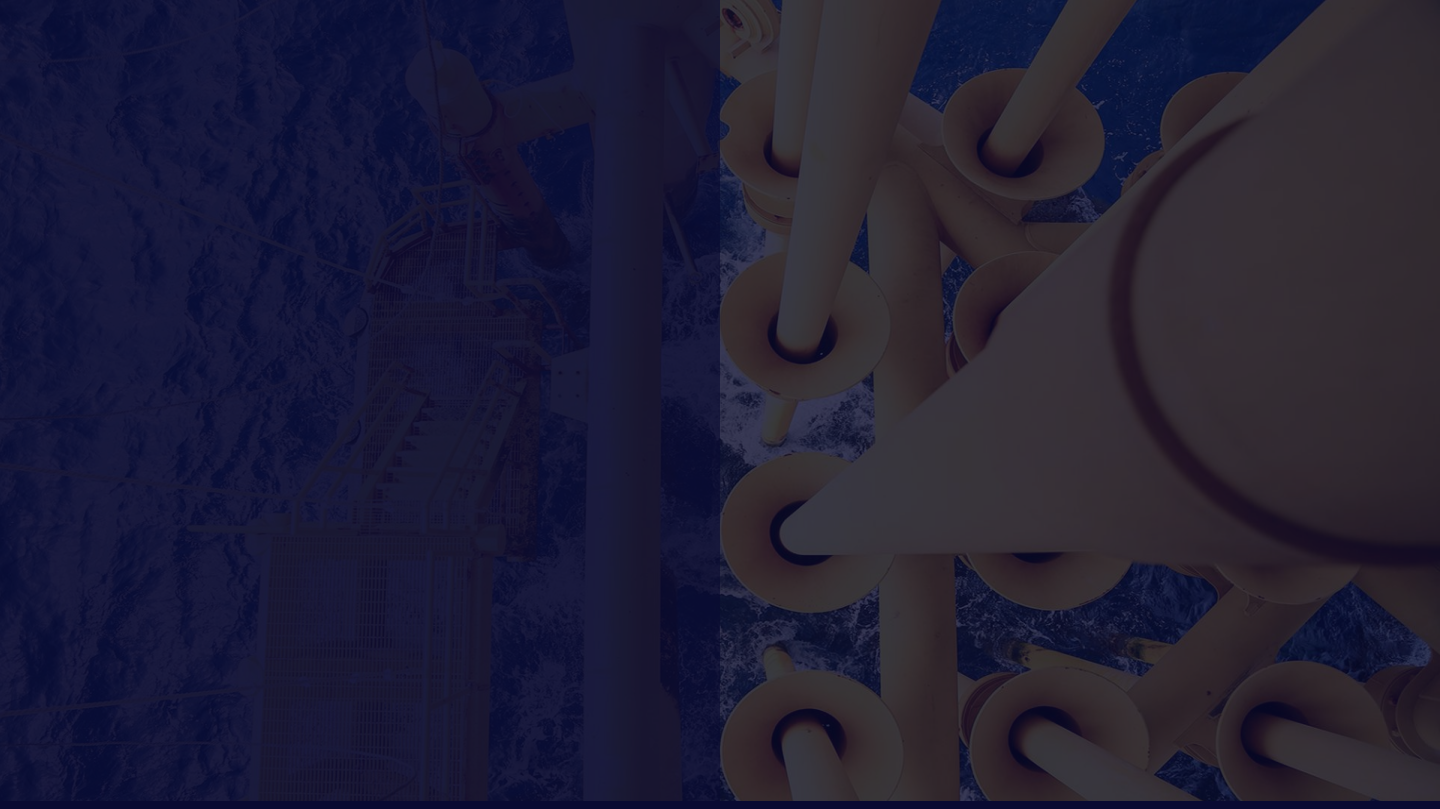


COMPANY BROCHURE

ISO 9001:2015 CERTIFICATION TM
QUALITY

ISO 45001:2018 CERTIFICATION TM
SAFETY

ISO 14001:2015 CERTIFICATION TM
ENVIRONMENT

WBR ENERGIES
ENGINEERED SOLUTIONS

Our Company

About Us

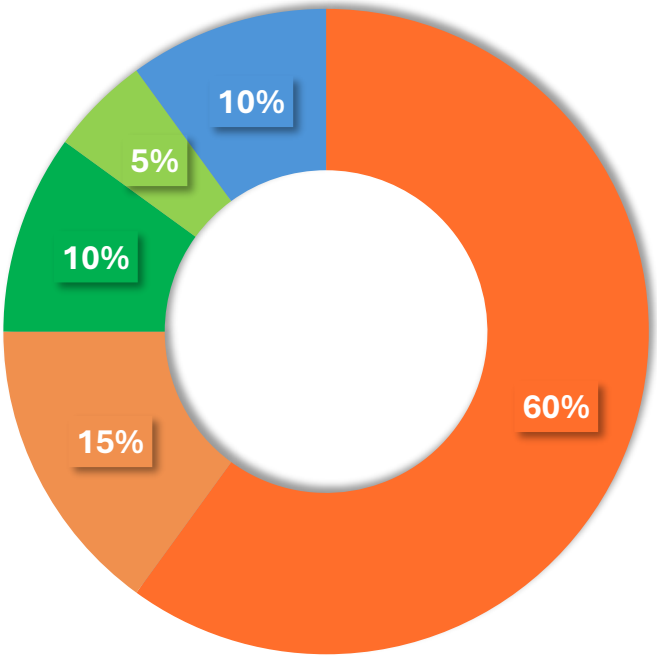
We provide end-to-end solutions, from conceptual studies and detailed engineering to equipment supply, testing and certification.

WBR ENERGIES
ENGINEERED SOLUTIONS

CONTACT US: +33 (0) 1 82 36 00 33 contact@wbr-energies.com

Our Markets

A global industry partner working across multiple industrial sectors, with a strong focus on the energy sector.



- Oil & Gas
- LNG & Petrochemical
- Renewable Energy
- Nuclear
- Automotive & Aerospace

