



DEUTSCH



DEUTSCH OFFSHORE

# DEUTSCH

## A LONG TERM COMPANY

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After almost 70 years of family ownership and continuous segmented local expansion, the Deutsch Company in America, Deutsch Ltd in the UK and Compagnie Deutsch in France have unified for global expansion becoming DEUTSCH under Wendel Group in June 2006.

## A MULTI CULTURAL COMPANY

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The Company's 3500 employees come from across America, Europe and Asia. DEUTSCH headquarters have recently been moved to New York from France in order to be centrally located with respect to all DEUTSCH companies. In order to best serve our customers and maintain our position as a world leader of harsh environmental connectors and switching solutions, DEUTSCH Sales networks have been reshaped creating a global strength and a local support.



▲ DEUTSCH

## MARKET

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Our products can be found worldwide in the following markets :

Civil Aerospace  
Industrial vehicles

Defense  
Railway

Automotive  
Offshore



# DEUTSCH OFFSHORE RESOURCES

## DESIGN AND ENGINEERING DEPARTMENT

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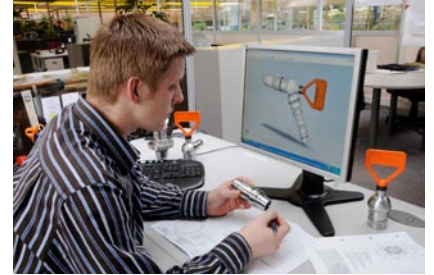
Our design and engineering department consists of a team of project and design engineers structured to handle scopes of work varying from long-term development to fast-track projects.

Our team includes experts from both the power and optical fields with more than 70 years of combined knowledge and experience.

The team has the latest design engineering tools at their disposal, such as Solidworks CAD software and Cosmosworks Finite Element software for thermal, mechanical and electrical calculations.

The team also have at their disposal the use of our in-house prototype facility, which allows rapid feasibility work to be performed.

All deliverable documentation is fully controlled and traceable in accordance with ISO 9001.



## QHSE / LABORATORY

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Our capabilities for electrical, mechanical and chemical testing are concentrated in one 440 m<sup>2</sup> laboratory.

- 10 Tests Tanks (high pressure vessels)
- Mating under pressure & turbid water
- Max. temperature and pressure capabilities : 200°C / 2000 bars
- Gas Testing Equipment
- HV testing to 200 kV (Faraday Chamber)
- Environmental simulation equipment (salt spray chamber, climatic chamber...)
- ATEX/CSA Certified
- ISO 9001 & ISO 14001 Certified
- OHSAS 18001 (in process)

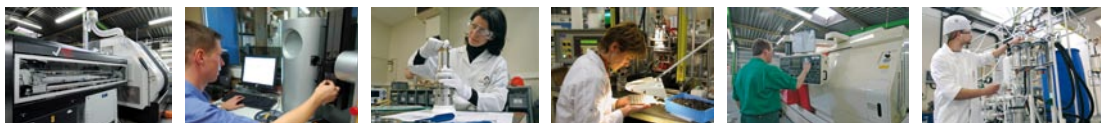


## MANUFACTURING & ASSEMBLY

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5200 m<sup>2</sup> of workflow  
12 moulding machines including 7 automated  
Prototype Workshop

18 CNC machines  
Triple shift Workshop



Deutsch Offshore

provides

a professional

service to our

clients from initial


enquiry through

to installation

and servicing.

# APPLICATIONS

## TOPSIDE

- FPSO
- Explosion proof 
- Seismic Streamers
- Skids
- Dry Trees
- Buoys

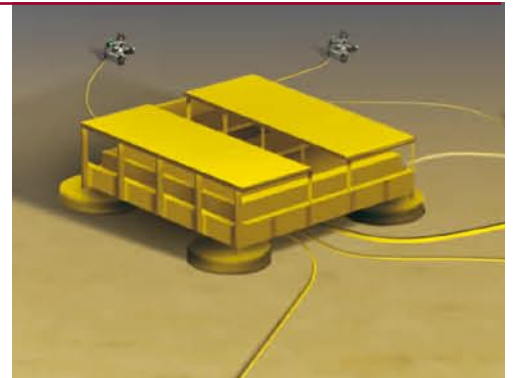


Deutsch

Offshore provides

## SUBSEA

- X-Mas Trees
- Transformers
- Circuit breakers
- ESP (electrical submersible pumps)
- VSD (Variable Speed Drives)
- Compressors
- Separators
- Seabed Seismic
- Multiphase Pumps



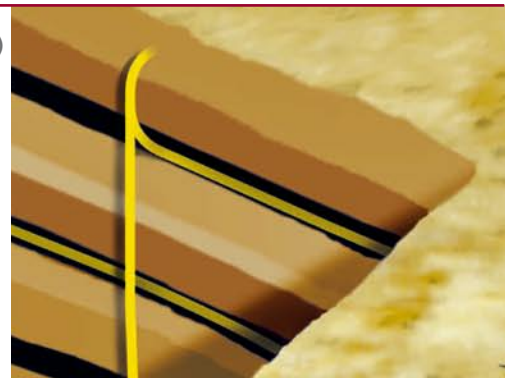
Power, Signal

& Optical

Connectors.

