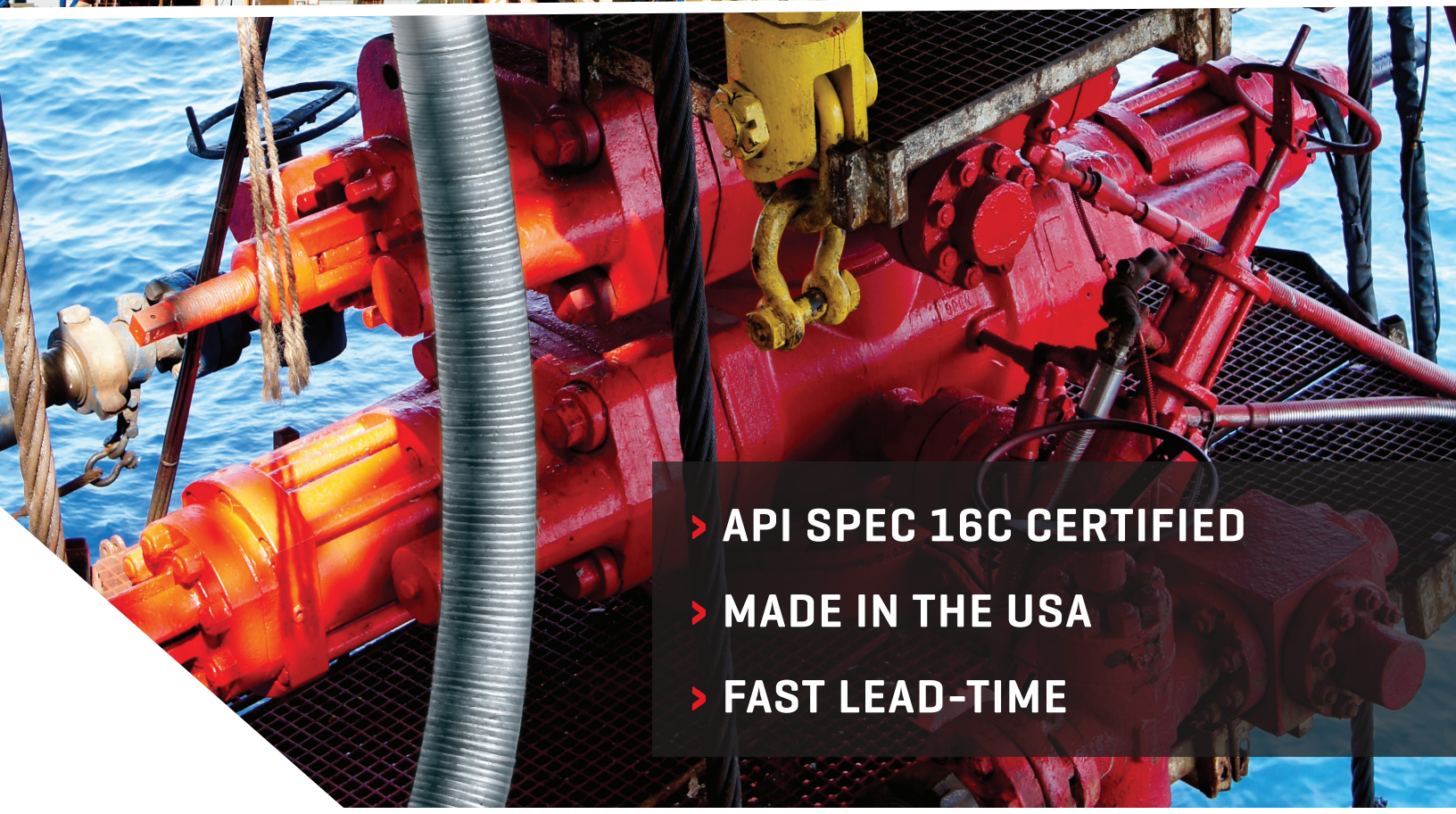
10,000 PSI ASSEMBLIES

BLACK GOLD® XTREME™ 16C CHOKE & KILL HOSE



- API SPEC 16C CERTIFIED
- MADE IN THE USA
- FAST LEAD-TIME

BLACK GOLD® XTREME™ CHOKE & KILL 10,000 PSI HOSE

THE MOST RIGOROUS SPEC IN THE INDUSTRY

API Spec 16C covers all components of a BOP system, and includes sections specifically related to the survivability of choke & kill lines in a catastrophe. A passing result includes no leaking or bursting following exposure to these severe test conditions:

HYDROSTATIC PRESSURE, BENDING & BURST TEST + EXPOSURE TEST + FIRE TEST + HIGH TEMPERATURE EXPOSURE TEST = API SPEC 16C CERTIFICATION

NEW DEMANDS ON BOP SYSTEMS

Deeper wells, directional drilling, and elevated temperatures, require BOP systems that perform at a higher level. Currently, choke & kill hose assemblies that consistently earn API Spec 16C certification are manufactured outside the U.S., and made with built-in couplings that must be special-ordered from the factory, resulting in average delivery lead times of 22 weeks.