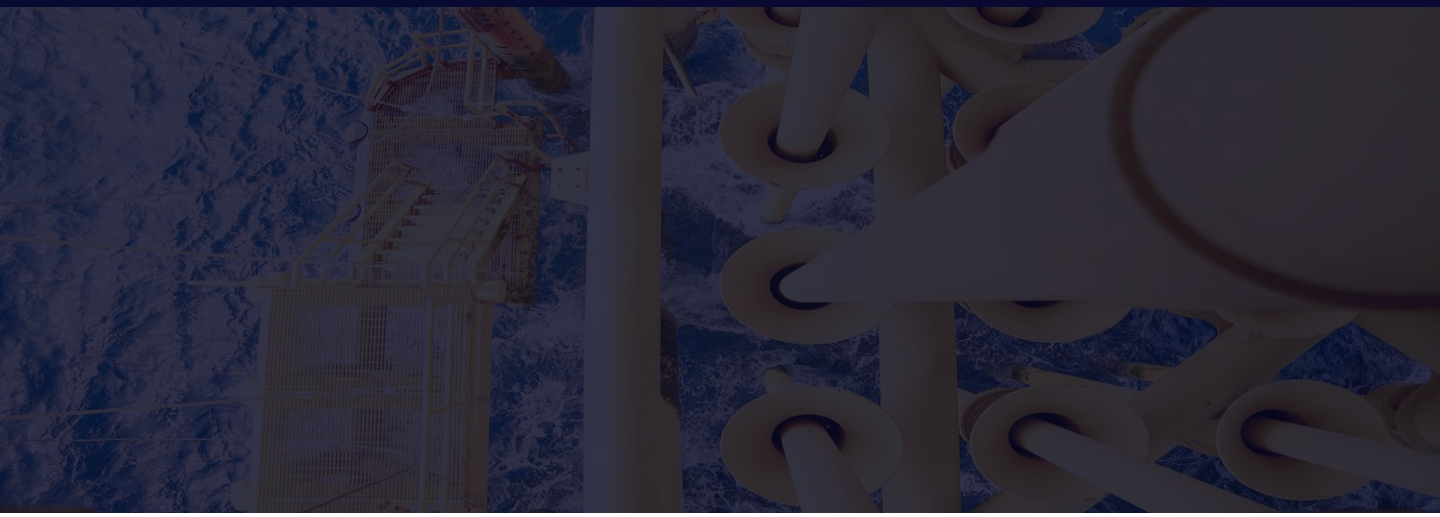
WBR ENERGIES
ENGINEERED SOLUTIONS

Quality System

Our company has developed and implemented an integrated quality management system certified in accordance with the requirements of ISO 9001:2015, ISO 14001:2015, and ISO 45001:2018.

QUALITY	ENVIRONMENT	SAFETY
ISO 9001 CERTIFICATION TM Intertek	ISO 14001 CERTIFICATION TM Intertek	ISO 45001 CERTIFICATION TM Intertek

WBR ENERGIES
ENGINEERED SOLUTIONS



Our Locations

WBR ENERGIES

HEAD OFFICE:

L'Espace INNEOS
1401 Avenue de la Grande Halle
78200 Buchelay
France

2B TECH

LOCAL OFFICE:

Rua Bom Jesus, 212 – Juvevê
Curitiba - PR, 80035-010
Brazil

WBR ENERGIES
ENGINEERED SOLUTIONS

Our Services

DESIGN & ENGINEERING

From initial concept to final design, supported by precise and reliable engineering analysis.

PROCUREMENT

Sourcing, negotiation, and delivery of high-value technical equipment with guaranteed quality, compliance, and cost efficiency

CUSTOM MANUFACTURING

Equipment manufactured and tailored to client specifications, compliance, and performance.

TESTING & CERTIFICATION

All equipment is tested and certified to meet international standards and client specifications.

WBR ENERGIES
ENGINEERED SOLUTIONS

DESIGN & ENGINEERING

ISO 9001:2015 CERTIFICATION TM
QUALITY

ISO 45001:2018 CERTIFICATION TM
SAFETY

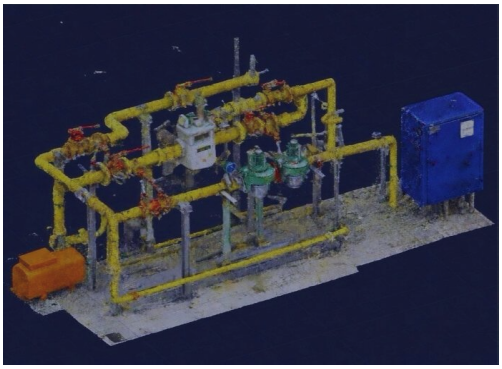
ISO 14001:2015 CERTIFICATION TM
ENVIRONMENT

WBR ENERGIES
ENGINEERED SOLUTIONS

ENGINEERING

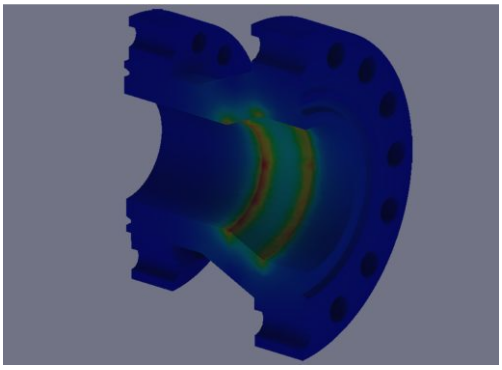
Design & Engineering

From initial concept to optimized design ready for production:

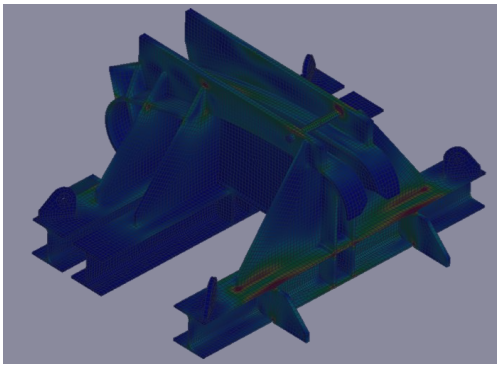


3D CAD Modeling &
2D Drafting

3D Scanning &
CAD Reconstruction



Analysis of High-Pressure
Equipment



Structural Analysis of
Bespoke Equipment

WBR ENERGIES
ENGINEERED SOLUTIONS

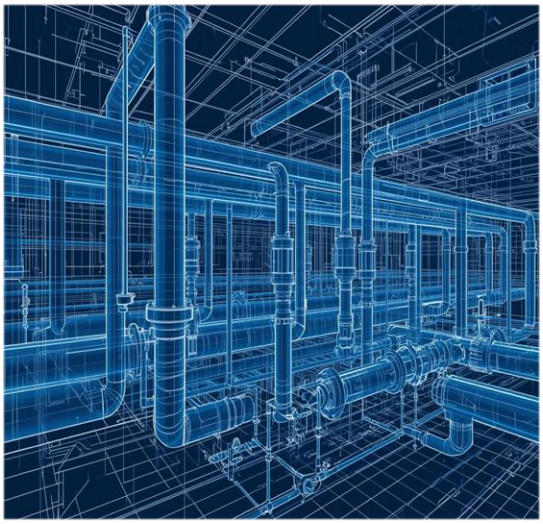
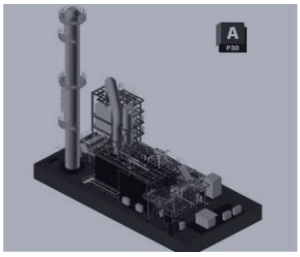
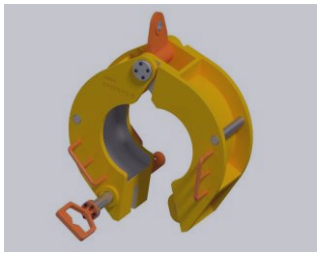
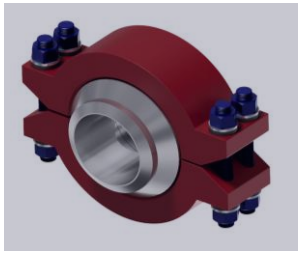
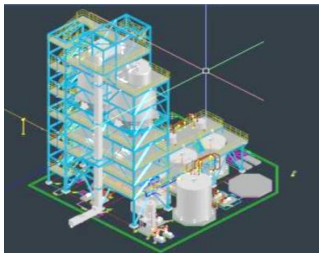
CONTACT US: +33 (0) 1 82 36 00 33 contact@wbr-energies.com

ENGINEERING

3D CAD Modeling & 2D Drafting

Our Services:

From preliminary concept to final design, we provide accurate 3D models and detailed 2D drawings for industrial and mechanical projects.

Added Values:

Our CAD solutions ensure realistic visualization, standards-compliant documentation, and optimized designs ready for production.

Applications:

Mechanical industries, pressure vessels, subsea systems, offshore platforms, refineries, and other industrial sectors requiring compliance with international standards.

