



DRIVEN BY POSSIBILITY™

GATES OIL & GAS

QUICK REFERENCE GUIDE



COMPANY PROFILE

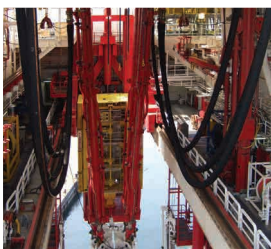
GATES OIL & GAS, A GLOBAL COMPANY SERVING THE ENERGY MARKET

Gates Engineering & Services UK, part of Gates Global Oil & Gas specialise in the design, manufacture and supply of hoses to the Energy Exploration, Extraction and Production industries. Our team of personnel have extensive experience and knowledge of the design, selection, supply, installation, operation and servicing of flexible hoses for all applications.

We provide a comprehensive range of flexible hoses and couplings for fluid transfer. Our modern international facilities manufacture low, medium and high pressure hose assemblies, including speciality long-length and fire-rated hoses, where applicable DNV and ABS Type Approvals are held. Our engineering team will support the client design team during all phases of engineering from FEED studies through to installation and lifetime service support ensuring the hoses maintain excellent performance and long life.

Gates provides high quality and reliable service to our customers, to an industry where quality and delivery are paramount. We strive for excellence in the provision of flexible hoses and are committed to building long-term relationships with our customers.

PRODUCTS AND SERVICES



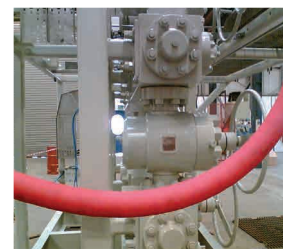
**HIGH PRESSURE
DRILLING HOSES**



DRAG CHAIN HOSES



**FIRE RESISTANT
HYDRAULIC BOP
HOSES**



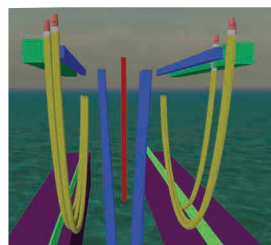
**FIREWATER MAINS
HOSE**



**INDUSTRIAL AND RIG
SUPPLY HOSES**



**SPECIALTY
HEAT-TRACE HOSES**



**HOSE CONFIGURATION
AND GLOBAL
INTERFACE ANALYSIS**



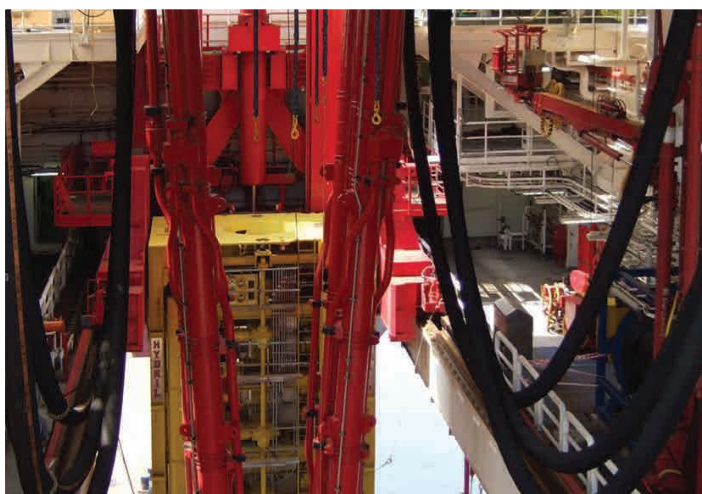
**HOSE MANAGEMENT &
INTEGRITY SERVICES**

HIGH PRESSURE DRILLING HOSE

ROTARY DRILLING AND VIBRATOR, MUD DELIVERY, AND CEMENT HOSES

Gates manufactures bonded rubber hoses with spiral steel cable reinforcement and one-piece bonded in end couplings. The hoses are mandrel built in continuous lengths up to 62 metres and fully vulcanised to form a fully bonded hose assembly offering excellent flexibility. Our product range covers pressures up to 15,000psi and bore size up to 8".

Applications include Rotary Drilling, Vibrator, Mud, Cement, Hydraulic, Tensioner and Motion Compensator services. Specialist variations include integral fire resistance to Lloyds OD1000/499 at 700 °C for 30 minutes, and embedded steel helix wire protection.



STANDARDS:

- API 7K Rotary Drilling & Mud hoses Type Approved to DNV-OS-E101 & ABS CDS
- API 7K Cement Hoses Type Approved to DNV-OS-E101 & ABS CDS
- API 7K Hydraulic Tensioner Hoses Type Approved to DNV-OS-E101 & ABS CDS
- FSL 0, FSL 1 & FSL 2
- Temperature Range I: -20 °C to +82 °C (-4 °F to +180 °F)
- Temperature Range II: -20 °C to +100 °C (-4 °F to +212 °F)
- Temperature Range III: -20 °C to +121 °C (-4 °F to +250 °F)

HIGH PRESSURE DRILLING HOSE

ROTARY DRILLING AND VIBRATOR, MUD DELIVERY, AND CEMENT HOSES

SPECIFICATIONS:

ID		OD	API GRADE	WORKING PRESSURE	TEST PRESSURE	SAFETY FACTOR	MIN BURST PRESSURE	MBR OPERATIONAL	WEIGHT	REMARK
inch	mm	mm		psi	psi		psi	mtr	kg	
2"	51	91	D	5,000	7,500	2.5	12,500	1.0	15	
		119		10,000	15,000	2.25	22,500	1.2	27	Cement
		119		15,000	22,500	2.25	33,750	1.4	27	Cement
2.5"	63.5	103	C	4,000	6,000	2.5	10,000	0.6	15	
		117	D	5,000	7,500	2.5	12,500	0.9	12	
		117	E	7,500	11,250	2.5	18,750	1.0	20	
		117		10,000	15,000	2.25	22,500	1.2	20	Cement
		150		15,000	22,500	2.25	33,750	1.5	48	Cement
3"	76	120	C	4,000	6,000	2.5	10,000	0.7	18	
		133	D	5,000	7,500	2.5	12,500	1.2	24	
		142	E	7,500	11,250	2.5	18,750	1.2	39	
		142		10,000	15,000	2.25	22,500	1.5	39	Cement
		180		15,000	22,500	2.25	33,750	1.6	79	Cement
3.5"	89	134	C	4,000	6,000	2.5	10,000	0.9	20	
		134	D	5,000	7,500	2.5	12,500	1.4	20	
		152	E	7,500	11,250	2.5	18,750	1.4	39	
4"	102	160	C	4,000	6,000	2.5	10,000	1.4	27	
		168	D	5,000	7,500	2.5	12,500	1.4	44	
		187	E	7,500	11,250	2.5	18,750	1.5	52	
5"	127	191	D	5,000	7,500	2.5	12,500	1.3	47	
		211	E	7,500	11,250	2.5	18,750	1.8	72	

Note: MBR is taken to the centre-line of each hose

INDUSTRIAL & UTILITY HOSE

Our global product offering from stocking locations offers complete range of hoses for Industrial and Utility services for the offshore Oil & Gas Exploration and Production industry. Our hoses offer excellent performance in the harsh offshore environment. End fittings are precision machined on in-house CNC equipment. Every hose is hydrostatically tested and provided with full certification package.



HOSE RANGE

CODE	PRODUCTS	WORKING PRESSURE	
		bar	psi
AF20S	Air Hose	20	290
AS30/40S	Air Hose	30/40	435/580
BP10H	Bulk Production Suction & Delivery Hose	10	145
BP10S	Bulk Production Delivery Hose	10	145
BP20H	Bulk Production Suction & Delivery Hose	20	290
BP20S	Bulk Production Delivery Hose	20	290
CE16H	Chemical Suction & Delivery Hose	16	232
CU16H	Chemical Suction & Delivery Hose	16	232
CX16H	Chemical Suction & Delivery Hose	16	232
F010H	Oil Suction & Delivery Hose	10	145
F010S	Oil Delivery Hose	10	145
WT20S	Potable Water Delivery Hose	20	290

CODE	PRODUCTS	WORKING PRESSURE	
		bar	psi
F020H	Oil Suction & Delivery Hose	20	290
F020S	Oil Delivery Hose	20	290
F040H	Oil Suction & Delivery Hose	40	580
F040S	Oil Delivery Hose	40	580
F070S	Oil Delivery Hose	70	1015
GP20S	General Purpose Hose	20	290
NG20S	Nitrogen Delivery Hose	20	290
WS175	Steam Hose	17	246
WT10H	Potable Water Suction & Delivery Hose	10	145
WT10S	Potable Water Delivery Hose	10	145
WT20H	Potable Water Suction & Delivery Hose	20	290

FLAMESHIELD HOSE

Gates Engineering & Services UK LTD Flameshield hose range is designed for emergency situations where operation must continue in fire conditions. Flameshield hoses are a bonded, multi-layer, light-weight construction, that provides maximum fire resistance without additional shielding material.

Flameshield hoses have been fire tested under severe test conditions in accordance with the industries most stringent requirements:

- **FLAMESHIELD 5000** API 16D at 700°C for 5 mins
- **FLAMESHIELD 300** Lloyds OD1000/499 at 700°C for 30 mins & ABS Rules at 800°C for 30 mins



FLAMESHIELD 5000 BOP PREVENTER HYDRAULIC HOSE

When primary well control has been lost, it becomes the function of the BOP to operate and seal the well. All equipment must be able to operate during fire exposure conditions. Flameshield 5000 is a hydraulic control hose that operates at 5,000psi while exposed directly to fire for a minimum of 5 minutes ensuring all well control operations can be operated in an emergency situation.



FLAMESHIELD 300 SEAWATER DELIVERY HOSE

Utilised in deluge systems offshore installations, the hose is rated and tested to operate in a fire for a minimum of 30 minutes affording and supporting emergency evacuation procedures.

Hose liner can also be provided for hydrocarbon services. Contact our sales team to advise any specific service requirements.

