

Client	Freeport-McMoran Oil & Gas
End user/Project	Freeport-McMoran Oil & Gas
Country	USA
Project	King
Year	2015
Location/Field	Gulf of Mexico
Type	Umbilical
Length (m)	24457
Depth (m)	1652
Description	Dynamic/Static Control Power and Communication Umbilical, delivered FAS Installed by Subsea 7, using Normand Oceanic

Client	One Subsea
End user/Project	ExxonMobil Development Company
Country	USA
Project	Julia
Year	2015
Location/Field	Gulf of Mexico
Type	Umbilical
Length (m)	23552
Depth (m)	2286
Description	Dvnamic/Static Power Umbilical, delivered FAS Installed by McDermotts, using NO-102

Client	Chevron
End user/Project	Chevron
Country	USA
Project	St Malo South
Year	2014
Location/Field	Gulf of Mexico
Type	Umbilical
Length (m)	21346
Depth (m)	2439
Description	Power Umbilical

Client	Chevron
End user/Project	Chevron
Country	USA
Project	Jack South
Year	2014
Location/Field	Gulf of Mexico
Type	Umbilical
Length (m)	20955
Depth (m)	2439 m
Description	Power Umbilical

Client	Statoil
End user/Project	Statoil
Country	Norway
Project	Asgaard Static
Year	2014
Location/Field	North Sea
Type	Umbilical
Length (m)	84000
Depth (m)	-
Description	

Client	BP America
End user/Project	BP America
Country	USA
Project	Thunder Horse
Year	2013
Location/Field	GoM
Type	Umbilical
Length (m)	4941
Depth (m)	.
Description	

Client	AS Norske Shell
End user/Project	AS Norske Shell
Country	Norway
Project	Ormen Lange MNF Infield
Year	2012
Location/Field	North Sea
Type	Umbilical
Length (m)	6500
Depth (m)	870
Description	Engineering, procurement, manufacture, and testing of electro-hydraulic umbilical with steel tubes.

Client	Statoil
End user/Project	Statoil
Country	Norway
Project	Hyme
Year	2012
Location/Field	North Sea
Type	Umbilical
Length (m)	20950
Depth (m)	330
Description	Two MAIN UMBILICAL - DYNAMIC UMBILICAL, - (super duplex tubes quads + FO cables) jointed to a static umbilical (with centre tube) using a transition joint. Terminated at topsides end with a hand-off, and subsea end with a subsea termination (FMC SST) One GL/SSIV - dynamic umbilical (SD Tubes, quads, FO Cables). Hand-off and subsea terminations (FMC)

Client	Statoil
End user/Project	Statoil
Country	Norway
Project	Skuld DEH
Year	2012
Location/Field	Norne
Type	Direct heating
Length (m)	34200
Depth (m)	380
Description	Delivery: 27.6 km 24kV 1200 mm ² + FO, Piggyback Cable 5.3 km 24 kV 1200/1300 mm ² + FO+rør, Feeder Cable 1,3 km 24 kV 4x1x1600 mm ² + FO+rør, Riser Cable

Client	Subsea 7 UK Limited
End user/Project	Subsea 7 UK Limited
Country	UK
Project	Laggon Tormore
Year	2012
Location/Field	West of Shetland Island
Type	Umbilical
Length (m)	17000 + 124000
Depth (m)	600
Description	Design, procurement, manufacture & testing of electro-hydraulic umbilicals incl. ancillary components

Client	BP America INC
End user/Project	BP America INC
Country	USA
Project	Isabella
Year	2011
Location/Field	Golf of Mexico
Type	Umbilical
Length (m)	
Depth (m)	-
Description	Delivery of Dynamic/Electr./Hydraulic Umbilical. FO Super Duplex

Client	BP Exploration Operating Company Ltd
End user/Project	BP Exploration Operating Company Ltd
Country	United Kingdom
Project	Devenick
Year	2011
Location/Field	North Sea Uk Sector
Type	Umbilical
Length (m)	38000
Depth (m)	112,5m
Description	Engineering, procurement, manufacture and testing of electro-hydraulic umbilicals with SO tubes. Umbilical length of main: 33.5 km. SSIV 500 m + spare. Infield: 2x1.5 km. Supply of Subsea Termination Units, Pull-in head and Hang-off arrangements.

Client	FMC Kongsberg Subsea AS
End user/Project	Statoil ASA
Country	Norway
Project	Marulk
Year	2011
Location/Field	North Sea Norne Field
Type	Umbilical
Length (m)	13500
Depth (m)	380
Description	Engineering, procurement, manufacture and testing of electro-hydraulic umbilicals with steel tubes.

Client	Petrobras
End user/Project	Petrobras
Country	Brazil
Project	Tambau/Urugua
Year	2011
Location/Field	Santos Field
Type	Umbilical
Length (m)	60000
Depth (m)	1500
Description	FPSO, umbilicals for gas field

Client	SAIPEM SA
End user/Project	Total Upstream Nigeria Limited
Country	France
Project	USAN
Year	2011
Location/Field	Offshore Nigeria
Type	Umbilical
Length (m)	67000
Depth (m)	800
Description	Delivery of 29 cables - length 67 km. Dynamic/Static - Electro-Hydraulic Umbilicals

Client	BP America Inc
End user/Project	BP America Inc
Country	USA
Project	Atlantis DC3 Extension
Year	2009
Location/Field	Golf of Mexico
Type	Umbilical
Length (m)	8000
Depth (m)	2150m
Description	1 Electrical, 1 Hydraulic, 1 Flying Lead

Client	BP America Inc
End user/Project	BP America Inc
Country	USA
Project	Thunder Horse Next
Year	2009
Location/Field	GoM
Type	Umbilical
Length (m)	8300
Depth (m)	1800
Description	Supply Ex work Halden 2 Static Infield Umbilicals for Tie-Back to Thunder Horse Infrastructure

Client	FMC Kongsberg Subsea AS
End user/Project	Statoil
Country	Norway
Project	Norne M Umbilical
Year	2009
Location/Field	North Sea
Type	Umbilical
Length (m)	
Depth (m)	-
Description	

Client	Norsk Hydro
End user/Project	Norsk Hydro
Country	Norway
Project	Ormen Lange Southern Field
Year	2009
Location/Field	North Sea
Type	Umbilical
Length (m)	13442
Depth (m)	870
Description	Engineering, procurement, manufacture and testing of electro-hydraulic umbilical with steel tubes.

