



Seng Heng Engineering Pte Ltd
Engineered For Quality, Built To Last



A COMPANY DRIVEN TO EXCELLENCE

Single Source Solution

Seng Heng Engineering is a single-source solution provider of fasteners, turnkey machining and corrosion resistant coated products with more than 70 years of experience.

Capacity and Capability

We provide a total solutions' package and on-time delivery worldwide.

With our new machining and coating facilities in Singapore, we have the capability to customize any fasteners and turnkey solutions to our customers' requirements.

In addition, our raw materials are stocked in a special automated retrieval system for full traceability records which meet stringent requirements by our clients.

Continuous Growth

Through the years, we have forged long-term partnerships with Original Equipment Manufacturers (OEMs), Engineering Procurement Contractors (EPCs) and major oil companies to support their needs. 70 years on, we remain steadfast in our commitment to our customers' trust and loyalty, motivated by a genuine passion for continuous improvement in our products, quality standards and services.

We keep up with global trends and employ what the latest technology can offer. This includes a sophisticated ERP system for order processing, coupled with online traceability software for efficient product tracking to guarantee that your orders are in good hands. Likewise, we have in place, a highly flexible manufacturing system that produces a wide range of products, both in small and large scale, on demand.

Long Established Expertise

We have an extensive track record in providing products and services to a wide range of industries.

- Refineries and Petrochemical Plants
- LNG Plants
- Onshore and Pipe Transportation
- Power Plants
- Gas and Steam Turbines
- Heavy Civil Construction
- Offshore Platform
- FPSO
- Subsea (API 20E)

Guiding Principles

Vision

To be a leading global manufacturer of fasteners, turnkey machining and corrosion-resistant coated products for the Oil & Gas industry for OEMs, EPCs and major oil companies.

Mission

To deliver top quality products on time through long term global partnership to achieve total customer satisfaction.

Value System

We are strongly committed to "Deliver Quality Products on Time", a philosophy that has earned us our impressive track record in the last seven decades.

7 Core Values

- Agility
- Caring
- Commitment
- Customer Focus
- Integrity
- Respect
- Team Spirit



SHE Hallmarks

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1 Customised Coatings

- Xylar + Xylan 1424
- Zinc + Xylan 1424
- Hot Dipped Galvanise + Xylan 1424

2 Anchor Bolts

- ASTM F1554 Gr.36
- ASTM F593 Gr. 316

3 Xylan Coating

- 1014, 1070, 1052, 1424
- Xylar 2

4 Turbine Boltings

- 20CrMoVTiB4-10
- ASTM A437 B4B

5 Super Duplex

- UNS S31803, S32750, S32760

6 Nickel Alloys

- Hastelloy® B2, C4, C276, G-3
- Monel® 400, K500

7 12 Point Hex Bolts

- ASTM A453 660 Class A/B/C/D
- AISI SS 316(L), SS316 Ti

8 Socket Head Cap Screws

- ASTM B8, B8M, B8MA
- ASTM A320 8T, 8CA
- Inconel® 718, 625
- Nitronic 50/60®, B8R, B8S

