



2020 Tekflow's Custom product range

TEKFLOW GROUP

Key figures

Presentation

QHSE

Activities

MANUFACTURING

PRODUCTS

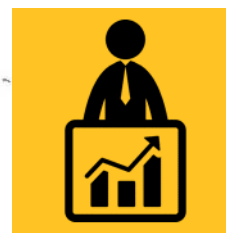
CUSTOMERS



500 projects
around the
world !



Founded
in 2003



French leader
in the Oil & Gas
equipment business



A team of
12 Oil & Gas
professionals

TEKFLOW GROUP

- Key figures
- Presentation
- QHSE
- Activities

MANUFACTURING

PRODUCTS

CUSTOMERS



Tekflow Group is a privileged partner of the **Energy sector**. We provide services and equipment dedicated to the transport of fluids subjected to high thermal, pressure and chemical stresses. Our head office is located near Paris and our two production sites are in Normandie.



120
employees
in France.

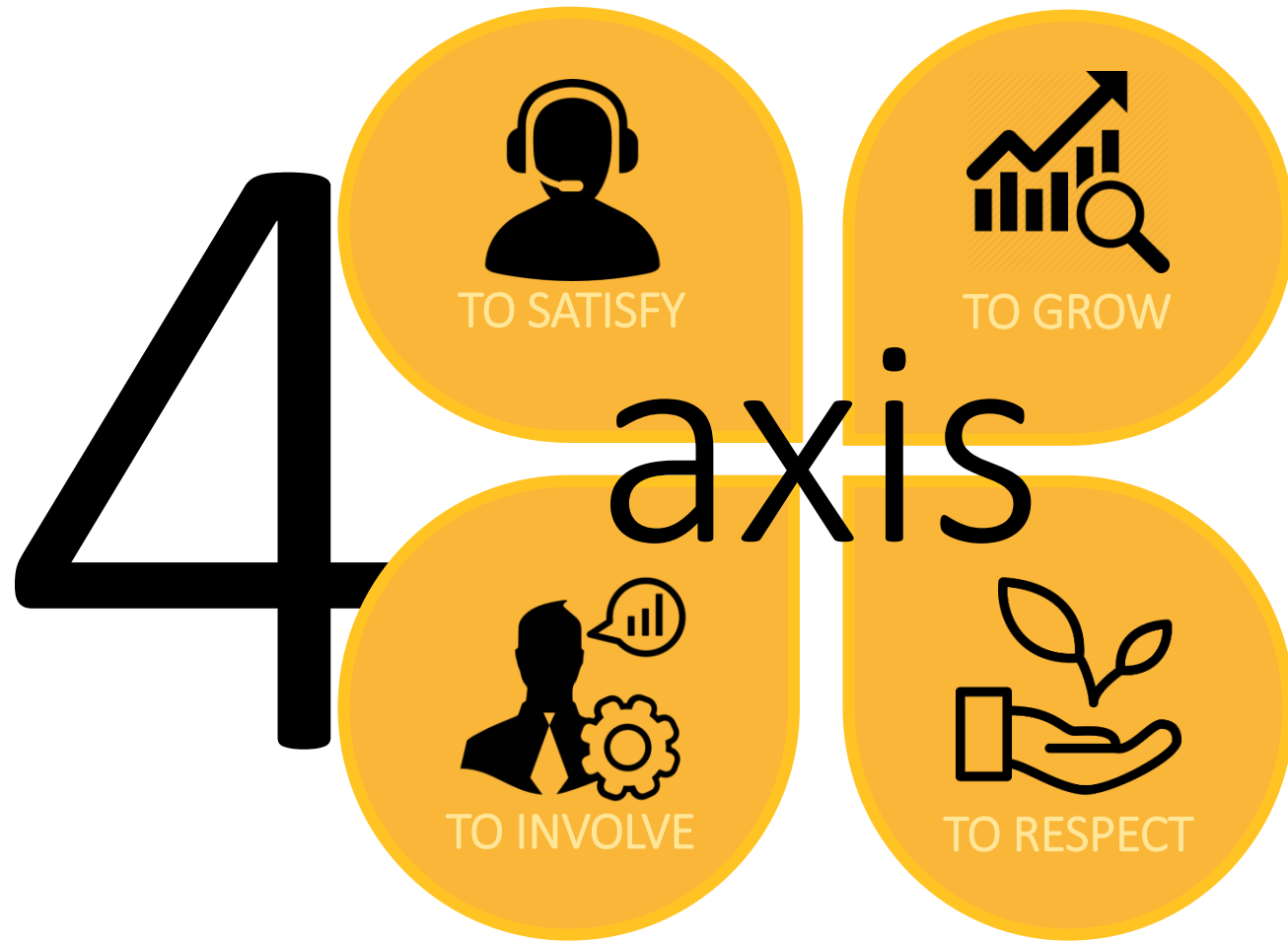
TEKFLOW GROUP

- Key figures
- Presentation
- QHSE
- Activities

MANUFACTURING

PRODUCTS

CUSTOMERS