DESIGN TOOLS: ®	
AUTODESK INVENTOR	AVEVA E3D
AUTODESK AUTOCAD	AUTODESK PLANT 3D
AUTODESK REVIT	

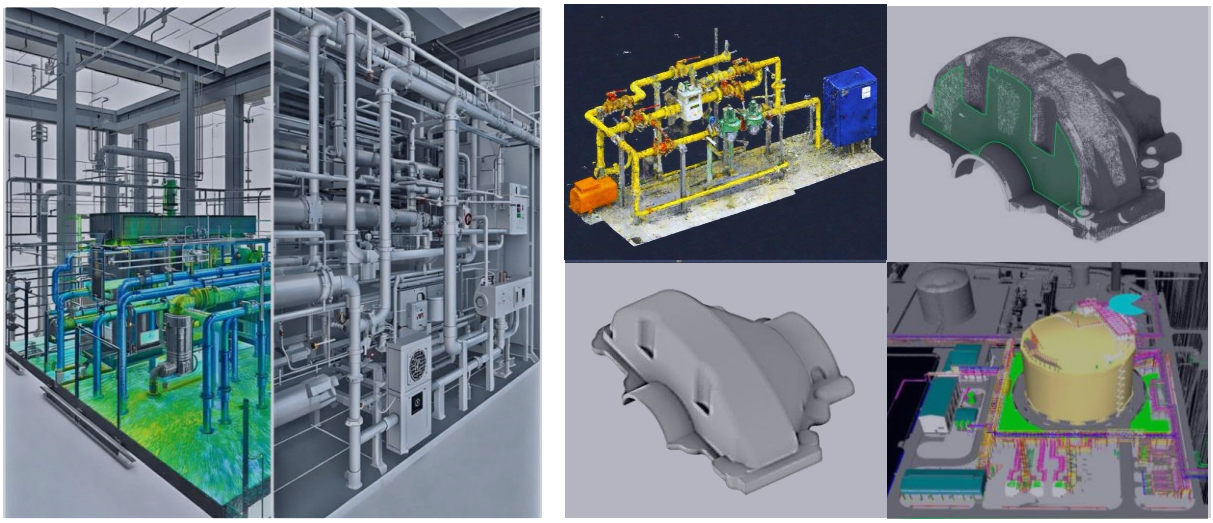
WBR ENERGIES
ENGINEERED SOLUTIONS

ENGINEERING

3D Scanning & CAD Reconstruction

Our Services:

Accurate 3D laser scanning for geometry capture and CAD reconstruction for reverse engineering and integration into design and manufacturing.



Added Values:

Precise geometry capture, faster reverse engineering, and seamless CAD integration to save time and reduce costs.

Applications:

Mechanical industries, complex components, subsea systems, offshore platforms, refineries, water treatment plants, and other industrial sectors requiring precision.

DESIGN TOOLS: ®	
AUTODESK INVENTOR	AVEVA E3D
AUTODESK AUTOCAD	AUTODESK PLANT 3D
AUTODESK REVIT	

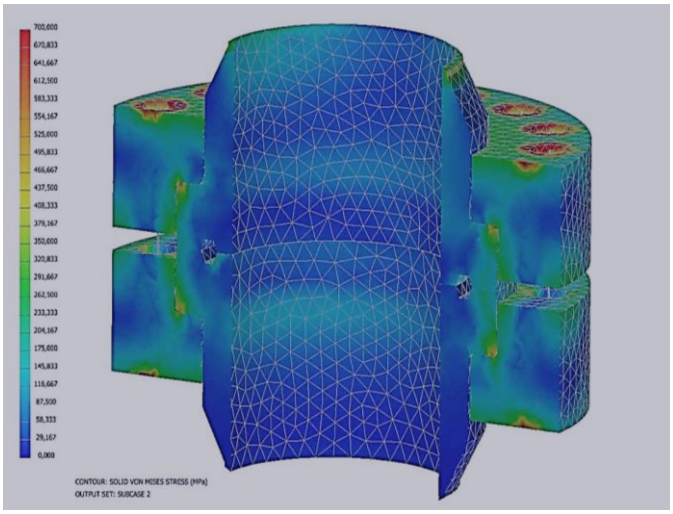
WBR ENERGIES
ENGINEERED SOLUTIONS

ENGINEERING

Analysis of High Pressure Equipment

Our Services:

We provide pressure equipment sizing and calculation services in accordance with client technical specifications and applicable international standards.



DESIGN CODES:
ASME VIII Div 2 - Boiler and Pressure Vessel
ASME VIII Div 1 - Boiler and Pressure Vessel
ASME B31.3 - Process Piping
API SPEC 16A - Drill-Through Equipment
API SPEC 16A - Wellhead Equipment
DNVGL-RP-D101 - Piping Systems
CODAP Division 2 – Pressure Equipment
EN 13445 - Unfired Pressure Vessels

Equipment Analysis:

Allowable design stress definition, elastic and elastic-plastic stress evaluation, check against plastic collapse and local failure.

Applications:

Pressure vessels, subsea systems, piping components for offshore platforms and refineries, and other industrial pressure equipment.

DESIGN TOOLS: ®	
AUTODESK INVENTOR	ROBOT
AUTODESK AUTOCAD	ABAQUS
AUTODESK NASTRAN	

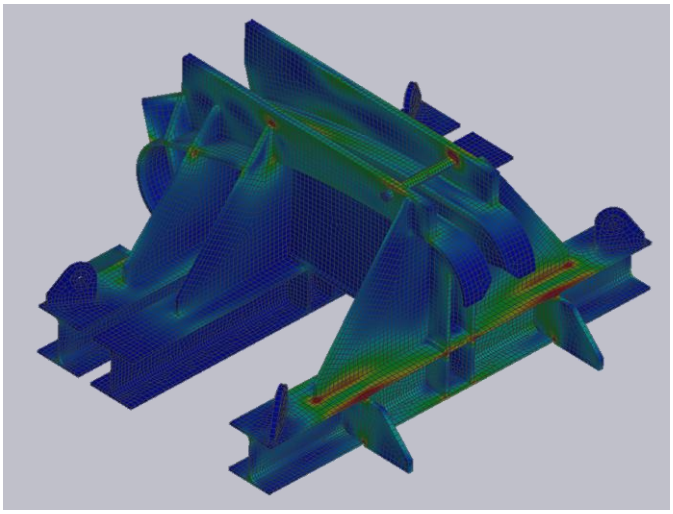
WBR ENERGIES
ENGINEERED SOLUTIONS

ENGINEERING

Structural Analysis

Our Services:

We provide structural analysis and calculation services in accordance with client technical specifications and applicable international standards.