Client	Statoil
End user/Project	Statoil
Country	Norway
Project	Tyrhans Power Umbilical
Year	2009
Location/Field	North Sea
Type	Umbilical
Length (m)	31000
Depth (m)	330
Description	EPC Contract for the supply of a Power umbilical system, that was installed between Kristin platform and the Trvrihans subsea development, for the supply of Power, hvdraulics and optic signals for the operation of subsea water injection pumps.

Client	BP America Inc
End user/Project	BP America Inc
Country	USA
Project	Dorado and King South
Year	2008
Location/Field	Dorado Subsea field tied back to Marlin Platform
Type	Umbilical
Length (m)	12076
Depth (m)	3245 feet
Description	1 Dynamic and 3 static control umbilicals (Hvdr+ Electric + FO) under BP frame agreement. Cover two BP projects: Dorado and King South (5289 m + 2446 m + 1437 m + 2904 m)

Client CNOOC China Limited
 End user/Project CNOOC China Limited
 Country China
 Project Wen Chang
 Year 2008
 Location/Field Wen Chang
Type Interplatform
Length (m) 5000
Depth (m) 120
Description

Client CNOOC China Limited
 End user/Project CNOOC China Limited
 Country China
 Project Xi Jiang
 Year 2008
 Location/Field Xi Jiang
Type Interplatform
Length (m) 2500
Depth (m) 120
Description

Client FMC
 End user/Project StatoilHydro
 Country Norway
 Project Alve Umbilical
 Year 2008
 Location/Field North Sea
Type Umbilical
Length (m) 16500
Depth (m) 370
Description Dynamic and Static umbilical delivered as an EPC.

Client	FMC Kongsberg Subsea AS
End user/Project	StatoilHydro ASA
Country	Norway
Project	Tyrihans Umbilical
Year	2008
Location/Field	North Sea
Type	Umbilical
Length (m)	39000
Depth (m)	320
Description	2 x Dynamic umbilicals and 5 x Static Umbilicals delivered as an EPC Contract

Client	Petróleo Brasileiro S.A. - Petrobras
End user/Project	Petrobras BV
Country	Brazil
Project	Mexilhão
Year	2008
Location/Field	Mexilhão
Type	Umbilical
Length (m)	57000
Depth (m)	500
Description	Platform-Manifold + infield. 2 dynamic + 7 static control umbilicals

Client	Saipem
End user/Project	Total
Country	France
Project	Akpo Field Development
Year	2008
Location/Field	Nigeria
Type	Umbilical
Length (m)	72000
Depth (m)	1500
Description	Dynamic and Static Steel Tube Umbilicals

Client	Statoil
End user/Project	Statoil
Country	Norway
Project	Fram Vest replacement
Year	2008
Location/Field	North Sea - Connected to Troll C via Transition Joint and Technipdynamic Umbilical
Type	Umbilical
Length (m)	
Depth (m)	360
Description	One infield umbilical (centre tube and small bore super duplex tubes + quads + FO cables) to replace an infield umbilical with damaged FMC UTH due seabed settlement and rockdumping. In addition, offshore scope work to replace FMC UTH (including welding, splicing of el and FO) of the damaged main umbilical UTH.

Client	StatoilHydro
End user/Project	StatoilHydro
Country	Norway
Project	Morvin DEH
Year	2008
Location/Field	Åsgard, North Sea
Type	Direct heating
Length (m)	20700
Depth (m)	360
Description	Piggyback cable without armour. Armoured Feeder Cable with galvanizes flat steel wires

Client	StatoilHydro
End user/Project	StatoilHydro
Country	Norway
Project	Tyrihans DEH
Year	2008
Location/Field	Tyrihans DEH, North Sea
Type	Direct heating
Length (m)	44000
Depth (m)	280
Description	

Client StatoilHydro
 End user/Project StatoilHydro
 Country Norway
 Project Alve DEH
 Year 2008
 Location/Field Norne, North Sea

Type Direct heating

Length (m) 16600

Depth (m) 390

Description

Client BP America Inc
 End user/Project BP America Inc
 Country USA
 Project King Pump
 Year 2007
 Location/Field Gulf of Mexico

Type Umbilical

Length (m) 27542

Depth (m) 1700

Description Frame agreement 2002. Dynamic Power Umbilical 23352m and Static Power Umbilical 4190m
 Prototype tester.

Client BP America Inc
 End user/Project BP America Inc
 Country USA
 Project Atlantic DC3
 Year 2007
 Location/Field Gulf of Mexico

Type Umbilical

Length (m) 7316 +
 7220

Depth (m) 2134

Description Frame Agreement 2002.
 Delivery Exwork Halden. Static Umbilical 3658m ST2 x 2. and 3669m EO3 x 2. + Flving Lead 1962 m.
 Tie back to Atlantis

Client	Dolphin Energy Limited
End user/Project	Dolphin Energy Limited
Country	Qatar
Project	Dolphin
Year	2007
Location/Field	Raf Laffan
Type	Umbilical
Length (m)	75000+900
Depth (m)	60 m
Description	EPCI Contract: Umbilicals contents 4 Super Duplex Tubes + FO Cables. 2x1700 m Directional Drilling. 2x1350 m Trenching Near Shore.

Client	Shell Oil Company
End user/Project	Shell Oil Company
Country	USA
Project	Deimos
Year	2007
Location/Field	Gulf of Mexico - Tied in to Mars TLP
Type	Umbilical
Length (m)	4100
Depth (m)	915
Description	Dynamic and Static Umbilical delivered on reels to Port Fourchon in Gulf of Mexico. Seacat Tubes and electrical quads bundled in 3 lay-up passes, then outer Pe sheath

Client	BP
End user/Project	BP
Country	USA
Project	Nakika
Year	2006
Location/Field	GoM
Type	Umbilical
Length (m)	21795
Depth (m)	2134m
Description	1 Dynamisk Umbilical (Steel Tube + Electric + FO). Prototype Testing

Client BP UK / Aker Kværner UK
 End user/Project BP UK
 Country UK
 Project Foinaven U-32
 Year 2006
 Location/Field North Sea
Type Umbilical
Length (m) 7000
Depth (m) 150
Description 2 x Subsea Terminations

Client FMC Kongsberg Subsea AS
 End user/Project Statoil ASA
 Country Norway
 Project Norne K
 Year 2006
 Location/Field North Sea
Type Umbilical
Length (m) 160
Depth (m) 160
Description 2 x Subsea Terminations

Client Mærsk Olie og Gas AS
 End user/Project Mærsk Olie og Gas AS
 Country Denmark
 Project Valdemar BA
 Year 2006
 Location/Field North Sea
Type Interplatform
Length (m) 3700
Depth (m) 50
Description Valdemar AB - Valdemar BA Interplatform Cable

Client	Norsk Hydro
End user/Project	Norsk Hydro
Country	Norway
Project	Ormen Lange
Year	2006
Location/Field	North Sea
Type	Umbilical
Length (m)	248000
Depth (m)	890
Description	Engineering and Manufacturing of 124 km Steel Tube Umbilicals.