FLAMESHIELD HOSE

FLAMESHIELD 5000 BLOWOUT PREVENTER HYDRAULIC HOSE

TUBE: Black Nitrile Rubber
REINFORCEMENT: High Tensile Steel Wire Spirals
COVER: Red CR Rubber with Embedded Fire Resistant Layers, Abrasion, Ozone, Weather, Heat & Oil Resistant
TEMPERATURE: -40°C to +121°C



ID		OD	WORKING PRESSURE		MIN BURST PRESSURE		MBR	WEIGHT
inch	mm	mm	bar	psi	bar	psi	mm	kg/m
1/4	6.5	20	350	5,000	1,400	20,000	110	0.7
3/8	9.5	24	350	5,000	1,400	20,000	150	0.8
1/2	12.7	30	350	5,000	1,400	20,000	250	1.2
3/4	19.1	37	350	5,000	1,400	20,000	330	1.9
1	25.4	44	350	5,000	1,400	20,000	375	2.6
1-1/4	31.7	58	350	5,000	1,400	20,000	460	4.2
1-1/2	38.1	63	350	5,000	1,400	20,000	520	5.0
2	50.8	77	350	5,000	1,400	20,000	700	7.5

FLAMESHIELD 300 SEAWATER DELIVERY HOSE

TUBE: Black Nitrile Rubber
REINFORCEMENT: Steel Braided Layers & Anti-static Copper Wire, Steel Helix Wire on 6" ID and above
COVER: Red CR Rubber, Abrasion, Ozone, Weather, Heat & Oil Resistant
TEMPERATURE: -30°C to +100°C



ID		OD	WORKING PRESSURE		MIN BURST PRESSURE		MBR	WEIGHT
inch	mm	mm	bar	psi	bar	psi	mm	kg/m
1-1/2	38.1	74	21	305	104	1,500	302	3.8
2	51	79	21	305	104	1,500	400	4.8
3	76	107	21	305	104	1,500	500	7.0
4	102	134	21	305	104	1,500	600	7.5
5	127	156	21	305	104	1,500	1,030	9.5
6	152	184	21	305	104	1,500	1,140	14.0
8	203	242	21	305	104	1,500	1,250	22.0
10	254	295	21	305	84	1,218	1,600	25.0



DRIVEN BY POSSIBILITY™

For technical support, please contact Gates

AMERICAS

GATES E&S - US & CANADA

7603 Prairie Oak Drive
Suite 190, Houston, TX 77086
T. 281 602 4100

GATES E&S - INTERAMERICA

15751 S.W. 41st Street, Suite 100
Davie, FL 33331,
T. 954 306 4364

GATES - MEXICO

Lerma Hose Plant
Blvd. Aeropuerto Miguel Aleman No. 164
52000 Lerma, Edo. de Mexico, Mexico
T. 52 (72) 2265 5390

GATES E&S - MEXICO

Calle Circuito Tabasco Sur Mza. 2
Lotes 4, 5, 6
Modulo 4 Parque Tabasco Business
Center Carretera Reforma-Dos bocas
Km. 17+920 R/a Pechucalco 2a. Seccion,
Cuanducan, Tabasco. C.P 86690
T. 52 91 4104 1035

GATES E&S - BRAZIL

Rua Florida, 1703 - 11o Andar
Sao Paulo, SP - 04530-001
T. 11 5105 8134

ASIA-PACIFIC

GATES E&S - SINGAPORE

40, Gul Circle, Jurong Industrial Estate
Singapore 629575
T. [65] 686 17322

GATES E&S - DALIAN

Jingang Industrial Park
2#-A in Phase I
99 Mid-Huaihe Road, Postal Code 116600
Dalian Economic & Tech Dev. Zone
Dalian, Liaoning Province, China
T. 86 411 8740 7899

GATES E&S - AUSTRALIA

101 Sheffield Road
Welshpool, WA, 6106
Australia
T. [61] 8 9258 8399

EUROPE

GATES ENGINEERING & SERVICES UK LTD.

Bassington Drive
Bassington Industrial Estate
Cramlington, NE23 8AS
T. [44] 1670 706210
E-mail. Sales_E&S_UK@gates.com

MIDDLE EAST & NORTH AFRICA

MIDDLE EAST AND NORTH AFRICA REGION, HQ:

Gates Engineering & Services
Jebel Ali Free Zone, P. O. Box 61046
Dubai, United Arab Emirates
T. +971 4 886 1414
E-mail. mena@gates.com

BAHRAIN, KUWAIT & QATAR

Gates E & S Bahrain WLL
P O Box. 50240
Hidd, Kingdom of Bahrain
T. +973 17 467 553

SAUDI ARABIA

Gates Engineering & Services LLC
Wasel: 6682 Al Yarmok, Unit No. 88
Al Khobar 34423-4236
Kingdom of Saudi Arabia
T. +966 13 814 1313 / 889 0056

OMAN

Gates Engineering & Services
P. O. Box 68 Postal Code 115
Madinat Sultan Qaboos, Muscat
Sultanate of Oman
T. +968 24 60 2691

EGYPT

Yasser Yousri
M. +201 22 178 8882