TEKFLOW GROUP

- Key figures
- Presentation
- QHSE
- Activities**

MANUFACTURING

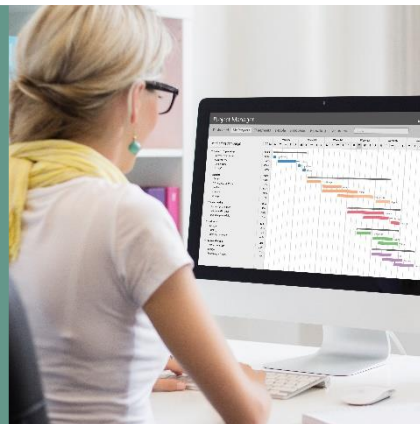
PRODUCTS

CUSTOMERS



Design & Engineering

- Design
- Calculation
- Finite Element Analysis
- 2D and 3D modeling
- Construction and review of design and as-built drawings
- ... in accordance with international standards.



Project management

- Customer Requirements Review.
- Scope of work Definition.
- Schedule and Budget.
- Design and Analysis.
- Material Procurement.
- Preparation of Documentation
- Manufacturing follow –up
- Testing and Inspection
- Vendor documentation



Custom manufacturing

- 7500 m²
- 65 CNC machines
- **Operations :**
milling, turning, grinding, lapping, balancing, surfacing, cladding, wire cutting and assembling.
- **Custom products :**
ex. flanges, umbilicals, pulling heads, forged products, special products, etc.