Client	Azerbaijan International Operating Company
End user/Project	Azerbaijan International Operating Company
Country	Azerbaijan
Project	Azeri
Year	2005
Location/Field	Azeri Offshore Field
Type	Interplatform
Length (m)	17000
Depth (m)	160
Description	Static power / Communication Cable 36kV 3x1 500 mm ² + FO. Nexans offshore termination assembly.

Client	BP
End user/Project	BP
Country	USA
Project	Atlantis
Year	2005
Location/Field	Gulf of Mexico
Type	Umbilical
Length (m)	52000
Depth (m)	2134
Description	Frame Agreement 2002. Delivered: 6 Dynamic Steel Tube Umbilical 33592 m 2 Dynamic Electro umbilicals + FO 10963 m + Prototype testing, Backup length, Flying lead

Client	Cooper Cameron Limited
End user/Project	Esso Exploration & Production Nigeria Limited
Country	Nigeria
Project	Erha Project
Year	2005
Location/Field	OPL Block 209, Nigeria
Type	Umbilical
Length (m)	7000
Depth (m)	1200
Description	Supply of two dynamic umbilicals of 3 km length each, and one static umbilical of 1 km length

Client	Statoil
End user/Project	Statoil
Country	Norway
Project	Norne
Year	2005
Location/Field	North Sea - Norne Field
Type	Direct heating
Length (m)	11300
Depth (m)	380
Description	Direct Electric Heating of one flowline, 9 km in length. Total cable lengths: 9 km piggyback cable, 2 x 570 m armoured feeder cable and 1320 m DEH riser cable.

Client	Stolt Offshore (UK)
End user/Project	Mærsk Olie og Gas
Country	Denmark
Project	Valdemar BO
Year	2005
Location/Field	North Sea, Danish Sector
Type	Interplatform
Length (m)	19000
Depth (m)	42 m
Description	Static Power and Optical Submarine Cable TFRA 12 kV 3x1x240 mm ² + FO. Including all relevant cable accessories for pull-in, hand-off, repair and termination. Nexans offshore termination assembly and testing.

Client Trans Tel
 End user/Project Trans Tel
 Country Singapore
 Project South Pars
 Year 2005
 Location/Field Iran/Spifon
Type Interplatform
Length (m) 330000
Depth (m) 150
Description Submarine FO Cable - Accessories for 10 platform

Client Vetco Gray
 End user/Project Statoil ASA
 Country Norway
 Project Snøhvit Subsea System
 Year 2005
 Location/Field North of Norway
Type Umbilical
Length (m) 145000
Depth (m) -
Description Engineering and manufacturing of 145000 m Main Umbilical in one length + 30000 m Infield Umbilicals divided on 4 lengths.

Client ABB
 End user/Project Aramco
 Country Saudi Arabia
 Project Abu Safah
 Year 2004
 Location/Field Abu Safah Offshore Field
Type Interplatform
Length (m) 67500
Depth (m) 45
Description Static Power Cable 15kV (total 67.5km) 3x185, 300, 400, 500 mm² XLPE insulated and separate FO submarine cable. Including all relevant cable accessories. Nexans transport and installation.

Client	ABB
End user/Project	Aramco
Country	Saudi Arabia
Project	Qatif
Year	2004
Location/Field	Qatif Offshore Field
Type	Interplatform
Length (m)	7200
Depth (m)	11
Description	Static Power / Communication Cable 15kV 3x1x107 mm2 XLPE insulated + FO. Including all relevant cable accessories. Nexans transport and installation.

Client	BP
End user/Project	BP
Country	USA
Project	Thunder Horse
Year	2004
Location/Field	Gulf of Mexico
Type	Umbilical
Length (m)	65000
Depth (m)	1890
Description	Frame Agreement 2002. Delivered: 5 Dynamic Steel tube Umbilical 31915 m 3 Dynamic Electro-hydraulic FO 20280 m 3 Static Electro-hydraulic FO 8308 m + Prototype with testing, Backup length, Flying lead, 2 Control Cables, Topside cable.

Client	CNOOC
End user/Project	CNOOC Tianjin
Country	China, People's Republic
Project	Lu Da
Year	2004
Location/Field	Lu Da, Bohai Bay
Type	Interplatform
Length (m)	15000
Depth (m)	30
Description	Static 72 kV 3x1x185 mm2 KQ+FO. XLPE 3-core power cable with lead sheath and fibre optic element of 12 fibres

Client	Halliburton KBR
End user/Project	Conoco Phillips
Country	Indonesia
Project	Belanak
Year	2004
Location/Field	Indonesia
Type	Interplatform
Length (m)	13500
Depth (m)	90
Description	Dynamic/static power/communication cable 15 kV 3x400 mm2 and 3x50 mm2 XLPE insulated.
Client	Shell
End user/Project	Shell
Country	United States Of America
Project	Llano
Year	2004
Location/Field	Gulf of Mexico
Type	Umbilical
Length (m)	19500
Depth (m)	872
Description	Hydraulic umbilical - Electro umbilical
Client	Shell
End user/Project	Shell
Country	United States Of America
Project	Glider
Year	2004
Location/Field	Gulf of Mexico
Type	Umbilical
Length (m)	13800
Depth (m)	906
Description	Hydraulic umbilical - Electro umbilical

Client	Statoil
End user/Project	Statoil
Country	Norway
Project	Kristin DEH
Year	2004
Location/Field	North Sea - Kristin Field
Type	Direct heating
Length (m)	44000
Depth (m)	320
Description	Direct Electric Heating of 6 flowlines each 6-7 km: 38 km of piggyback cable, 5x900 m armoured feeder cable and 700 m DEH riser cable