DESIGN CODES:
DNVGL-OS-C101 – Design of Offshore Units
DNVGL-RP-D101 – Analysis of Piping Systems
DNV-RP-C203 – Fatigue Design of Offshore Units
DNV-RP-C205 – Environmental Loads Conditions
API STD 2RD – Floating Production Systems
API RP 2A WSD – Fixed Offshore Platforms
AISC 16th Ed – Steel Construction Manual
EN 1991-1999 – Basis of Structural Design

Equipment Analysis:

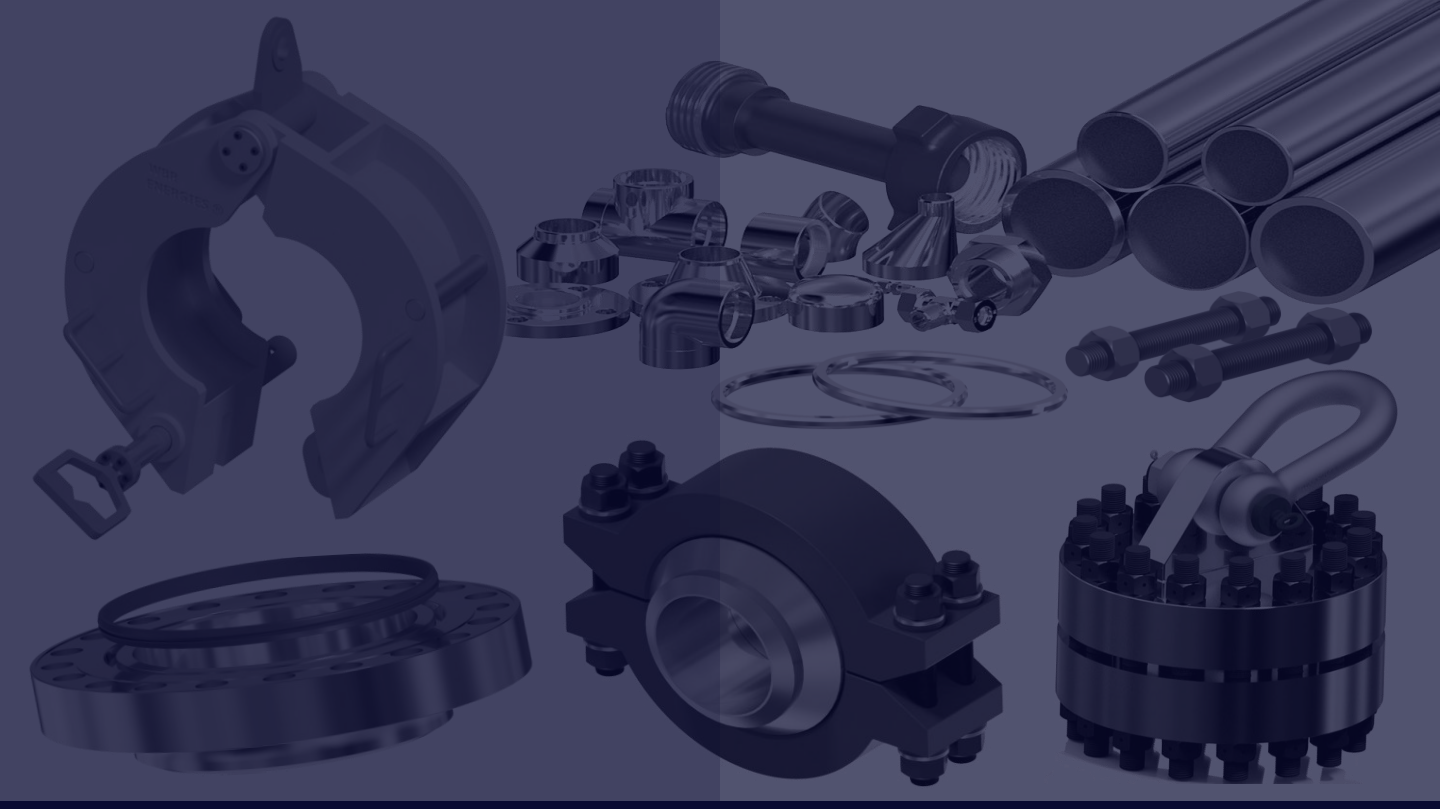
Allowable design stress definition, check against plastic collapse and local failure, in-place, installation and transportation analysis.

Applications:

Custom-made steel structures, subsea systems, steel frames for offshore applications, and other industrial structures requiring specific sizing and FEA analysis.

DESIGN TOOLS: ®	
AUTODESK INVENTOR	ROBOT
AUTODESK AUTOCAD	ABAQUS
AUTODESK NASTRAN	

WBR ENERGIES
ENGINEERED SOLUTIONS



OUR PRODUCTS

ISO 9001:2015 CERTIFICATION TM
QUALITY

ISO 45001:2018 CERTIFICATION TM
SAFETY

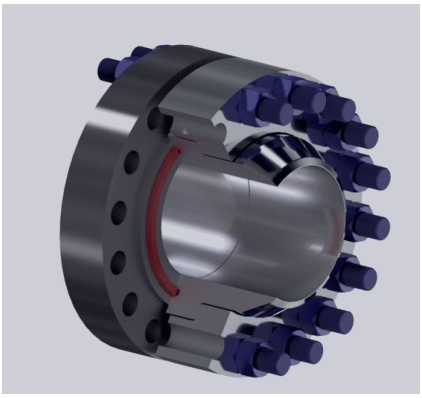
ISO 14001:2015 CERTIFICATION TM
ENVIRONMENT