Distribution



TEKFLOW GROUP

MANUFACTURING

Materials

Production site

Turning

Milling

Cladding

Assembling

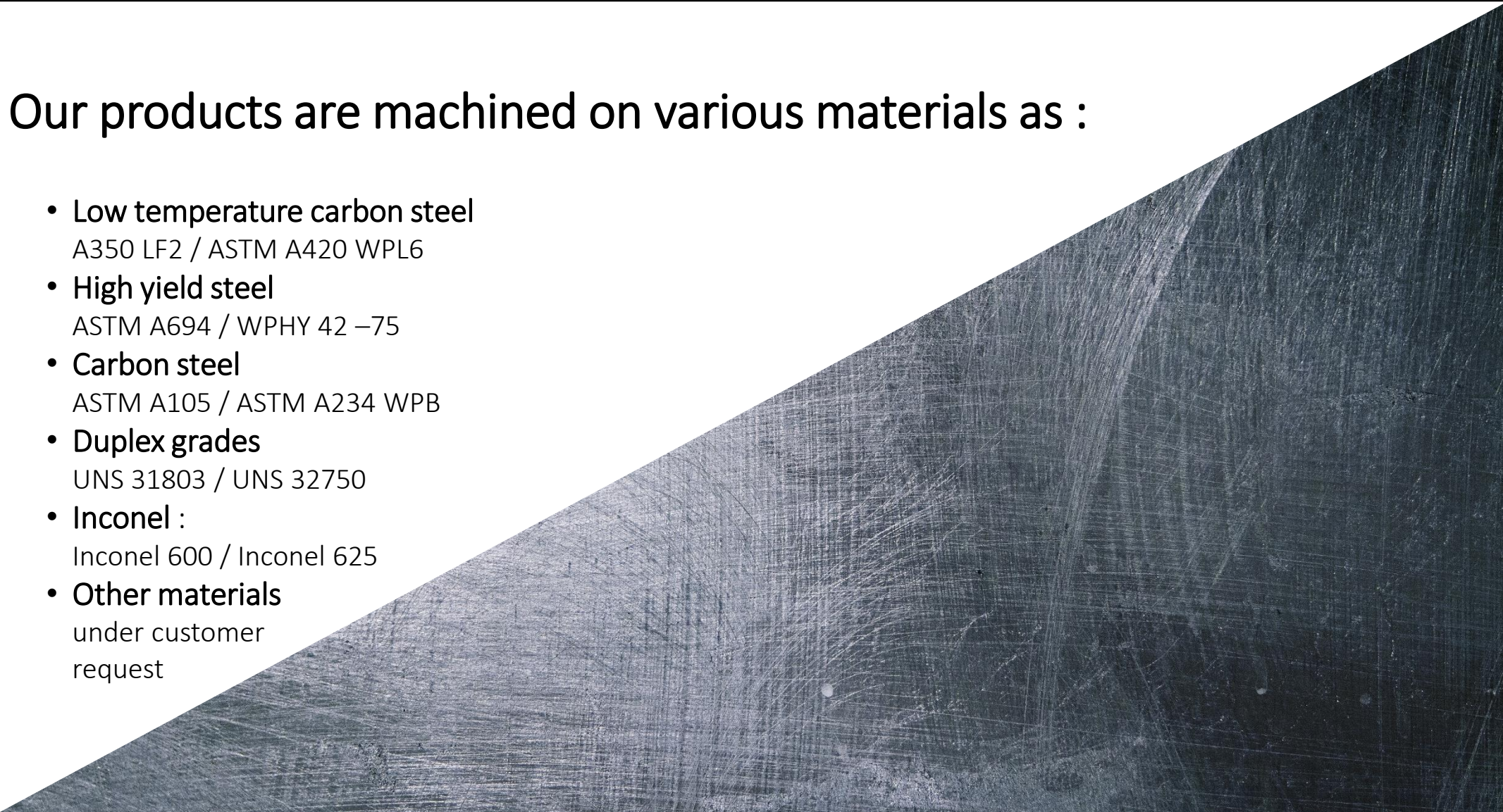
Quality Equipment

PRODUCTS

CUSTOMERS

Our products are machined on various materials as :

- **Low temperature carbon steel**
A350 LF2 / ASTM A420 WPL6
- **High yield steel**
ASTM A694 / WPHY 42 –75
- **Carbon steel**
ASTM A105 / ASTM A234 WPB
- **Duplex grades**
UNS 31803 / UNS 32750
- **Inconel :**
Inconel 600 / Inconel 625
- **Other materials**
under customer request



TEKFLOW GROUP

MANUFACTURING

- Materials
- Production site
- Turning
- Milling
- Cladding
- Assembling
- Quality Equipment

PRODUCTS

CUSTOMERS

MILLING

TURNING

GRINDING

LAPPING



BALANCING

SURFACING

CLADDING

WIRE CUTTING

ASSEMBLING

[Click here](#)

7500 m²

3 production units

65 CNC machines

To see all our machines

TEKFLOW GROUP

MANUFACTURING

- Materials
- Production site
- **Turning**
- Milling
- Cladding
- Assembling
- Quality Equipment

PRODUCTS

CUSTOMERS



VERTICAL TURNING

- **1 YUGY YV-1200 ATC+C machine**

Load capacity : $\varnothing 1250 \times 1200$
 Max weight of the raw part : 5000 kgs
 Spindle max power = 51 kW
 Chuck = $\varnothing 470$ mm