9 Structure Bolts

- ISO 3506 A2-50/70/80, A4-50/70/80

10 Subsea Bolting API 20E

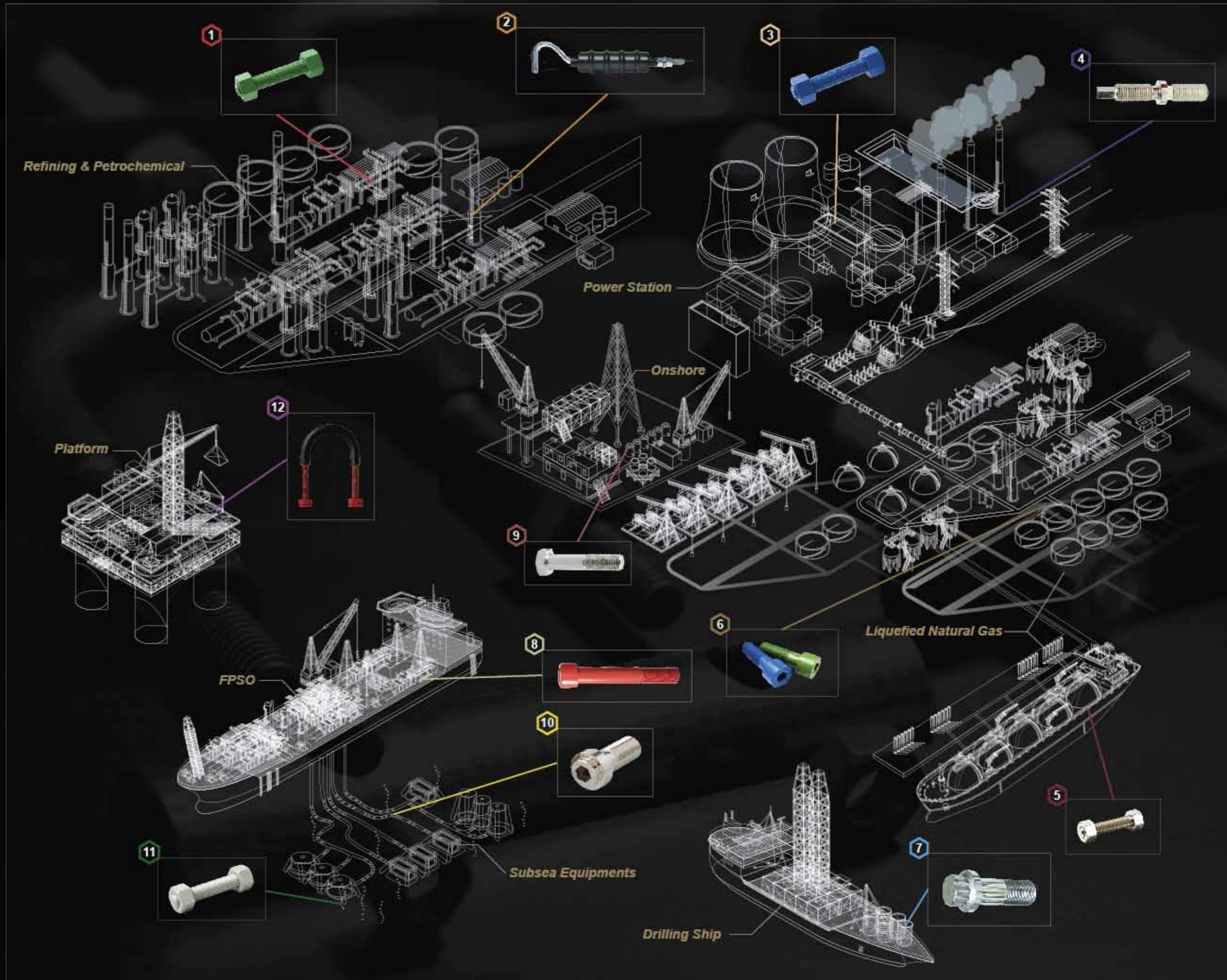
- ASTM A193 B7, B7M, B16, A320 L7, L7M
- ASTM A194 2H, 2HM, 4, 7, 7M

11 Polyolefin U-Bolts

- ASTM A325 Type 1
- ASTM 7M, B7M, B7, B8

12 SermaGard Coating

- 1105, 1280



Products Portfolio

Petrochemical Bolts and Nuts

Our core strength is in the manufacturing of bolt assemblies for the petrochemical industry. Materials include various grades of alloy, carbon and stainless steel based on international standards from ASTM, AISI, ISO, BS, and SAE.

Diameter Range: 1/4" - 7", M5 - M150

Pipe Supports

We manufacture a full range of pipe support items such as U-Bolts, Tie Rods, Threaded Rods, turnbuckles and Clamps according to customers' specified drawings and material grades with corrosion resistant coatings.

Pipe Size Range: 1/2" ~ 45", M10 ~ M1200

Structural Bolts

We supply a wide range of heavy duty bolting for joints in structural steel.

Specifications:




























- BS 3692 Gr 8.8, 10.9, 12.9
- ASTM A325 High Strength Bolts
- JIS 1186 F10T, BS4395 Part 1,2,3 High Strength Friction Grip Bolts
- Torque Shear Type High Strength Bolts (TC Bolts)
- BS EN ISO 3506 A4-70/80, BS ISO 3506 A2-70/80
- SAE Grade 5, 8, 10
- A490 Type 1
- SS 316, SS 304, SS 316L

Diameter Range: 1/2" - 2", M12 – M52

Special Grade Fasteners

Special grade fasteners are specially manufactured from corrosion resistant materials which are well suited for service in extreme environments. These materials are effective against temperature and pressure requirements such as pressure vessels and valve flanges.