WBR ENERGIES
ENGINEERED SOLUTIONS

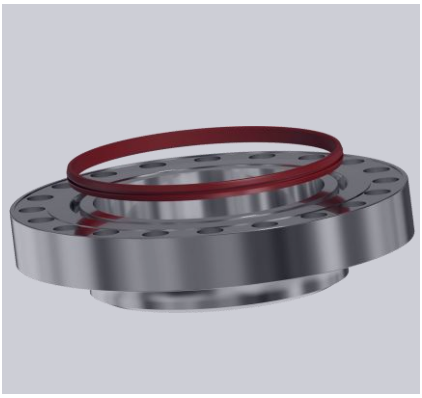
PRODUCTS

Our Products

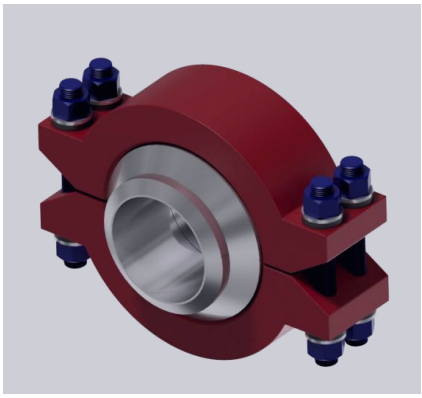
Custom-Made Products



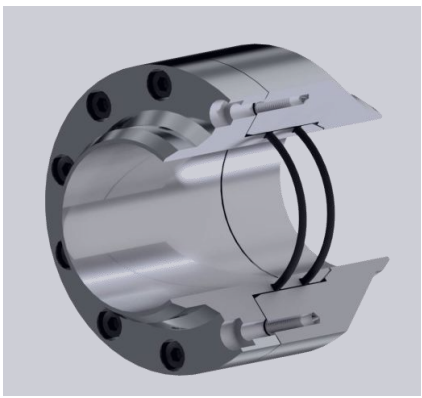
Swivel Flanges



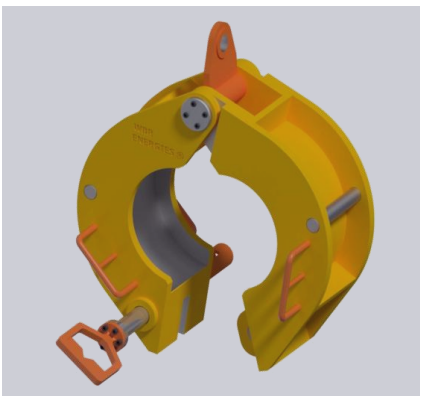
Compact Flanges Norsok



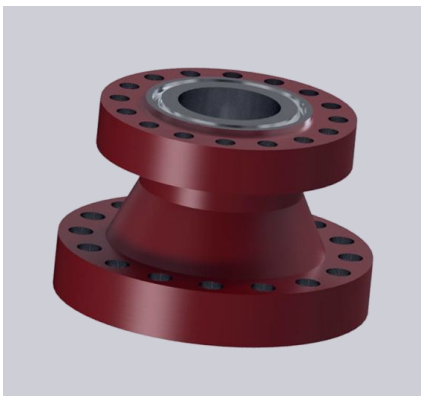
Clamp & Hubs API



High-Pressure Connectors



Subsea Structural Clamps



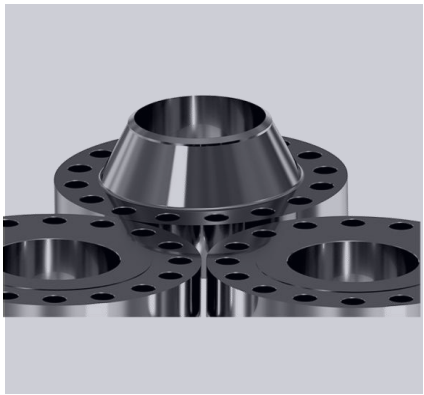
Special Forged Components

WBR ENERGIES
ENGINEERED SOLUTIONS

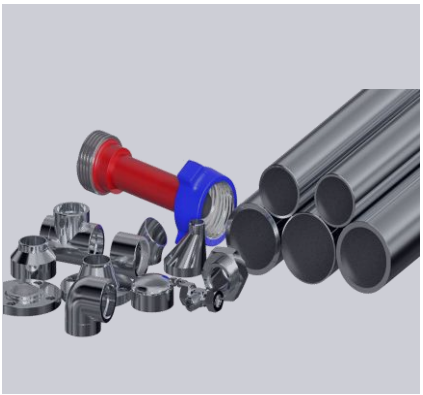
PRODUCTS

Our Products

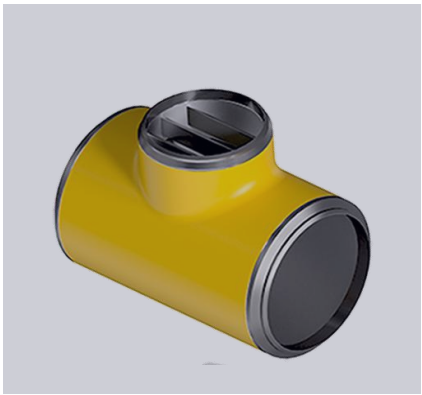
Standard Products & Accessories



Standard Flanges

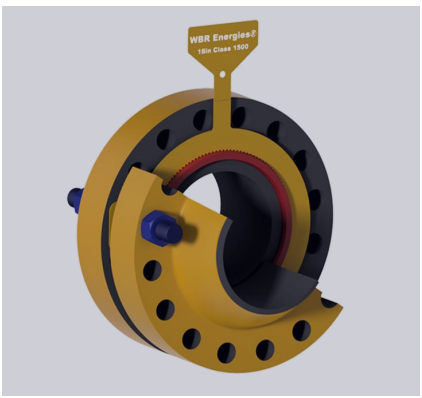


Piping and Fittings

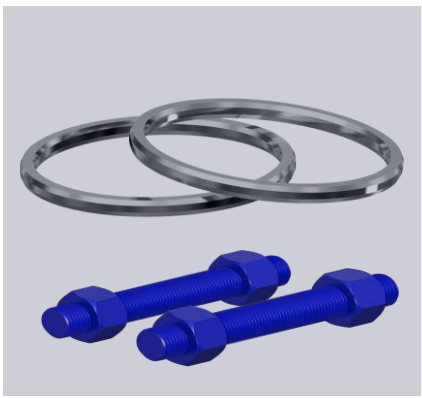


Forged Piping Components

Spectacle Blinds Line Spades



Gasket Installation Tool



Gaskets and Bolting

WBR ENERGIES
ENGINEERED SOLUTIONS

PRODUCT SPECIFICATIONS

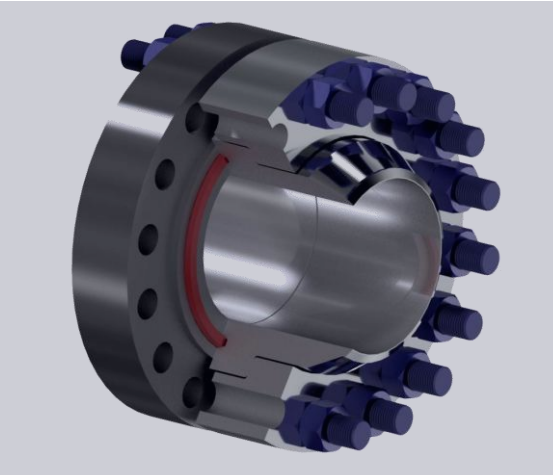
ISO 9001:2015 CERTIFICATION TM
QUALITY

ISO 45001:2018 CERTIFICATION TM
SAFETY

ISO 14001:2015 CERTIFICATION TM
ENVIRONMENT

WBR ENERGIES
ENGINEERED SOLUTIONS

SWIVEL RING FLANGES



TYPES:	
SWIVEL FLANGES	ASME B16.5
SWIVEL FLANGES	ASME B16.47
SWIVEL FLANGES	API 17D

SIZES & RATING:	
ASME B16.5 / ASME B16.47	4in to 60in – Class 150 to 2500
API 17D	2 1/16in to 13 5/8in – 2000 PSI to 20000 PSI

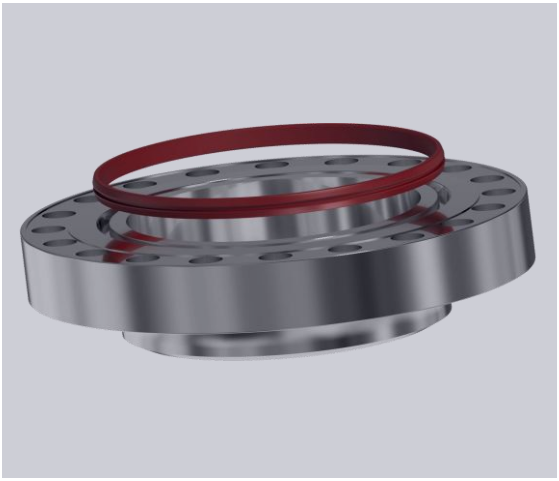
DESIGN CODES:	
ASME B16.5	Pipe Flanges and Flanged Fittings
ASME B16.47	Large Diameter Steel Flanges
API 17D	Specification for Subsea Wellhead and Tree Equipment
ASME VIII Div 2	Rules for Construction of Pressure Vessels

MATERIALS:	
ASTM A694	F42 / F52 / F60 / F65 / F70
ASTM A350 / ASTM A105	LF2 Classes 1 and 2 / LF1 to LF9
API 6A	36K / 45K / 60K / 75K
ASTM A182	F316 / 316L / F304 / 304L / F22 / F51 / F55 / F91
ASME IX / DNV-OS-F101	Corrosion Resistance Overlay (Cladding)
SPECIALS	DUPLEX / INCONEL ® / SUPER DUPLEX

**other material grades and dimensions are available under request

WBR ENERGIES
ENGINEERED SOLUTIONS

COMPACT FLANGES



TYPES:	
COMPACT FLANGE	NORSOK L-005
COMPACT FLANGE	ISO 27509

SIZES & RATING:	
NORSOK L-005	4in to 48in – Class 150 to 2500
ISO 27509	4in to 48in – Class 150 to 2500