HORIZONTAL TURNING

- **1 CMZ TD45Y 2200 machine**

Load capacity : $\varnothing 550 \times 2250$
 C and Y axis : Possibility of milling the keyways.
 Spindle max power = 51 kW
 Chuck = $\varnothing 470$ mm

- **1 SOMAB machine**

Load capacity: $\varnothing 280$ max x 1000

- **1 CMZ TC35Y 1350 machine**

Load capacity : $\varnothing 550 \times 1400$ - C and Y axis
 Spindle max power = 48 kW - Chuck = $\varnothing 400$ mm

- **1 CMZ TA20YS machine**

Load capacity : $\varnothing 400 \times 600$ - C and Y axis
 Spindle max power = 22 kW equipped with automatic bar feeder

- **2 CMZ TA30Y machines**

Load capacity : $\varnothing 400 \times 600$ - C and Y axis
 Spindle max power = 42 kW equipped with automatic bar feeder

- **1 NAKAMURA super NTJX machine**

Load capacity : $\varnothing 130 \times 200$ - 12 axis - Two-spindle + milling head



TEKFLOW GROUP

MANUFACTURING

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PRODUCTS

CUSTOMERS

HORIZONTAL MILLING

- **1 MORI SEIKI NH4000 DCG machine**
Load capacity : Ø630 x 900
Max weight of the raw part : 400 kgs
4 axis - 59 tools
- **1 MORI SEIKI NHX4000 machine**
Load capacity : Ø630 x 900
Max weight of the raw part : 400 kgs
4 axis - 59 tools

VERTICAL MILLING

- **1 HARDINGE VMC1000 II machine**
Load capacity : 1000 x 500 X 500
Max weight of the raw part : 250 kgs - 4 axis
- **1 HURCO VMX50 DXF machine**
Load capacity : 1200 x 600
Max weight of the raw part : 1360 kgs - 3 axis

5-AXIS MILLING

- **1 HELLER FT8000 machine**
Load capacity : Ø1810 x 1400 (table Ø1110).
Max weight of the raw part : 2000 kgs
5 axis (B axis table)
Horizontal Spindle : 60 kW - 50 tools
- **1 HURCO VMX30 UHSI machine**
Load capacity : Ø238
Max weight of the raw part : 200 kgs
5 axis (B axis table)
Horizontal Spindle : 35 kW - 40 tools
- **1 HURCO VMX60 SRTi machine**
Load capacity : 1270 X 610
Max weight of the raw part : 1360 kgs
5 axis (machine-integrated rotary table)
Horizontal Spindle : 35 kW - 50 tools
- **1 HURCO VTXU machine**
Load capacity : : 600 X 400
Max weight of the raw part : 250 kgs
Horizontal Spindle : 35 kW - 50 tools



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MANUFACTURING

- Materials
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- Cladding**
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PRODUCTS

CUSTOMERS

Pre-heating
prior cladding

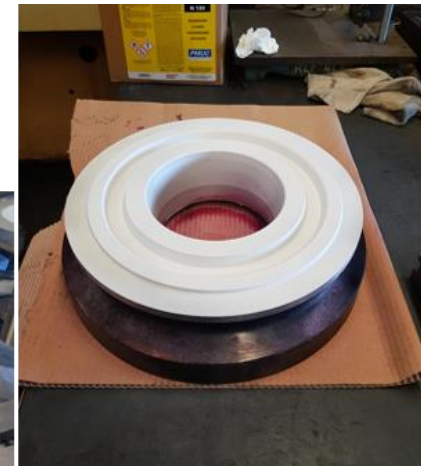


Machining after
Inconel overlay

Liquid Penetrant
Inspection



LPI with A+
identifier



Ultrasonic testing



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MANUFACTURING

- Materials
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PRODUCTS

CUSTOMERS

Example

Assembling of 11 meters bend restrictors for MEGIE PROJECT (2019)



TEKFLOW GROUP

MANUFACTURING

- Materials
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- Quality Equipment**

PRODUCTS

CUSTOMERS

3D Tables
3D FARO arm
METRIS scan
Marble tables
Digital roughnesses
Manual measurements
Talyrond control
Etc.