Client	Stolt Offshore
End user/Project	Chevron Texaco
Country	France
Project	Sahna
Year	2004
Location/Field	Nigeria
Type	Interplatform
Length (m)	6500
Depth (m)	40
Description	Static power / communication cable - 11 kV 3x1x95 mm ² + FO, XLPE insulated

Client	Norsk Hydro
End user/Project	Norsk Hydro
Country	Norway
Project	Fram Vest
Year	2003
Location/Field	North Sea
Type	Umbilical
Length (m)	25500
Depth (m)	250
Description	Electro-hydraulic umbilical

Client	Shell
End user/Project	Shell
Country	United States Of America
Project	Nakika
Year	2003
Location/Field	Gulf of Mexico
Type	Umbilical
Length (m)	94100
Depth (m)	2316
Description	Electro-hydraulic umbilicals

Client	Stolt Offshore
End user/Project	Enterprise
Country	Ireland
Project	Corrib
Year	2003
Location/Field	Ireland
Type	Umbilical
Length (m)	90000
Depth (m)	250
Description	Electro-hydraulic umbilical

Client	Burullus
End user/Project	Burullus
Country	Egypt
Project	Scarab / Saffron
Year	2002
Location/Field	Egypt
Type	Umbilical
Length (m)	220000
Depth (m)	850
Description	90 km Hydraulic Umbilical + 90 km Electric Umbilical from shore to Subsea Field offshore + 40 km Infield Umbilical. First subsea development in Egypt.

Client	Elsam
End user/Project	Elsam
Country	Danmark
Project	Horns Rev - Windmills to platform
Year	2002
Location/Field	-
Type	Interplatform
Length (m)	11500
Depth (m)	30
Description	Static power/communication cable - 36kV 3x400mm ² + FO, XLPE insulation

Client	Eltra
End user/Project	Eltra
Country	Danmark
Project	Horns Rev - Platform to onshore
Year	2002
Location/Field	Denmark
Type	Interplatform
Length (m)	21000
Depth (m)	30
Description	Static power/communication cable 170 kV 3x630 mm ² + FO, XLPE insulation. Including electrical and mechanical accessories, installation and trenching.

Client	FMC Kongsberg Subsea
End user/Project	Statoil
Country	Norway
Project	Mikkel
Year	2002
Location/Field	North Sea
Type	Umbilical
Length (m)	74000
Depth (m)	300
Description	Electro-hydraulic umbilicals

Client	Halliburton
End user/Project	BP
Country	Trinidad Tobago
Project	Kapok
Year	2002
Location/Field	Offshore Trinidad, Interplatform
Type	Umbilical
Length (m)	8071
Depth (m)	73
Description	Armored Steel tube umbilical comprising 1 off 0.902" and 7 off 1/2" 25 Cr Duplex Steel tubes. 0.902" tube is rated for 4000 psi and 1/2" was rated for 3500 psi.

Client	Shell
End user/Project	
Country	Malaysia
Project	Sarawak
Year	2002
Location/Field	
Type	Umbilical
Length (m)	1200
Depth (m)	100
Description	Electro-hydraulic umbilical

Client	Shell US
End user/Project	Shell US
Country	USA
Project	Princess
Year	2002
Location/Field	Ursa TLP, Gulf of Mexico
Type	Umbilical
Length (m)	
Depth (m)	73
Description	Princess Dynamic Steel tube umbilical comprising of 7 off 1.25", 12 off 5/8" tubes from SEACat Inc. and off electrical quads. The STFL comprises of 2 off 3/8" and 9 off 1/2" 25 Cr tubes. All tubes 15000 psi rated.

Client	Stolt Offshore (France)
End user/Project	Shell
Country	Nigeria
Project	Forcados Yokri
Year	2002
Location/Field	Forcados Yokri
Type	Interplatform
Length (m)	See descripts
Depth (m)	30
Description	<p>Static Power and Optical Submarine Cables: 36000 m: TSRA 1kV 3x1x95 mm² + FO 8100 m: TSRA 3.6kV 3x1x120 mm² + 3 FO 13640 m: TSRA 36kV 3x1x240 mm² + 3 FO</p> <p>Power and Optical Onshore Cables: 24500 m: TSBE 1kV 3x1x95 mm² + FO 10600 m: TSBE 36kV 3x1x120 and 240 mm² + 3 FO 50000 m: Overhead Lines: 50000m 17800 m: OPGW 19700 m: ACS</p> <p>Including all relevant cable accessories for all types of cables and overhead lines.</p>

Client	Petróleo Brasileiro S.A
End user/Project	Petróleo Brasileiro S.A
Country	Brazil
Project	Bidinho
Year	2001
Location/Field	Brazil
Type	Umbilical
Length (m)	24500
Depth (m)	2000
Description	Electro-Hydraulic Umbilical

Client	Shell
End user/Project	
Country	United States Of America
Project	Crosby
Year	2001
Location/Field	Gulf of Mexico
Type	Umbilical
Length (m)	15800
Depth (m)	1341
Description	Electro-hydraulic umbilical

Client	Shell US
End user/Project	BP NaKika
Country	USA
Project	Coloumb
Year	2001
Location/Field	NaKika Platform, Gulf of Mexico
Type	Umbilical
Length (m)	
Depth (m)	2316
Description	Coloumb Dynamic/Static Steel tube umbilical comprises of 4 off 1.25", 8 off 5/8" tubes from SEAcad Inc. and 3 off electrical quads. All tubes 10000 psi rated.

Client	Statoil
End user/Project	Statoil
Country	Norway
Project	Huldra
Year	2001
Location/Field	Huldra, North Sea
Type	Direct heating
Length (m)	16000
Depth (m)	175
Description	Direct Electric Heating of one flowline. 16 km in length. Total cable lengths: 16 km pigback cable, 260 m DEH riser cable, 150 m catenary cable (Veslefrikk A-B)

Client	Stolt Offshore (France)
End user/Project	Shell
Country	Nigeria
Project	Shell EA
Year	2001
Location/Field	Shell EA Field
Type	Interplatform
Length (m)	18000
Depth (m)	30
Description	Static Power and Optical Submarine Cable 17 kV 3x25m ² XLPE insulated with 3 Fibre Optic elements. Including all cable accessories for pull-in, hand-off, repair and termination. Nexans offshore termination assembly and testing.