DESIGNED FOR TODAY'S DRILLING NEEDS

Gates crimped coupling design, with patented Cable-Trap™ technology, meets the strict performance requirements of API Spec 16C. Unlike built-in fittings, Gates crimped fittings are better designed to meet today's drilling performance needs, including:

- Static and dynamic pressures
- Directional drilling
- Negative pressure pulses
- Elevated mud temperatures

BETTER DESIGN, SHORTER LEAD TIME

Gates Black Gold Xtreme Choke & Kill hose assemblies are rated for 10,000 psi working pressures and designed to meet or exceed the stringent performance requirements of API spec 16C. Incorporating a crimped coupling overcomes the long delivery lead times and inherent performance limitations of competitive hoses. Made in the U.S.A., this hose can be assembled and delivered in a fraction of the time.

GATES CERTIFIED ASSEMBLY PROCESS

All components of Gates Black Gold Xtreme Choke & Kill 10,000 psi hose are made in the U.S.A. and assembled at the Gates Engineering & Services (E&S) North America facility in Corpus Christi, Texas. Every assembly undergoes a one-hour proof pressure test as required by the API Spec 16C certification.

ADDITIONAL CERTIFICATIONS

- API 16C Monogram
- ABS Type Approval
- DNV Type Approval
- NACE MR0175
- ISO 15156

BUILT-IN COUPLINGS

Chemical bond (epoxy)

Typical couplings have 32 components

Legacy technology

Invented before modern drilling methods:

- Vertical Drilling
- Static Pressures
- Moderate Fluid Temperatures
- Simple Fluids
- Low Drilling Pressures
- Low Flow Rates
- Small Hose Sizes

VS

CRIMPED COUPLINGS

Mechanical bond (steel-to-steel crimp)

Gates coupling has 7 components

Modern technology (patent pending)

Invented for modern drilling methods:

- Horizontal Drilling
- Dynamic Pressures
- High Fluid Temperatures
- Complex Fluids
- High Drilling Pressures
- High Flow Rates
- Large Hose Sizes

POTENTIAL CONSEQUENCES OF BOP HOSE FAILURE

Beyond disastrous results, failure of a choke & kill hose on a BOP system causes:

Downtime and loss of production

Endangerment of workers

Environmental spills and clean-up costs

Equipment replacement costs

SPECIFICATIONS

Tube: Synthetic polymer. Black. Resists abrasion, corrosion, oil, drilling muds, methane, and H2S.

Reinforcement: Multiple layers of "close-wound," high tensile plated steel cables, with multiple layers of textile reinforcement under the cover.

Cover: Type C4 (Modified Nitrile). Black, specially compounded Ultrabrasion™ cover is resistant to abrasion, corrosion, cutting, gouging, oil, and weather. Outer armor of 316 Stainless Steel.

Design Factor: 2.25:1

Temperature Range: -4°F to +212°F (-20°C to +100°C).

Survival temperature: 350°F (177°C) for 1 hour per API Spec 16C 10.5.2.

Couplings: Crimped. Couplings will be supplied with your choice of end fittings. (A full range of fitting options are available, including hammer unions, hubs, and flanges.) Per API, the end fitting pressure rating must be equivalent to the pressure rating of the flexible hose. Carbon steel material meets NACE MR0175/ISO 15156. Note: Field welding of fittings to couplings is not recommended.

Optional: Accessories such as safety clamps, hose lift eyes, and collar clamps. Coupling material traceability, letters of conformance, 3rd party witness tests, and NACE certificates are available for an additional fee.

Nominal I.D.		Nominal O.D.		Min. Bend Radius		Hose Weight	
3.0 in	76 mm	5.88 in	149 mm	69.0 in	1750 mm	23.0 lb/ft	10.4 kg/m

Max. Length Of Hose		Max. Working Pressure		Test Pressure		Min. Burst Pressure	
90.0 Ft.	27.4 m	10,000 psi	690 Bar	15,000 psi	1035 Bar	22,500 psi	1550 Bar

HOW TO ORDER

Order all Gates hose products and assemblies through your authorized Gates Distributor. For more information on Gates oilfield products, contact Gates E&S or visit www.gates.com/oilfield.

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