[Click here](#)

To see all details on quality equipment



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MANUFACTURING

PRODUCTS

Overview

Hot stab

Dummy hot stab

Parking

CUSTOMERS

<p>HUBS & CLAMP CONNECTORS</p>	<p>FLANGES & ACCESSORIES</p>	<p>PIPING PACKAGE</p>	<p>ACCESSORIES FOR FLEXIBLE RISERS & UMBILICALS</p>	<p>HOT STABS & RECEPTACLES</p>
<p>REDUCERS</p>	<p>ELBOWS & BENDS</p>	<p>TEES & BARRED TEES</p>	<p>SPECIAL FLANGES</p>	<p>BUCKHEADS & FORGED ANCHORS</p>

TEKFLOW GROUP

MANUFACTURING

PRODUCTS

Overview

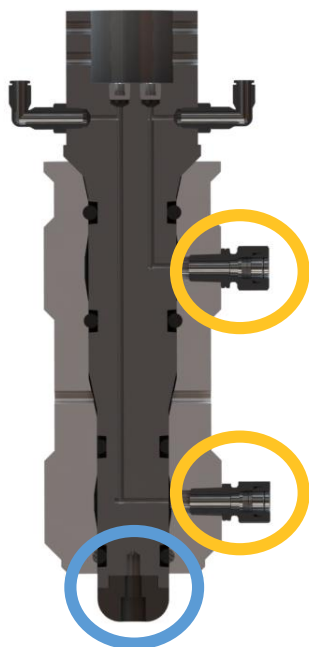
Hot stab

Dummy hot stab

Parking

CUSTOMERS

Port arrangements
 > single, dual, quad and others.



Nose



Product presentation

> Tekflow designs and manufactures a large range of standard and non standard Live Hot Stabs and Live Receptacles to supply hydraulic power to subsea equipments, to perform chemical injections and to monitor pressure.



Design code

> ISO 13628-8 / API 17 and custom design following API 6A requirements.



Materials

> Nitronic 50 or 60, S316, Super Duplex S32760 and others.



Painting system

> Following Norsok requirements



Pressure rating

> Up to 20 000 psi

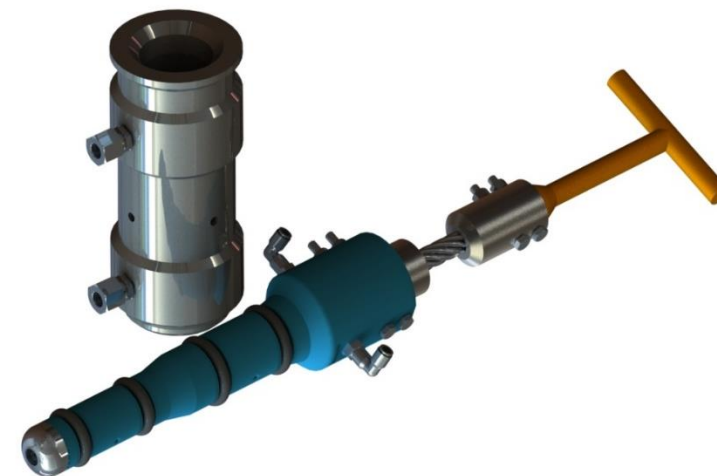


Testing requirements

> Pressure test : API 6A PSL3 (3G available)
 > Qualification test : API 6A 17D PSL 3 PR2