Client	Aker Maritime
End user/Project	Saga
Country	Norway
Project	Snorre TLP-B
Year	2000
Location/Field	North Sea
Type	Interplatform
Length (m)	11400
Depth (m)	310
Description	Dynamic / Static Power / Communication cable 36kV 3x240 mm2 XLPE insulated.

Client	Amerada Hess
End user/Project	-
Country	United States Of America
Project	Conger
Year	2000
Location/Field	Gulf of Mexico
Type	Umbilical
Length (m)	8500
Depth (m)	440
Description	Electro-hydraulic umbilical

Client	Kongsberg Offshore
End user/Project	Statoil
Country	Norway
Project	Sygna
Year	2000
Location/Field	North Sea
Type	Umbilical
Length (m)	
Depth (m)	450
Description	

Client Petróleo Brasileiro S.A. (Petrobras)
 End user/Project Petróleo Brasileiro S.A. (Petrobras)
 Country Brasil
 Project Roncador
 Year 2000
 Location/Field Brazil
Type Umbilical
Length (m) 23500
Depth (m) 2000
Description Electro-hydraulic umbilical

Client Shell
 End user/Project
 Country
 Project F 23 SW Field
 Year 2000
 Location/Field South China Sea
Type Umbilical
Length (m) 8400
Depth (m) 85
Description Electro-hydraulic umbilical

Client Statoil
 End user/Project Statoil
 Country Norway
 Project Åsgard
 Year 2000
 Location/Field Åsgard Field, North Sea
Type Direct heating
Length (m)
Depth (m) 320
Description Direct Electric Heating of six flowlines, each of 6 - 9 km length. Total cable lengths: 44 km piggyback cable, 12x900 m armoured feeder cable, 3x600 m DEH riser cable.

Client	ETPM
End user/Project	ELF Congo
Country	Congo
Project	Tchibeli
Year	1999
Location/Field	Gulf of Congo
Type	Interplatform
Length (m)	41600
Depth (m)	0
Description	Engineering, procurement, construction, and production of interplatform cables and accessories. One 12.6 km 36 kV 3x50mm ² static cable and one 29 km 36 kV 3x120mm ² dynamic cable install at ELF Nkossa barae. Installation supervision, termination assembly and offshore testing executed by Alcatel Kabel.

Client	Petróleo Brasileiro S.A. (Petrobras)
End user/Project	Petróleo Brasileiro S.A. (Petrobras)
Country	Brasil
Project	Roncador
Year	1999
Location/Field	Brazil
Type	Umbilical
Length (m)	12500
Depth (m)	2000
Description	Electro-hydraulic umbilical.

Client	Shell Deepwater Development Inc.
End user/Project	Shell Deepwater Development Inc.
Country	United States Of America
Project	Macaroni
Year	1999
Location/Field	The Macaroni Field with tie back to Auger TLP- GoM
Type	Umbilical
Length (m)	20400
Depth (m)	1126
Description	Engineering, procurement, manufacture and testing of electro-hydraulic umbilical with zinc coated carbon steel tubes. Umbilical length is 20.5 km (18.9 km static and 1.5 km dynamic). Max water depth is 1126 m.

Client	Shell Deepwater Development Inc.
End user/Project	Shell Deepwater Development Inc.
Country	
Project	Europa
Year	1999
Location/Field	The Europa Field with tie back to Mars TLP-GoM
Type	Umbilical
Length (m)	30500
Depth (m)	1213
Description	Engineering, procurement, manufacture and testing of electro-hydraulic umbilical with SD tubes. Umbilical length is 30,5 km (28,9 km static and 1,6 km dynamic). Max water depth is 1213 m.
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Client	Texaco Exploration and Production Inc.
End user/Project	Texaco Exploration and Production Inc.
Country	United States Of America
Project	Gemini
Year	1999
Location/Field	Gemini Field with tie back to VK900 platform - GoM
Type	Umbilical
Length (m)	45000
Depth (m)	1034
Description	Engineering, procurement, manufacture and testing of electro-hydraulic umbilical with SD tubes. Umbilical length is 44,1 km at maximum water depth of 1034 m.
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Client	BP Exploration
End user/Project	BP Exploration
Country	United States Of America
Project	Troika
Year	1998
Location/Field	Troika Development, Gulf of Mexico
Type	Umbilical
Length (m)	50000
Depth (m)	814
Description	The scope of supply is engineering, manufacture, testing, load out and transportation of (i) 25.000 mtr continuous length hydraulic control / chemical injection umbilical and (ii) 25.000 mtr electrical power/communication umbilical for the Troika Development. The umbilicals will run between the Shell operated Bullwinkle platform at 412 mtr water depth to a subsea manifold at 814 mtr sized for 8 wells. The hydraulic umbilical will comprise of 1" ID annulus center tube, 4x1/2" ID tubes and 10x3/4" ID tubes. All tubes rated for 10.000 psi. The umbilical will have an outer PE sheath. The electrical umbilical will have 1xsignalling quad (4 mm ²) and 8xpower conductors (4x4 mm ² and 4x10mm ²). Umbilicals will be transported and installed with C/S Skagerrak.

Client	Brown & Root Energy Services AS
End user/Project	Norsk Hydro
Country	Norway
Project	Troll Olje
Year	1998
Location/Field	Troll Olje Gas Province
Type	Umbilical
Length (m)	7600
Depth (m)	330
Description	Engineering, procurement, manufacture and testing of electro-hydraulic umbilicals with an integrated service line of 2". Umbilical lengths to be delivered are 4,600 mtr and 3,000 mtr respectively.

Client	Kongsberg Offshore AS
End user/Project	Statoil
Country	Norway
Project	Heidrun
Year	1998
Location/Field	The Heidrun Nord Field, North Sea
Type	Umbilical
Length (m)	10300
Depth (m)	350
Description	Engineering, procurement, manufacture and testing of electro-hydraulic umbilicals with an integrated service line of 2". Umbilical lengths to be delivered are 9,2 km in three lengths.

Client	Shell Exploration and Production
End user/Project	Shell Exploration and Production
Country	United Kingdom
Project	Osprey
Year	1998
Location/Field	The Osprey Field, North Sea
Type	Umbilical
Length (m)	13800
Depth (m)	130
Description	Engineering, procurement, manufacture and testing of electro-hydraulic umbilicals with SD steel tubes. Umbilical lengths delivered were 6400 meters, 6980 meters and a 400 meter riser umbilical.