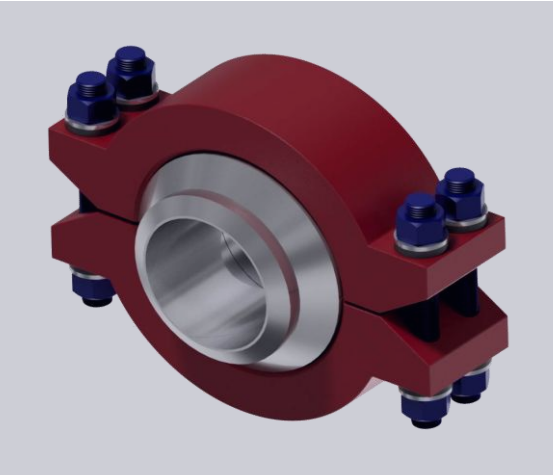
DESIGN CODES:	
NORSOK L-005	Compact Flanged Connections
ISO 27509	Compact Flanged Connections with IX Seal Rings

MATERIALS:	
ASTM A694	F42 / F52 / F60 / F65 / F70
ASTM A350 / ASTM A105	LF2 Classes 1 and 2 / LF1 to LF9
NORSOK M-630	
ASTM A182	F316 / 316L / F304 / 304L / F22 / F51 / F55 / F91
ASME IX / DNV-OS-F101	Corrosion Resistance Overlay (Cladding)
SPECIALS	DUPLEX / INCONEL ® / SUPER DUPLEX

**other material grades and dimensions are available under request

WBR ENERGIES
ENGINEERED SOLUTIONS

CLAMP & HUBS – API 16A



TYPES:	
CLAMPS	API 16A / API 6A
HUBS	API 16A / API 6A

Hubs are available as Weld Neck, Integral & Blinds. Rings Joints Type: BX and RX

SIZES & RATING:	
CLAMP	N°1 to N°28 – 2000 PSI to 20000 PSI
HUBS	1 13/16in to 21 1/4in – 2000 PSI to 20000 PSI

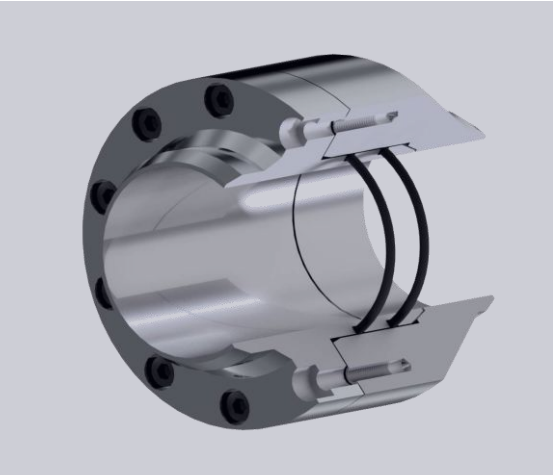
DESIGN CODES:	
API 16A	Specification for Drill Through Equipment
API 6A	Specification for Subsea Wellhead and Tree Equipment
ASME VIII Div 2	Rules for Construction of Pressure Vessels

MATERIALS:	
ASTM A694	F42 / F52 / F60 / F65 / F70
AISI	4130 / 4140
API 6A	36K / 45K / 60K / 75K
ASTM A182	F316 / 316L / F304 / 304L / F22 / F51 / F55 / F91
ASME IX / DNV-OS-F101	Corrosion Resistance Overlay (Cladding)
SPECIALS	DUPLEX / INCONEL ® / SUPER DUPLEX

**other material grades and dimensions are available under request

WBR ENERGIES
ENGINEERED SOLUTIONS

HIGH-PRESSURE CONNECTORS



TYPES:

For Hydraulic and Pneumatic applications.

Custom designed according to customer technical requirements.

SIZES & RATING:

2in to 10in – Maximal Working Pressure 100 bar (for O-rings sealing interface solution)
Other sizes and pressure rating under request

DESIGN CODES:

ASME VIII Div 2	Rules for Construction of Pressure Vessels
API 6A / API 16A	Specification for Subsea Wellhead and Tree Equipment
ISO 3601	Fluid Power Systems — O-rings
EN 13445	Unfired pressure vessels
DNVGL-RP-D101	Structural analysis of piping systems
ASME B31.3	Process Piping

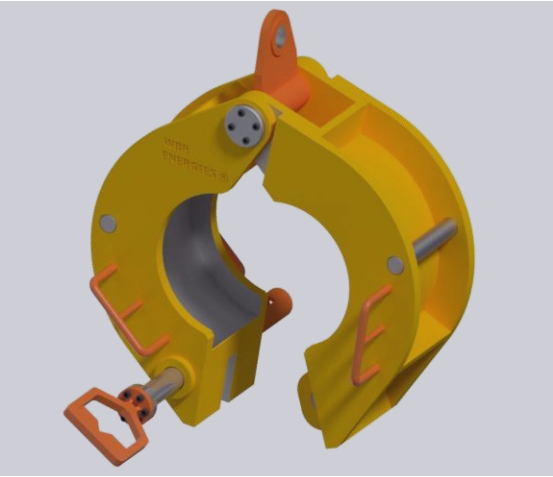
MATERIALS:

ASTM A694	F42 / F52 / F60 / F65 / F70
ASTM A350 / ASTM A105	LF2 Classes 1 and 2 / LF1 to LF9
API 6A	36K / 45K / 60K / 75K
ASTM A182	F316 / 316L / F304 / 304L / F22 / F51 / F55 / F91
ASME IX / DNV-OS-F101	Corrosion Resistance Overlay (Cladding)
SPECIALS	DUPLEX / INCONEL ® / SUPER DUPLEX

**other material grades and dimensions are available under request

WBR ENERGIES
ENGINEERED SOLUTIONS

SUBSEA STRUCTURAL CLAMPS



TYPES:

STRUCTURAL CLAMPS, designed according to customers technical requirements.

Our clamps can be adapted to be ROV operated for subsea applications.

SIZES & RATING:

Various sizes and load capacities available under request

DESIGN CODES:

ASME VIII Div 2	Rules for Construction of Pressure Vessels
API 6A / API 16A	Specification for Subsea Wellhead and Tree Equipment
DNVGL-RP-D101	Structural analysis of piping systems
DNVGL-ST-F101	Submarine pipeline systems

MATERIALS:

EN10025 / EN 10210 / EN 10219	S235 / S275 / S355 / S420 / …
ASTM A350 / ASTM A105	LF2 Classes 1 and 2 / LF1 to LF9
ASTM A694	F52 / F60
AISI	4130 / 4140
API 5L	X42 to X80
SPECIALS	DUPLEX / INCONEL ® / SUPER DUPLEX

**other material grades and dimensions are available under request

WBR ENERGIES
ENGINEERED SOLUTIONS

PULLING & HANDLING HEADS

TYPES:

ASME B16.5 / ASME 16.47

API 6A

NORSOK L-005

O-RING SEAL SOLUTION

SIZES & RATING:

ASME B16.5 / B16.47	4in to 60in – Class 150 to 2500
API 6A	1 13/16in to 21 1/4in – 2000 PSI to 20000 PSI
NORSOK L-005	4in to 48in – Class 150 to 2500

DESIGN CODES:

ASME VIII Div 2	Rules for Construction of Pressure Vessels
API 6A / API 16A	Specification for Subsea Wellhead and Tree Equipment
ASME B16.5	Pipe Flanges and Flanged Fittings
ASME B16.47	Large Diameter Steel Flanges
NORSOK L-005	Compact Flanged Connections
ISO 3601	Fluid Power Systems – O-Rings