Diameter Range: 1/4" - 7", M5 - M150

	SAE J429 GR 5		ASTM A193 GR B8		SS304
	SAE J429 GR 8		ASTM A320 GR L7		SS316
	ASTMA307 GR A		A193 GR B8M		SS316L
	ASTMA307 GR B		BS 3692 GR 4.8		BS EN ISO 3506 A2 - 50
	ASTM A325 TYPE 1		BS 3692 GR 8.8		BS EN ISO 3506 A2 - 70
	ASTM A490 TYPE 1		BS 3692 GR 10.9		BS EN ISO 3506 A2 - 80
	ASTM A193 GR B7		BS 3692 GR 12.9		BS EN ISO 3506 A4 - 50
	ASTM A193 GR B7M		JIS B1188 CLASS F8T		BS EN ISO 3506 A4 - 70
	ASTM A193 GR B16		JIS B1185 CLASS F10T		BS EN ISO 3506 A4 - 80

Turbine Bolting

We produce special grade bolting for steam and gas turbine engines. Grades include 718, 660 class A/B/C/D, SS321, SS410, B4B, B8M class 2, B7, B16 and others for use in extreme environments. Raw materials which meet the turbines' requirement are stocked in our special automated retrieval system so that record can be fully traced. Where required, bolts and nuts and machining items may be enhanced by special coatings like silver or electroless nickel plating.

Diameter Range: 1/4" - 4", M6 - M100



Turnkey Machining

We provide turnkey machining to OEMs through stocking their specified grades of steel followed by machining and specific coating in accordance to their drawing's requirement.

*** As per customer's requirements**



Subsea Bolting API 20E

Our subsea fasteners are certified to API 20E. We stock special raw material with additional testing done to cater to the subsea bolting requirements. Our full traceability record system and stringent testing ensure that the correct bolts that meet API 20E requirements are supplied - i.e. fasteners for coating such as SermaGard, Xylan, Moly, which are commonly used in subsea operations are also carried out in-house to provide one-stop service for subsea OEMs' requirements.

Diameter Range: 1/4" - 4", M6 - M120

Coatings

We have an extensive range of plating and coatings that provide outstanding temperature, chemical, abrasion and corrosion resistance designed to withstand harsh conditions. These coating services are combined with our production capabilities to customize a multilayered-coating system ideally suited to any specific environment.

Plating

- Zinc (White / Yellow / Black)
- Zinc Nickel
- Cadmium (White / Yellow / Black)
- Electroless Nickel



Galvanising

- Hot-Dipped Galvanise
- Mechanical Galvanise



Fluorocarbon Coating

SermaGard® Coating Systems:

- 1105
- 1280
- 1628
- 1175

Xylan® Coating Systems:

- Xylar 2
- 1014
- 1070
- 1052
- 1424

Molykote® Coating Systems:

- 7409

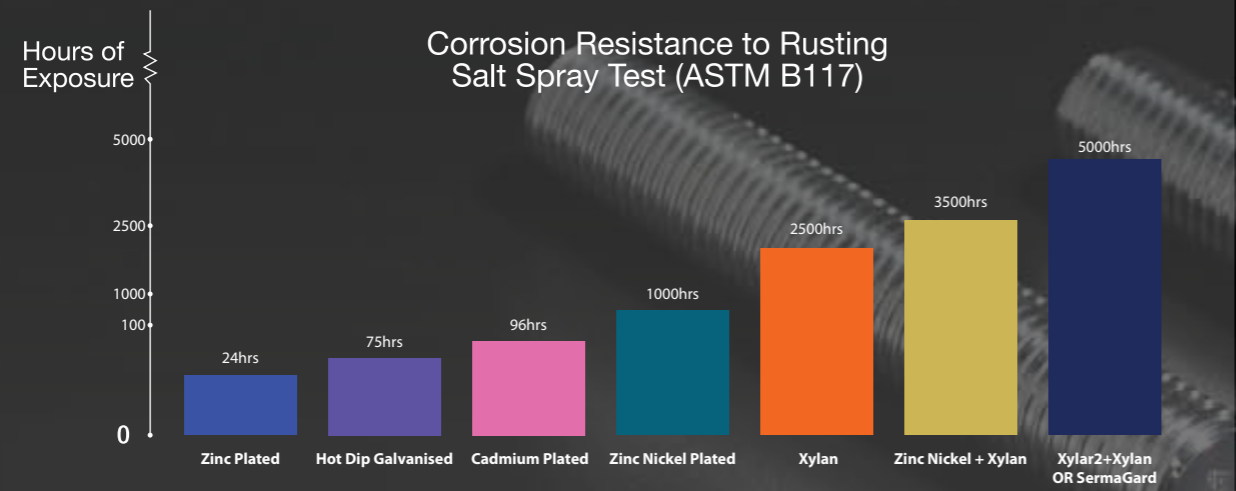
Customised Coating Systems

- Zinc + Fluorocarbon / PTFE
- Cadmium + Fluorocarbon / PTFE
- Zinc Nickel + Fluorocarbon / PTFE
- Hot-Dipped Galvanise + Fluorocarbon / PTFE
- Zinc Plating + Xylan 1424 Blue
- SermaGard 1105 + SermaGard 1280
- Zinc Nickel + Xylan 1014 Black
- Xylar 2 + Xylan 1070 Blue
- Zinc Chromate + SermaGard 1280
- Zinc Electroless + Xylan 1424 + Xylan 1514

SHE specializes in producing a better protective coating for steel that enhances its service life in harsh environments. It is particularly useful to industrial plants operating in hot, humid, tropical and marine atmospheres where high corrosion rates occur.

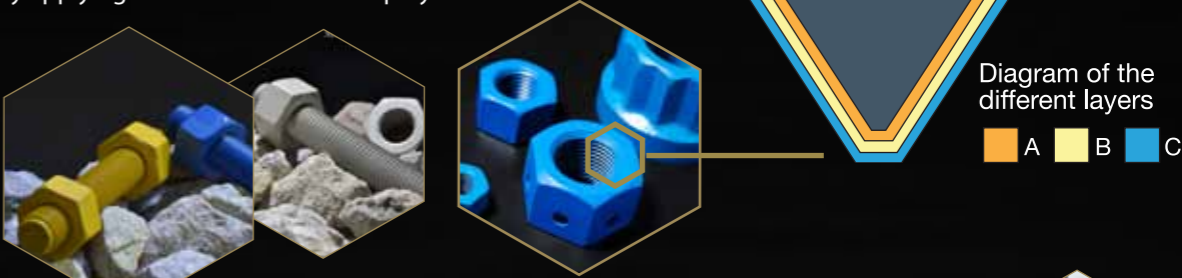
It has the following characteristics:

- Inert to a wide range of chemicals and solvents commonly used in industries
- Superior coating adhesion throughout its service life
- Low coefficient of friction
- Able to withstand severe temperature extremes, from -45°C to 232°C, without significantly affecting its properties
- Non-wetting property which facilitate cleaning-up and ease of maintenance
- Good resistance to chipping
- Excellent weather resistance



The coating process involves:

- (A) Thorough cleaning and chemical treatment of the steel substrate to ensure good bonding;
- (B) Coating with primer;
- (C) Finally applying a coat of fluorocarbon polymer.



Outstanding Features

1. Rust and Corrosion Prevention

- Outstanding coating protection due to unique coating system
- Superior durability in corrosive environments and marine atmosphere
- Excellent performance in outdoor hot, humid and tropical environment

2. Heat Resistance

- Applicable over a wide temperature range from -45°C to 232°C

3. Weather Resistance

- Good resistance to sunlight, rain and seawater spray



Chemical Resistance	
Solvents (aliphatic and aromatic)	Excellent
Petroleum (gasoline, naphtha etc)	Excellent
Oils (animal and vegetable)	Excellent
Acids (HCl, H ₂ SO ₄ , HNO ₃ , organic acids)	Good
Soaps, Detergents, Diluted Alkalis	Good
Other Chemicals	Generally Unaffected
Seawater	Unaffected



Quality Assurance

Total customer satisfaction is our goal in all that we undertake.

We place great emphasis on product quality and we are dedicated to our stringent processes which ensure our products are engineered for lasting performance.