## DOWNHOLE

- MWD / LWD (measurement / Logging While Drilling)
- DTS (Distributed Temperature Sensing)
- PT Gauge (Pressure Temperature)
- In-Tool
- ESP



# PRODUCTS

## POWER CONNECTORS

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### MPD

6 / 10 (12) kV - 300 A - Splash Zone Mateable  
for FPSO Quick Disconnect / Reconnect Turret



### DS3003

3 kV - 50 A - Wet Mateable  
Max. Operating Pressure : 300 bar (4,350 psi)



### P6-LW 250

6.6 / 6.6 (7.2) kV - 250 A - Linear Wet Mateable  
Max. Operating Pressure : 300 bar (4,350 psi)



### P6-THFT 250

6.6 / 6.6 (7.2) kV - 250 A - Wet & Dry Mateable  
for HP HT Tubing Hanger Feedthrough System



### P6-SW 400

6 / 10 (12) kV - 400 A - Wet Mateable  
Max. Operating Pressure : 300 bar (4,350 psi)



### P6-SW 1600

6 / 10 (12) kV - 1600 A - Wet Mateable

### P18-SD 300

18 / 30 (36) kV - 300 A - Dry Mateable  
Max. Operating Pressure : 300 bar (4,350 psi)



### P18-SW 900

18 / 30 (36) kV - 900 A - Wet Mateable  
Max. Operating Pressure : 200 bar (2,900 psi)



## SIGNAL CONNECTORS

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 MSD

1 kV - 20 A - Splash Zone Mateable  
for FPSO Quick Disconnect / Reconnect Turret



9323

1500 V (# 22) & 500 V (#16) - Up to 13 A - Dry Mateable  
Max. Operating Pressure : 60 bar (870 psi)  
for Seismic Streamers



 9316 / 9306

250 V to 2000 V - 5 A to 600 A - Dry Mateable  
Max. Operating Pressure : up to 750 bar (10,877 psi)



DS3001

1 kV - 40 A - Wet mateable - 4, 7, 8 & 12 Contacts  
Max. Operating Pressure : 300 bar (4,350 psi)



Electrical THFT

500 V - 5 A - 4 Contacts - 1140 bar (16,500 psi) - 177°C (350°F)  
for HP HT Tubing Hanger Feedthrough System



DLS

840 V - 1.7 A at 205°C (400°F) - Dry Mateable - 1 to 7 contacts  
Max. Operating Pressure : 2070 bar (30,000 psi) for HP HT Linear

## OPTICAL CONNECTORS

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### MOD

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Insertion Loss < 0.5 dB - Back Reflection < -45 dB  
Splash Zone Mateable - 8 Contacts  
Max. Operating Pressure : up to 80 bar (1,160 psi)  
for FPSO Quick Disconnect / Reconnect Turret



### 9316

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Insertion Loss < 0.5 dB - Back Reflection < -40 dB  
Dry Mateable - 12 Contacts



### Optical THFT

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Insertion Loss < 2dB - Back Reflection < -40dB - Dry & Wet Mateable  
Max. Operating Pressure : 1034 bar (15,000 psi) / 177°C (350°F)  
for HP HT Tubing Hanger Feedthrough System



### DO3000

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Insertion Loss < 0.5 dB - Back Reflection < -40 dB  
Wet Mateable - 8 Contacts  
Max. Operating Pressure : up to 300 bar (4,350 psi)



## HYBRID CONNECTORS

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### SHOWET

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1 kV - 20 A - Splash Zone Mateable  
Insertion Loss < 0.5 dB - Back Reflection < -45 dB - 4 contacts  
Max. Operating Pressure : up to 80 bar (1,160 psi)



### Hermaphroditic

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12 V - 2 A - Dry Mateable - 2 Contacts  
Insertion Loss < 3 dB - Land Seismic



### DH3000

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3 kV - 50 A - Wet Mateable - Insertion Loss < 0.5dB - Back Reflection < -40dB  
Max. Operating Pressure : up to 300 bar (4,350 psi)

### 9316

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650 V - 17 A - Dry Mateable  
Insertion Loss < 0.5 dB - Back Reflection < -40 dB





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