ROV Handles options

> following ISO 136628-8



TEKFLOW GROUP

MANUFACTURING

PRODUCTS

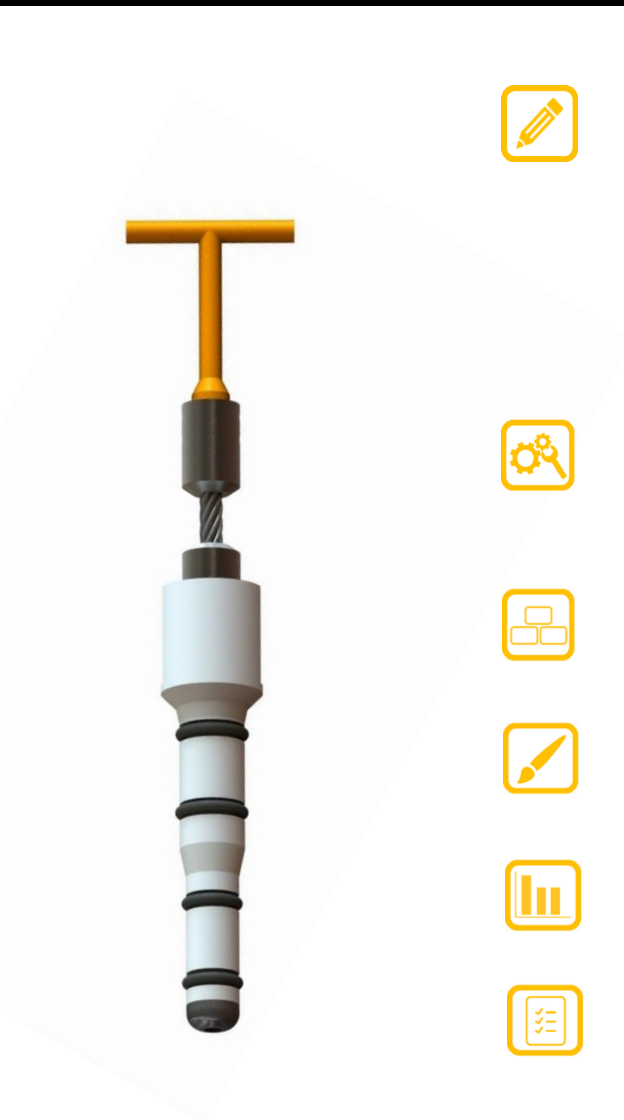
Overview

Hot stab

Dummy hot stab

Parking

CUSTOMERS



Product presentation

>> Tekflow designs and manufactures a large range of standard and non-standard Dummy Hot Stabs for use in subsea operation or testing. These products are recommended to seal the Live Receptacle and to retain pressure (or not) whilst the subsea system is not in operation.



Design code

>> ISO 13628-8 / API 17 and custom design following API 6A requirements.



Materials

>> Super Duplex S32760.



Painting system

>> Following Norsok requirements



Pressure rating

>> Up to 20 000 psi (for Dummy Hot Stab)



Testing requirements

>> Pressure test : API 6A PSL3 (3G available)
>> Qualification test : API 6A 17D PSL 3 PR2

ROV Handles options

>> following ISO 136628-8



TEKFLOW GROUP

MANUFACTURING

PRODUCTS

Overview

Hot stab

Dummy hot stab

Parking

CUSTOMERS



Product presentation

>> Tekflow designs and manufactures a large range of standard and non-standard Parking Receptacle used for storing Live and Dummy Hot Stabs during subsea operations or testing.



Design code

>> ISO 13628-8 / API 17 and custom design following API 6A requirements.



Materials

>> Nitronic 50 or 60, S316, Super Duplex S32760 and others.



Painting system

>> Following Norsok requirements



Testing requirements

>> Pressure test : API 6A PSL3 (3G available)

>> Qualification test : API 6A 17D PSL 3 PR2



TEKFLOW GROUP

MANUFACTURING

PRODUCTS

CUSTOMERS

🔹 **Business sectors**

🔹 References

🔹 Customer case



**OIL & GAS
OFFSHORE**



**OIL & GAS
ONSHORE**



**POWER
GENERATION**



**SUSTAINABLE
ENERGIES**



**NATURAL
GAS**

TEKFLOW GROUP

MANUFACTURING

PRODUCTS

CUSTOMERS

Business sectors

References

Customer case



ENPING project

China

Compact flanges Norsok L-005



Statoil

JOHAN SVERDRUP project

Norway

Inconel flanges



Statoil

GULLFAKS Project

Norway

Cladded flanges 20''