Client	Dectra Sendirian Behrad
End user/Project	Esso Malaysia
Country	Malaysia
Project	Seligi-F/Terrengganu
Year	1997
Location/Field	Offshore West Malaysia
Type	Interplatform
Length (m)	4830
Depth (m)	75
Description	<p>Engineering, procurement, construction, transportation and installation of interplatform cable between Seliai-D and Seliai-F platforms. This combined armoured submarine cable comprises of</p> <ul style="list-style-type: none"> (i) 24 kV power element (3x70mm² XLPE) (ii) communication/control (12 pairs, 1.5mm²), and (iii) fiber optic element (12 fibers). <p>The total length is 4830 mtr and installation depth is 75 mtr.</p>

Client	Kongsberg Offshore AS
End user/Project	Statoil
Country	Norway
Project	Norne
Year	1996
Location/Field	Norne Development, North Sea
Type	Umbilical
Length (m)	9100
Depth (m)	380
Description	<p>Engineering, procurement, manufacture and testing of 3x2000mtr and 2x200mtr Static Large Center Tube Umbilical (LCU). The LCU's have a center tube with diameter of 2.5" ID, surrounded by 11x1/2" tubes and 6x 2.5mm² quads.</p> <p>The supply also includes 3x900 m Dynamic LCU Steel tube umbilical with center tube diameter 1.2" ID, surrounded by 11x1/2" tubes and 6x 2.5mm² quads.</p>

Client	Kongsberg Offshore AS
End user/Project	Statoil
Country	Norway
Project	Yme
Year	1996
Location/Field	Yme Beta Øst - Yme Gama, North Sea
Type	Umbilical
Length (m)	12500
Depth (m)	90
Description	<p>Engineering, procurement, manufacture and testing of 1 x 12.5 km Static Steel Tube Umbilical. The umbilical consists of 8 x 1/2" tubes (7500 psi) around a centre cable consisting of 4 pairs, 4 mm².</p> <p>The delivery also includes one subsea termination, one Bend Restrictor and one platform hang-off.</p>

Client	Phillips Petroleum Company Norway
End user/Project	Phillips Petroleum Company Norway
Country	Norway
Project	Ekofisk
Year	1996
Location/Field	Ekofisk 2/4 FTP – 2/4A
Type	Interplatform
Length (m)	3200
Depth (m)	72
Description	<p>Engineering, manufacture and installation of 3.2 km composite interplatform cable. The cable will be installed in a decommissioned oil pipeline connecting Ekofisk 2/4 A and Ekofisk 2/4 FTP platforms. The combined cable consists of 12 kV power elements (3x25mm²) and fibre optic element (8 fibres)</p> <p>Manufacturing and testing will be at the Halden factory.</p> <p>Installation performed with a winch pulling the cable through the pipeline.</p>

Client	Shell
End user/Project	Shell
Country	United States Of America
Project	Mars
Year	1996
Location/Field	Mars Development, Gulf of Mexico
Type	Umbilical
Length (m)	1700
Depth (m)	904
Description	<p>Engineering, procurement, manufacture and testing of 1700mtr dynamic steel tube umbilical for installation from floating production vessel to subsea template located at 904mtr water depth. The umbilical comprises of 9x5/8 OD, polyethylene sheathed super duplex tubes (10,000psi wp) and 4 signal pairs. Scope of supply includes development of a prototype umbilical which is subject to a test programme simulating 105 years in dynamic service.</p>

Client	Shell
End user/Project	Shell
Country	United States Of America
Project	Mensa
Year	1996
Location/Field	Mensa Development, Gulf of Mexico
Type	Umbilical
Length (m)	129200
Depth (m)	1630
Description	<p>The scope of supply is engineering, manufacture, testing, reeling and load out of 129,200 mtr electrical umbilical for the Mensa project.</p> <p>The main umbilical length is 104,000 mtr which runs between the West Delta platform at 113 mtr water depth to a subsea manifold at 1,630 mtr. From the manifold there are three 8,000 mtr pieces to the gas wells.</p> <p>The umbilical comprises of 10x6mm² (1xsignal quad/500V & 2xpower triad/1.5kVAC). The umbilical is armoured with two layers of zinc coated mild steel wires with Bitumen compound and PP yarn as</p>

outer protection.

Client	Elf Petroleum Norge As
End user/Project	
Country	Norway
Project	Frøy
Year	1995
Location/Field	Frøy Field, North Sea
Type	Interplatform
Length (m)	32000
Depth (m)	120
Description	Engineering, procurement, construction and installation of interplatform cable between the Frøy and Friaa (TCP2) platforms. The total length is 32 km. This combined cable comprises of 24 kV power phases and 16 optical fibres and was installed with C/S Skaerrak and protected with the Capiet 500 trenching equipment.

Client	McDermott Engineering (Europe) Ltd.
End user/Project	BP Exploration Operation Company Ltd (UK)
Country	United Kingdom
Project	Foinaven
Year	1995
Location/Field	Foinaven, West of Shetland
Type	Umbilical
Length (m)	22800
Depth (m)	475
Description	Engineering, procurement, manufacture, testing of the following scope of supply: (i) 3x900 mtr. dynamic thermoplastic production umbilicals (ii) 3x900 mtr. Dynamic thermoplastic gas lift umbilicals (iii) 2x4,000 mtr. + 1x2,000 mtr. static steel tube production umbilicals and (iv) 1x4,700 mtr. + 1x2,700 mtr. static steel tube water injection umbilicals. All manufacture performed by Alcatel Halden Factory.