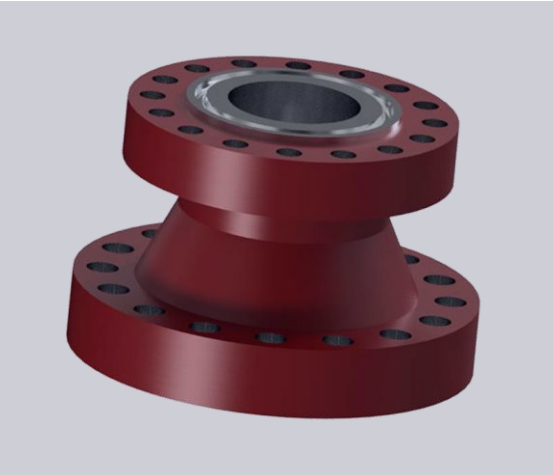
MATERIALS:

ASTM A694	F42 / F52 / F60 / F65 / F70
ASTM A350 / ASTM A105	LF2 Classes 1 and 2 / LF1 to LF9
API 6A	36K / 45K / 60K / 75K
ASTM A182	F316 / 316L / F304 / 304L / F22 / F51 / F55 / F91
ASME IX / DNV-OS-F101	Corrosion Resistance Overlay (Cladding)
SPECIALS	DUPLEX / INCONEL ® / SUPER DUPLEX

**other material grades and dimensions are available under request

WBR ENERGIES
ENGINEERED SOLUTIONS

SPECIAL FORGED COMPONENTS



TYPES:

SPOOL ADAPTER FLANGES – ANCHOR FLANGES

NOZZLES – FORGED BARRED TEEs

ELBOWS

SIZES & RATING:

Various sizes and pressure ratings available under request

DESIGN CODES:

ASME B16.11	Forged Fittings, Socket-Welding and Threaded
API 6A / API 16A	Specification for Subsea Wellhead and Tree Equipment
ASME B16.5	Pipe Flanges and Flanged Fittings
ASME B16.47	Large Diameter Steel Flanges
NORSOK L-005	Compact Flanged Connections

MATERIALS:

ASTM A694	F42 / F52 / F60 / F65 / F70
ASTM A350 / ASTM A105	LF2 Classes 1 and 2 / LF1 to LF9
API 6A	36K / 45K / 60K / 75K
ASTM A182	F316 / 316L / F304 / 304L / F22 / F51 / F55 / F91
ASME IX / DNV-OS-F101	Corrosion Resistance Overlay (Cladding)
SPECIALS	DUPLEX / INCONEL ® / SUPER DUPLEX

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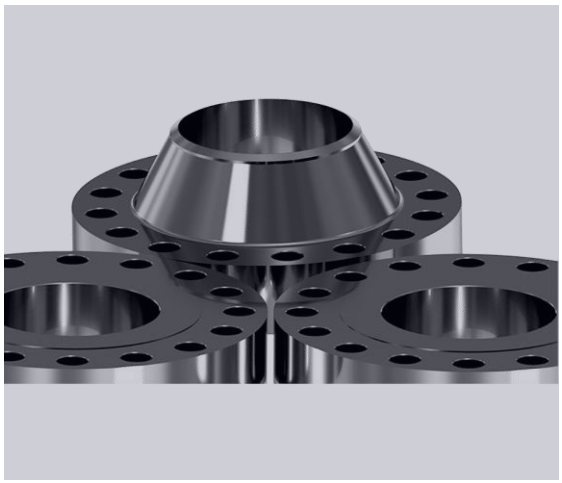
WBR ENERGIES
ENGINEERED SOLUTIONS

STANDARD FLANGES



TYPES:

WELDING NECK – BLIND -

LAPPED – SLIP ON

THREADED – ORIFICE FLANGES

LONG WELDING NECK

SIZES & RATING:

ASME B16.5 / ASME B16.47	4in to 60in – Class 150 to 2500
API 6A	1 13/16in to 21 1/4in – 2000 psi to 20000 psi
BS EN 1092-1	DN10 to DN2000 – PN 2,5 to PN 400

DESIGN CODES:

ASME B16.5	Pipe Flanges and Flanged Fittings
ASME B16.47	Large Diameter Steel Flanges
API 6A	Specification for Subsea Wellhead and Tree Equipment
BS EN 1092-1	Circular flanges for pipes, valves, fittings and accessories

MATERIALS:

ASTM A694	F42 / F52 / F60 / F65 / F70
ASTM A350 / ASTM A105	LF2 Classes 1 and 2 / LF1 to LF9
API 6A	36K / 45K / 60K / 75K
ASTM A182	F316 / 316L / F304 / 304L / F22 / F51 / F55 / F91
ASME IX / DNV-OS-F101	Corrosion Resistance Overlay (Cladding)
SPECIALS	DUPLEX / INCONEL ® / SUPER DUPLEX

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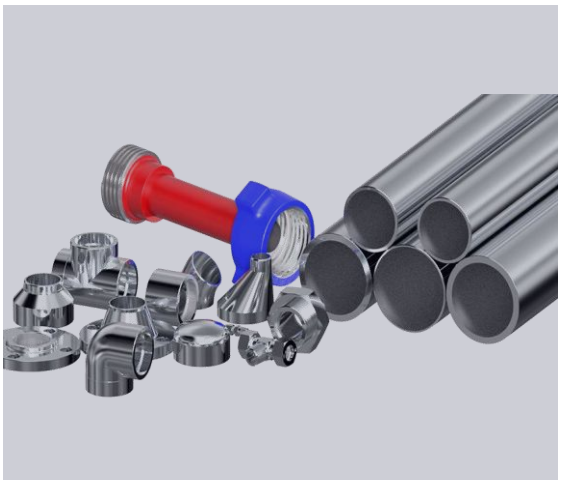
WBR ENERGIES
ENGINEERED SOLUTIONS

PIPING & FITTINGS



TYPES:

WROUGHT BUTT WELD & FORGED FITTINGS

ELBOW: 45°, 90° & 180° - SHORT, LONG RADIUS

TEE: EQUAL & REDUCING TEEs

REDUCER: CONCENTRIC & ECCENTRIC

CAPS – PLUGS – UNIONS – HEX HEAD BUSHINGS

COUPLINGS – HALF COUPLINGS

SIZES & RATING:

ASME B16.9 – ASME B16.28 – MSS SP 43/75 – BS1640	from 1/2 in to 48in
ASME B16.11 – BS1740 – BS3799 – MSS SP 79/95/97	from 1/8 in to 4in

DESIGN CODES:

ASME B16.9	Factory-Made Wrought Butt-Welding Fittings
ASME B16.28	Wrought Steel Short Radius Elbows and Returns
ASME B16.11	Forged Fittings, Socket-Welding and Threaded
BS1640	Steel Butt-Welding Pipe Fittings
MSS SP 43/75	Wrought Stainless Steel Butt-Welding Fittings
MSS SP 79/95/97	Socket-Welding Reducers – Swaged Nipples and Bull Plugs

MATERIALS:

ASTM A182 F304 - F316 - F321 - F347 - F51 - F53 - F55 - F5 - F9 - F11 - F22

ASTM A694 F42 - F52 - F60 - F65 - F70

ASTM A234 WPB – A860 WPHY 52 to 65 – MSS SP75 WPHY 52 to 65

ASTM A350 / ASTM A105 - LF2 Classes 1 and 2 / LF1 to LF9

ASTM A234 WP5 - WP1 - WP11 - WP22 - WP9 - WP91

ASTM A403 WP304 - WP316 - WP321 - WP347

**other material grades and dimensions are available under request

WBR ENERGIES
ENGINEERED SOLUTIONS

SPECTACLE BLINDS & LINE SPADES

TYPES:

SPECTACLE BLINDS RTJ

LINE SPADES & SPACERS

LINE BLIND MALE / FEMALE WITH RTJ GROOVE

REVERSIBLE SPADES RTJ

NORSOK PADDLE & SPACER

SIZES & RATING:

ASME B16.5 / B16.47	4in to 60in – Class 150 to 2500
API 6A	1 13/16in to 21 1/4in – 2000 PSI to 20000 PSI
NORSOK L-005	4in to 48in – Class 150 to 2500

DESIGN CODES:

ASME B16.5	Pipe Flanges and Flanged Fittings
ASME B16.47	Large Diameter Steel Flanges
API 6A	Specification for Subsea Wellhead and Tree Equipment
ASME B16.48	Line Blanks
API 590	Steel Line Blanks
NORSOK L-005	Compact Flanged Connections

MATERIALS:

ASTM A694	F42 / F52
ASTM A350 / ASTM A105	
API 6A	36K / 45K
ASTM A182	F316 / 316L / F304 / 304L / F22
NORSOK M-630	
SPECIALS	DUPLEX / INCONEL ® / SUPER DUPLEX

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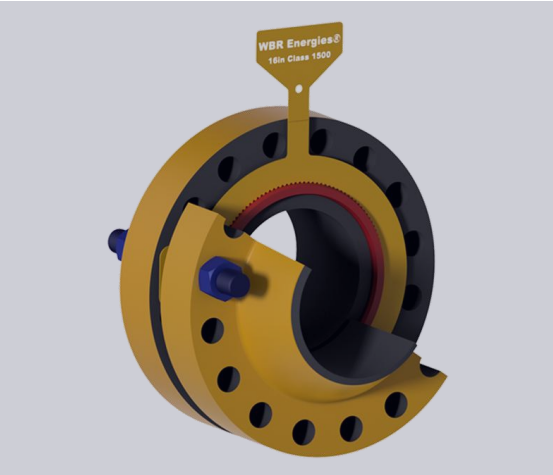
ENGINEERED SOLUTIONS

GASKET INSTALLATION TOOL



TYPES:

For ASME FLANGES Type R – RX – BX

For API FLANGES Type R – RX – BX – SBX

SIZES & RATING:

ASME B16.5 / B16.47	4in to 60in – Class 150 to 2500
API 6A	1 13/16in to 21 1/4in – 2000 PSI to 20000 PSI

DESIGN CODES:

ASME B16.5	Pipe Flanges and Flanged Fittings
ASME B16.47	Large Diameter Steel Flanges
API 6A	Specification for Subsea Wellhead and Tree Equipment

MATERIALS:

CARBON STEEL

STAINLESS STEEL

ALUMINIUM

**other material grades and dimensions are available under request

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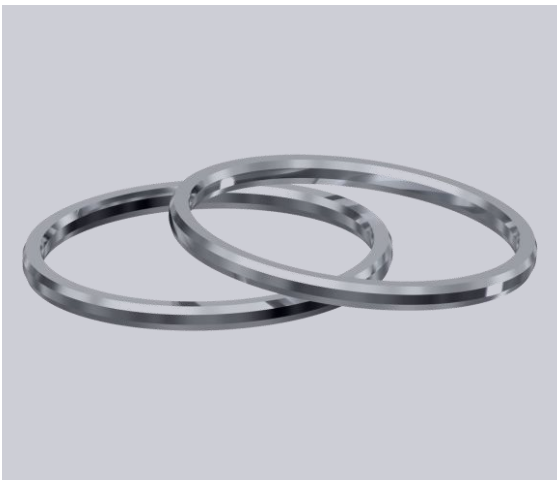
ENGINEERED SOLUTIONS

RING JOINT GASKETS



TYPES:

ASME FLANGES, TYPE: R – RX – BX

API FLANGES, TYPE: R – RX – BX – SBX

NORSOK FLANGES, TYPE: IX

RF FLANGES, TYPE: FLAT GASKETS – SPIRAL GASKETS

SIZES & RATING:

ASME B16.5 / B16.47	4in to 60in – Class 150 to 2500
API 6A	1 13/16in to 21 1/4in – 2000 PSI to 20000 PSI
NORSOK L-005	4in to 48in – Class 150 to 2500

DESIGN CODES:

ASME B16.5	Pipe Flanges and Flanged Fittings
ASME B16.47	Large Diameter Steel Flanges
API 6A	Specification for Subsea Wellhead and Tree Equipment
NORSOK L-005	Compact Flanged Connections
ASME B16.21	Nonmetallic Flat Gaskets for Pipe Flanges

MATERIALS:

CARBON STEEL	SOFT IRON / LOW CARBON STEEL
STAINLESS STEEL	316 / 304
SPECIALS	DUPLEX / INCONEL ® / SUPER DUPLEX

Zinc Plated / PTFE Coated / Xylan® / Fluoropolymer

**other material grades and dimensions are available under request

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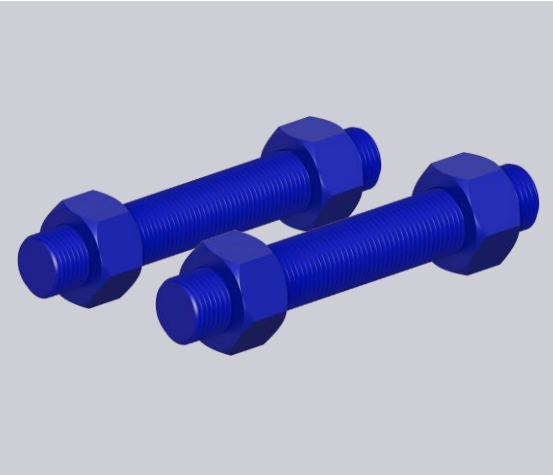
SPECIAL BOLTING



TYPES:

STUD BOLTS & HEX NUTS: ASME B18.2.1 / ASME B18.2.2

API 6A BOLTING: PSL1 / PSL2 / PSL3 / PSL 4

NORSOK BOLTING: NORSOK M650 / NORSOK M630

HEX NUTS WITH TOMMY BAR HOLES

SCREWS-NUTS-WASHERS: DIN 933 / ISO4017 / DIN 931 / ISO4014 / DIN 558 / ISO4018 / DIN-EN14339 / DIN 912

SIZES & RATING:

1/4in to 4in – all lengths

DESIGN CODES:

ASME B16.5	Pipe Flanges and Flanged Fittings
ASME B16.47	Large Diameter Steel Flanges
API 6A	Specification for Subsea Wellhead and Tree Equipment
NORSOK L-005	Compact Flanged Connections
API 20E	Alloy and Carbon Steel Bolting
API 20F	Corrosion Resistant Bolting

MATERIALS:

ASTM A193/A193M	B7 / B7M / B8 / B8M / B16
ASTM A320/A320M	L7 / L7M / B8 / B8M
DIN 931/DIN 933	4.6 / 4.8 / 5.6 / 5.8 / 8.8 / 10.9 / 12.9

Zinc Plated / Hot dip Galvanized / PTFE / Xylan® / Zintek® / Delta Protekt® / Fluoropolymer coated

**other material grades and dimensions are available under request

WBR ENERGIES ENGINEERED SOLUTIONS

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