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MANUFACTURING

PRODUCTS

CUSTOMERS

Business sectors

References

Customer case

Schlumberger

10K/15K project

Norway

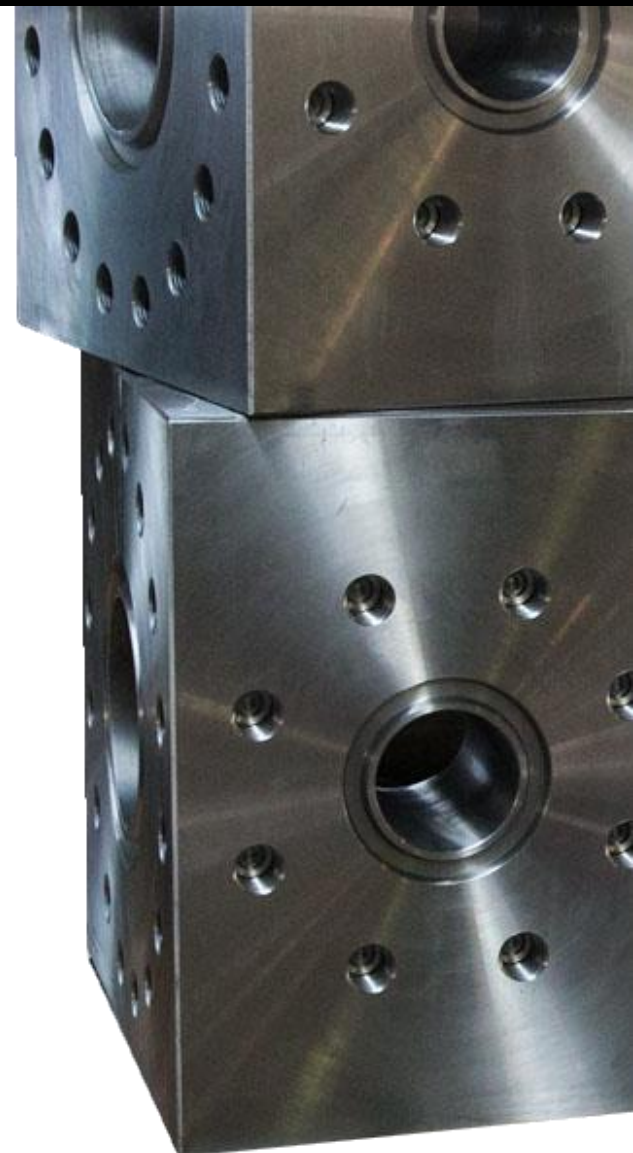
API flanges & Cross blocks AISI4130

ExxonMobil

ERHA NORTH project

Nigeria

Blind flanges special tapered, bolting, gaskets



TEKFLOW GROUP

MANUFACTURING

PRODUCTS

CUSTOMERS

Business sectors

References

Customer case



TEN project

Ghana

Pulling heads & handling heads



TEPA ROSA project

Angola

Spools with Grayloc hub ends



AGBAMI Phase 3 Project

Nigeria

Pulling heads Grayloc
& Handling heads ASME



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MANUFACTURING

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Business sectors

References

Customer case

LEIGHTON

HEERA project

India

Swivel flanges & mating flanges

ExxonMobil

MEGIE project

Equatorial Guinea

Handling heads & Bend restrictors

Chevron

LIANZI Project

Congo

Pulling heads



TEKFLOW GROUP

MANUFACTURING

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CUSTOMERS

Business sectors

References

Customer case



Tekflow contributed in 2019 to the Merakes Project in Indonesia as a supplier of pulling heads, filling heads and Grayloc® clamps.

#1 Design support for pulling heads to facilitate machining operations in accordance with standards.

#2 Supplying of material for pulling heads and filling heads. Machining of these products in our machine shop.

#3 Preparation and organization of fit up tests, load tests, painting inspection and shipment.



TEKFLOW SAS

58 Route de Chartres

IMMOPARC

Bâtiment Seine 5

78190 TRAPPES - France