Client	Norske Shell AS
End user/Project	Norske Shell AS
Country	Norway
Project	Troll
Year	1995
Location/Field	Troll Field, North Sea
Type	Land-platform
Length (m)	67000
Depth (m)	350
Description	Engineering, procurement, construction and installation of power and signal cable between the onshore terminal at Kolsnes, Western Norway, and Troll platform. This includes onshore cables from onshore terminal to shore, subsea cable from shore to platform and topside cables from top of J-tube to termination rooms on platform. The onshore and topside cables are single core power cables and fiber optical cable and the subsea cable is a three core power cable with a fibre optic element. The XLPE insulated power cable has a voltage of 52 kV and the crosssection is 240 mm ² and the fibre optic cable has 24 fibres. The subsea cable is 67000 meter long and shall be installed at 350 meter water depth. The subsea cable shall be installed as one length by Alcatel using laying vessel C/S Skagerrak and shall

be trenched by Alcatel's trenching machine. Capjet

Client	Shell
End user/Project	Shell
Country	United States Of America
Project	Popeye
Year	1995
Location/Field	Popeye Development, Gulf of Mexico
Type	Umbilical
Length (m)	39000
Depth (m)	630
Description	Engineering, procurement, manufacture, testing and transportation of hydraulic umbilical from Cougar platform to subsea manifold/template. Total length is 39 km in one continuous length. The hydraulic bundle is built up with 7 stranded Super Duplex steel tubes (ID ½", 10000 psi). The umbilical has 3 mm polyethylene outer sheath.

Client	Statoil
End user/Project	Statoil
Country	Norway
Project	Sleipner West
Year	1995
Location/Field	Sleipner West Field
Type	Interplatform
Length (m)	12500
Depth (m)	120
Description	Engineering, manufacture and installation of 12.5 km composite submarine cable connecting Sleipner B to Sleipner A. The combined 24 kV power and signal cable comprises of 300mm ² Cu cores and 16 optical fibres. Manufacturing and testing will be at the Halden facility. Installation with C/S Skagerrak and trenching with Capjet 500.

Client	TL Offshore Sdn Bhd
End user/Project	Shell Sarawak
Country	Malaysia
Project	Sarawak
Year	1995
Location/Field	Offshore East Malaysia (Sarawak)
Type	Interplatform
Length (m)	4700
Depth (m)	75
Description	Engineering, procurement, construction and installation of interplatform cable between E11R-A and E11R-B platforms. This combined armoured submarine cable comprises of (i) 6.6 kV power element (3x25mm ² XLPE), (ii) telecom element (2 pairs, Ø1.2mm), (iii) control element (4x4mm ²) and (iv) fiber optic element (8 fibers). The total length is 4700 mtr and water depth is 75mtr.

Client	Kongsberg Offshore AS
End user/Project	Conoco
Country	Norway
Project	Heidrun
Year	1994
Location/Field	Heidrun Field/Water Injection, North Sea
Type	Umbilical
Length (m)	15000
Depth (m)	350
Description	Engineering and manufacture of 15 km electrohydraulic umbilicals in three lengths. The umbilical design includes 10x1/2" ID steel tubes and 7x2.5 mm ² quads electric conductors. Welding and Non Destructive Testing is performed by Alcatel Kabel at the factory in Halden. The design is the same as for Statfjord Satellites in order to achieve standardization.

Client	Sandvik South East Asia Pte. Ltd.
End user/Project	Shell Sarawak Sdn. Bhd.
Country	Malaysia
Project	Sarawak
Year	1994
Location/Field	Offshore East Malaysia (Sarawak)
Type	Umbilical
Length (m)	
Depth (m)	0
Description	Engineering, manufacture and testing of 1125 m 2-tube Flooding Control Umbilical and 620 mtr 3.tube. Flooding Control Umbilical. Stainless tubing (316L) with OD 3/8 and w.t. 0.049" were laid up with a High Density Polyethylene outer sheath.

Client	Kongsberg Offshore AS
End user/Project	Statoil
Country	Norway
Project	Statfjord and Sleipner
Year	1993
Location/Field	Statfjord and Sleipner, North Sea
Type	Umbilical
Length (m)	73000
Depth (m)	145
Description	Engineering and manufacture of combined electric and hydraulic umbilical to 6 subsea templates. Total length is 73 km divided into 10 sublengths (longest length is 19 km). The electric core comprises of stranded 2.5 mm ² copper conductors which is PE-insulated and forming 14 pairs diagonally laid up. Multiplexing is used to transmit power and signal in the same conductor. The hydraulic element is built up with 10 stranded Super Duplex steel tubes (1/2" id, 7500 psi). The fluid lines include three for hydraulic supply, four for scale inhibitor supply, two for corrosion inhibitor and one for annulus bleed. The umbilical is armoured with two layers of zinc coated mild steel wires and torque balanced. All cable lengths are without splices.

Client	Kongsberg Offshore AS
End user/Project	Shell
Country	Norway
Project	Draugen
Year	1993
Location/Field	Draugen, North Sea
Type	Umbilical
Length (m)	41500
Depth (m)	260
Description	Engineering and manufacture of combined electric and hydraulic umbilical to 5 subsea stations on the Draugen Field. Total length is 41.5 km divided into 7 sub-lengths (3 Template Umbilicals and 4 Satellite Umbilicals). The longest length is 20 km. The Template Umbilical is laid up with 3 quads 10mm ² power conductors, 3 quads 1.5 mm ² signal conductors, 4x1/2" hose (7500psi) and 3x5/8" hose (3000 psi). The Satellite Umbilical is laid up with 2 pairs 10 mm ² power conductors, 2 pairs 1.5 mm ² signal conductors, 2x3/8" hose (7500 psi), 2x3/4" hose (5000psi), 1x3.8" hose (3000psi) and 1x1/2" hose (3000psi). The fluid lines (thermoplastic) are for chemical injection, annulus bleed, high & medium hydraulic supply and return. The umbilical is armoured with two layers of zinc coated mild steel wires and torque balanced.

Client	Kongsberg Offshore AS
End user/Project	Shell
Country	Norway
Project	Draugen
Year	1992
Location/Field	Draugen, North Sea
Type	Umbilical
Length (m)	2400
Depth (m)	260
Description	Complete Workover System for the Draugen Field This Workover System comprises of 3 different umbilicals, all including winch and end connections. (a) The Heavy Umbilical (2x400 meters) is laid up with 8x1/4" hose (1000psi), 1x3/4" hose (5000psi), 2x1/4" hose (5000psi). (b) The Light Umbilical (2x400 meters) is laid up with 8x1/4" hose (5000 psi) and 4x1/4" hose (9800 psi). c) The Surveillance Umbilical (2x400meter) includes a signal element of 12 pairs 0.35mm ² and 3 quads 0.5mm ² and a power element of 22 conductors 1.5mm ² .

