

#### **PRODUCTS**

#### OIL & GAS

Scope certified by American Petroleum Institute (API) in SPEC Q1 and ISO 9001: 2015 QMS systems to,

'Design, Manufacture, Supply and Service of Surface and Subsea Well Head and Tree Equipment, Drill Through Equipment, Control Systems for Drilling Well Control Equipment and Control Systems for Diverter Equipment; Repair, Remanufacture, Refurbishment, and Overhauling of Drill Through Equipment for the Oil and Gas Industry'

Design, Manufacture, Supply, Repair, Remanufacture, Refurbishment, Overhauling and Service of products related to Oil and Gas Industry, Repair and Remanufacture as per 16AR.

- Drill Through Equipment of Ram and Annular type BOP's, BOP stack systems, Drilling Chokes, Connectors, Risers, Telescopic Joints, Flex Joints, Gate Valves, Choke & Kill Manifolds & Choke Control Panels and Related Accessories.
- Drilling Well / BOP Control Equipment and Control Systems for Diverter Equipment.
- Well head and Tree Equipment's, Gate Valves, Actuators, Conventional And Compact Trees, Wellheads & Wellhead Connectors and Running And Retrieving Tools.
- \* Refurbishment, Overhauling of Drill through equipment including BOP, BOP Stack systems per API 16AR.

#### HIGH PRESSURE SYSTEMS & RENTAL SERVICE

HARSHU Provides High Pressure Test Units of working pressure ranges from 5,000 to 30,000 PSI for Hydraulic, Oil and Gas Mediums.

These units are recommended for high pressure static testing. Test Units are available in unit-mounted, portable, skid-mounted and high flow electric driven styles. Accessories include stand-mounted chart recorders and high-pressure hose assemblies as per the requirements of Customers.

**Applications:** a) Pressure Test b) Valve Testing c) Gas Boosting from Low Pressure to High Pressure

d) Accumulator charging e) Flushing systems f) Descaling systems

HARSHU provides short term equipment rentals for Hydrostatic Test Systems Up and above 30,000 PSI (2068 bar). where the System is equipped with a Single acting air driven Hydraulic Pump up and above 30,000 Psi (2068 bar) and comes complete with Air Controls, Gauges, Isolation, Vent and Relief Valves. Systems are manufactured of mild steel, powder coated with stainless-steel fittings and accessories. All necessary controls and gauges are mounted in the skit for a safe and easy operator use.

#### HARSHU HIGH PRESSURE TUBING FITTINGS & MANIFOLDS:

HARSHU offers a complete range of Tube fittings and adapters for high pressure applications, specially designed to match the performance of high-pressure valves and tubing.

We supply Tube fittings, adapters and Manifolds for virtually any configuration of systems designed for handling fluids and gases at extreme pressures and temperatures. All fittings and adapters are marked with, material specification & pressure rating. The HARSHU high pressure Tube fittings and Manifolds are extremely safe to use with weep holes.

#### HARSHUPUMP INTEGRATION & SYSTEM DESIGNS:

We at HARSHU Provide Complete system of Pump with Suitable Motor and Gear Box Drive to Operate the Pump with Suitable Coupling for the Power Transmission with Coupling Guards, where the all the Parts are Mounted on the Skid as per the Customer requirements. We are capable of integrating pumps capable of moving fluids forwards and backward. These non-clogging reliable systems provide worry-free operation with no pulsation, low shear, and can process liquids with high solids.





### Product and Equipment Certifications provided / to be provided by HOT

	Troduct and Equipm	Repair / Refurbishment				New Manufacture*			
Product Standards	Products List	coc/cos/			COC / COS /				
		√/x	To Specs	SOF**	Monogram	√/x	To Specs	SOF**	Monogram
API 16A	Drill Thru Equipments								
	Ram blowout preventer	٧	16A / 16AR	COC / COS / SOF as CEM	Nil	٧	16A / 16AR	COC / COS / SOF as CEM	API
	Annular blowout preventer	٧	16A / 16AR	COC / COS / SOF as CEM	Nil	٧	16A / 16AR	COC / COS / SOF as CEM	API
	Drilling spools and spacer spools	٧	16A / 16AR	COC / COS / SOF as CEM	Nil	>	16A / 16AR	COC / COS / SOF as CEM	API
	Adapters	٧	16A / 16AR	COC / COS / SOF as CEM	Nil	٧	16A / 16AR	COC / COS / SOF as CEM	API
	Loose connections	٧	16A / 16AR	COC / COS / SOF as CEM	Nil	٧	16A / 16AR	COC / COS / SOF as CEM	API
	Clamps	٧	16A / 16AR	COC / COS / SOF as CEM	Nil	٧	16A / 16AR	COC / COS / SOF as CEM	API
API 6A	Wellhead Equipment & Christmas Tree								
	Cross-Over Spools	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	Nil	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	API
	Cross-over Connectors	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	Nil	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	API
	Tees	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	Nil	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	API
	Crosses	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	Nil	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	API
	Adapter and Spacer spools	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	Nil	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	API
	Single Valves	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	Nil	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	API
	Actuated valves	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	Nil	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	API
	Valves prepared for actuators	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	Nil	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	API
	Chokes	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	NiI			x	
	Back-pressure valves	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	Nil	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	API
	Weld neck Flanges / connectors	٧	16A / 16AR	COC / COS / SOF as CEM	Nil	٧	16A / 16AR	COC / COS / SOF as CEM	API
	Blind Flanges / connectors	٧	16A / 16AR	COC / COS / SOF as CEM	Nil	٧	16A / 16AR	COC / COS / SOF as CEM	API
	Threaded Connectors	٧	16A / 16AR	COC / COS / SOF as CEM	Nil	٧	16A / 16AR	COC / COS / SOF as CEM	API
	Adapter and spacer connectors	٧	16A / 16AR	COC / COS / SOF as CEM	Nil	٧	16A / 16AR	COC / COS / SOF as CEM	API
	Valve-removal plugs	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	Nil	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	API
	Clamp hubs	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	Nil	٧	6A / HARSHU Engg	COC / COS / SOF as CEM	API
API 16D	Drilling & Well Control Systems								
	Control system for surface mounted BOP stacks	٧	16D / HARSHU Engg	COC / COS / SOF as CEM	Nil	٧	16D / HARSHU Engg	COC / COS / SOF as CEM	API
	Control system for diverter equipment	٧	16D / HARSHU Engg	COC / COS / SOF as CEM	Nil	٧	16D / HARSHU Engg	COC / COS / SOF as CEM	API

<sup>\*</sup> API Application is in progress.

# LOCATION & FACILITY

#### HARSHU OIL TOOLS has it's,

- Corporate & Design Centre @ 67, Kuttiappan 2nd Street, Kilpauk, Chennai 600010, Tamil nadu, India.
- ❖ Registered office and Works @ Plot No. K14, SIPCOT Industrial Complex, Sriperumbudur, Kanchipuram District-602105. Tamilnadu, India
- \* CNC Machining Centre @ SIDCO Estate, Ambattur, Chennai

Our works infrastructure is housed with **27,000 sq. Ft** of covered shed with Well-Equipped Facility and with all Safety Measures maintaining all Quality Requirements with utmost care with stringent Quality Standards with due care on our HSE as main focus:

# **CONTACT:**

#### HARSHU OIL TOOLS PVT LTD

© ©: +91-9500084149, +91-7010626540

 $\mathbf{x}$ : parthi@harshugroup.com

⋈: info@harshugroup.com⋈: sales@harshugroup.com

<sup>\*\*</sup> COC-Certificate Of Compliance / OCS-Certificate Of Service / SOF- Statement Of Fact