Our operations are certified ISO 9001, OHSAS 18001, API Spec Q1 9th Edition and each and every one of our products are certified by our strict QC regime. We aim to achieve the API Spec 20E accreditation shortly to further raise our standards as a leading global manufacturer.



Occupational Health & Safety Policy

Our Statement of General Policy is:

- To provide and maintain a safe and healthy working environment for all employees;
- To prevent accidents and cases of work-related injury and ill health;
- To comply to relevant occupational health and safety practices to meet legal requirements.

Available Materials & Specifications

ALLOY STEELS

ASTM A193	B7, B7M, B16, B5
ASTM A194	2H, 2HM, 3, 4, 7, 7M, 16
ASTM A320	L7, L7M, L43
BS 3692	Grade 10.9, 12.9
EN10269	Grade 20CrMoVTiB4-10 4140, 4340

CARBON STEELS

ASTM A325	Type 1
ASTM A490	Type 1
ASTM A307	Grade A, B, C
BS 3692	Grade 4.8, 8.8
SAE J429	Grade 5, 8, 10
ASTM F1554	GRADE 36

STAINLESS STEELS

ASTM A193	B6, B8, Class 1 & 2, B8M Class 1 & 2, B8T Class 1 & 2 B8MA, B8A
ASTM A194	6, 8, 8A, 8M, 8MA, 8C, 8CA, 8T
ASTM A320	B8 Class 1 & 2, B8M Class 1 & 2 B8T Class 1 & 2, B8MA, B8A
ASTM A453	660 Class A / B / C / D
ASTM A437	B4B
ISO 3506	A2-50, A2-70, A2-80, A4-50, A4-70, A4-80, A4L-80
AISI	SS 304(L), SS 316(L), SS316 Ti, SS410
Nitronic	50/60° B8R, B8S
EN10269	Grade 20CrMoVTiB4-10
Others°	17-4 PH, FV 520B, Sanicro 28, Carpenter 20CB-3

DUPLEX STAINLESS STEELS

UNS	S31803, S32750, S32760 (SA, FG, FLT)
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NICKEL ALLOYS

Hastelloy°	B2, C4, C22, C276, G, G-3, X
Incoloy°	800, 800HT, 825, DS, Ra330
Inconel°	600, 601, 625, 718
Monel°	400, K500

COPPER ALLOYS

Aluminium Bronze	B150, CA104, DGS 1043/1044,
Phosphor Bronze	NES833/834/835 PB102
Cupro Nickels	70/30, 90/10

OTHER MATERIAL GRADES

Titanium	GR 2/5/7
Durehete°	900, 950, 1055

PLATING

Zinc	ASTM B633
Cadmium	ASTM B766
Zinc Nickel	ASTM B841
Electroless Nickel	ASTM B733
Phosphate	ASTM F1137

GALVANISING

Hot Dip Galvanise	ASTM A153/ BS EN ISO 1461:1999
Mechanical Galvanise	ASTM A695

COATINGS

Xylan°	Primer P-92, Xylar 2, 1010, 1070, 1014, 1052, 1424
SermaGard°	1105, 1175, 1280, 1628
MolyKote°	7409
Fluorocarbon Polymer	PTFE, Teflon°, Xylan°, SermaGard°
Everslik°	1301
Polyolefin Coating	
Magni° Coating	
Thread Locking - Loctite°	



Our Clientele

- Aker Solutions

ADCO

ADNOC Distribution

Bechtel Corporation

Borouge

Cameron International

CB&I

Chevron Corporation

CUEL Ltd

ConocoPhillips

Daelim Industrial

Daewoo E&C

Doosan Engineering & Construction

ExxonMobil

Eni S.p.A

FMC Technologies

Foster Wheeler

General Electric

Gazprom

GASCO

INPEX Corporation

JGC Corporation

KBR Inc.

Keppel Shipyard Limited

KNPC
- McDermott International

MODEC Inc

MA'ADEN

Petrobras

PETRONAS

PTSC

Punj Lloyd Limited

PTT Public Company Limited

Qatar Petroleum

Reliance Industries Limited

Saipem S.p.A

Saudi Aramco

Saudi Kayan Petrochemical Company

Singapore Technologies Marine

SMOE

SNC-Lavalin

SABIC

Sonatrach

SK E&C

Técnicas Reunidas

Technip S.A.

The Shell Global

Total S.A.

Woodside Petroleum

ZADCO

Our Global Reach





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