Client	Philips Petroleum Company
End user/Project	
Country	Norway
Project	Embla
Year	1992
Location/Field	Embla Field, North Sea
Type	Interplatform
Length (m)	6000
Depth (m)	72
Description	Engineering, manufacturing and installation of 6 km composite interplatform cable between platforms Eldfisk and Embla. The cable design is a XLPE insulated 24 kV 3x50 mm ² with a fiberoptic element

containing 8 fibres. The cable was installed in 1992 using C/S Skagerrak and trenched by Capiet 500.

Client	Saudi Aramco
End user/Project	Saudi Aramco
Country	Saudi Arabia
Project	Ras Tanura
Year	1992
Location/Field	Saudi Arabia
Type	Interplatform
Length (m)	4500
Depth (m)	0
Description	Static power/communication cable 15 kV 3x35 mm ² XLPE insulated.

Client	Saudi Aramco
End user/Project	
Country	Saudi Arabia
Project	Juayman
Year	1992
Location/Field	Juayman, Saudi Arabia
Type	Interplatform
Length (m)	7000
Depth (m)	0
Description	Engineering and manufacturing of 7 km interplatform cable. The cable is 15 kV XLPE 3x1x50mm ² copper conductor and fiberoptics (24 fibers).

Client	Aker Vetco A/S
End user/Project	Shell
Country	Norway
Project	TOGI
Year	1990
Location/Field	Troll-Oseberg (TOGI), North Sea
Type	Umbilical
Length (m)	
Depth (m)	305
Description	Electrical umbilical for the Troll Oseberg Gas Injection project. The subsea systems on Troll are remotely operated from Oseberg by the electrical umbilical. Distance between Oseberg and Troll is 48 km. Depth at Troll 305 m and Oseberg 100 m. The electrical umbilical is built up by stranded 10 mm ² conductors which are PE-insulated and form twelve pairs diagonally laid up in 6 quads around a center element. Petroleum Jelly is filled within the interstices within a common PE-sheath. The umbilical is armoured with two layers of zinc coated mild steel wires and torque balances. Bitumen compound and pp-varn is serving as outer protection. Multiplexing is used to transmit power and signal in the same conductor.

Client	Elf Aquitaine
End user/Project	
Country	Norway
Project	East Frigg
Year	1989
Location/Field	East Frigg, North Sea
Type	Repair
Length (m)	
Depth (m)	0
Description	Repair of electrical umbilical after mechanical damage. Use of Alcatel STK cable repair equipment onboard diving support vessel.

Client	Statoil
End user/Project	Statoil
Country	Norway
Project	Veslefrikk
Year	1989
Location/Field	North Sea
Type	Interplatform
Length (m)	500
Depth (m)	175
Description	Deep Catenary Cables: Engineering and manufacture of three composite cables including hand off system and emergency cutting and release system. Composite cable: TFVE 12kV 3x300mm ² copper conductor + two fiberoptics (each 16 fibres) + signal copper cable (23 guards) + two power cables 1kV 16mm ² copper.

Client	STC
End user/Project	Amarada Hess
Country	United Kingdom
Project	Rob Roy
Year	1989
Location/Field	Rob Roy Field
Type	Umbilical
Length (m)	2000
Depth (m)	0
Description	Manufacture of 2 km umbilical with terminations 3x10mm ² power cores 3x2.5mm ² screened signal pairs. 4x3/8" 5000 psi hydraulic hose Double layer, torsion free steel armour

Client	Elf Aquitaine
End user/Project	
Country	Norway
Project	East Frigg
Year	1988
Location/Field	East Frigg, North Sea
Type	Umbilical
Length (m)	46000
Depth (m)	100
Description	Engineering and manufacture of 3 control cables, platform to subsea station (21+21+4 km) with terminations, weak links and bend restrictors. Installation and testing of topside hand-off and platform splice. Cable design: EFVD 7x10mm ² 950 V power conductors, 3 signal quads.

Client	Statoil
End user/Project	Gullfaks B Project
Country	Norway
Project	Gullfaks A-B
Year	1988
Location/Field	Gullfaks A Field - Gullfaks B Field, North Sea
Type	Interplatform
Length (m)	
Depth (m)	.
Description	Engineering, manufacture and installation of two composite cables between Gullfaks A and Gullfaks B Platforms, XLPE 24kV 3x300 mm ² copper conductor and fiberoptics (8 fibers). The cables were installed in 1987 by Alcatel STK including trenching and dumped rock protection.

Client	Statoil
End user/Project	Statoil
Country	Norway
Project	Gullfaks A
Year	1986
Location/Field	Gullfaks A Field
Type	Umbilical
Length (m)	
Depth (m)	.
Description	Electrical and hydraulic cables to four subsea wells. Distance from 1.9 to 2.8 km from Gullfaks A Platform. One electric and one hydraulic cable to each well. Electric umbilical: Two power cables and two signal cables laid up in a double armoured polyethylene insulated cable. Power cable consists of three copper conductors 10mm ² , the signal cables are one pair 1.5 mm ² , copper 500V. The armouring wires are made of steel, all insulated. Special marking on outer sheath. All cable lengths are without splices. Hydraulic umbilical: Consists of 12x3/8" and 3x1/2" hoses laid up in a double armoured cable. Special weight elements are included in the armour. The hoses are made of Hvtrel with Kevlar braiding. All cable lengths have one field splice.

Client	Otter Group
End user/Project	Norske Shell, BP, Chevron, Statoil and Total Marine
Country	Norway
Project	Trondheimsfjorden
Year	1985
Location/Field	Trondheimsfjorden
Type	Umbilical
Length (m)	
Depth (m)	0
Description	Umbilical with hydraulically controlled fiber optic connector for monitoring and control of subsea production units.

Client	Elf Aquitaine
End user/Project	
Country	
Project	North East Frigg
Year	1983
Location/Field	North East Frigg - TCP2, North Sea
Type	Interplatform
Length (m)	20000
Depth (m)	100
Description	Manufacture and installation of 20 km composite interplatform cable XLPE 12 kV 3x25 mm ² + Signal Quad. The cable was installed in a free hanging catenary from seabed pontoon to an articulated column.

Client	Texaco Inc.
End user/Project	
Country	United States Of America
Project	Santa Barbara Channel
Year	1981
Location/Field	Santa Barbara Channel, California, USA
Type	Interplatform
Length (m)	6000
Depth (m)	90
Description	Manufacture of a 3-core 34,5 kV XLPE cable, 70 mm ² copper conductor for installation between two platforms offshore from Carpiteria. Route length approx. 6 km, max. depth 90 m.
