AUTOCHOKE pressure-balanced drilling choke

Provides precise well pressure control for underbalanced and managed pressure drilling

Pressure:
3,000- and 10,000-psi model availability

Temperature:
–20 to 250 degF [–29 to 121 degC]

Applications

- Managed pressure drilling (MPD)
- Underbalanced drilling (UBD)
- Well control
- Kick control and well killing
- Frac flowback
- Equivalent circulating density (ECD) drilling
- 3,000- and 10,000-psi model availability

How it improves wells

The AUTOCHOKE* pressure-balanced drilling choke regulates pressure automatically under a diverse range of conditions. It reduces risk of formation breakdown or secondary bubbles during well control and drilling operations, delivering faster, safer kick control and implementation of MPD practices. By maintaining casing pressure, the drilling choke makes stripping pipe simpler and safer.

How it works

As drillpipe is lowered into the hole, an equal volume of fluid is automatically displaced through the choke. A patented sliding shuttle and sleeve design automatically adjusts fluid flow to regulate casing pressure.

Field-replaceable parts

The tungsten carbide- or stellite-coated internal wear parts are all replaceable and more durable than needle-valve or rotating-disc chokes.

Additional information

The drilling choke provides easy, predictable casing pressure control. It enables precision control for stripping pipe into the hole; for MPD and UBD techniques when controlling backpressures; and for bottomhole pressure during well control operations, MPD, and UBD. The choke reduces lost circulation, gas intrusion, fluid costs, production damage, and blowouts.

The self-cleaning orifice reduces plugging. The unit contains easy-to-maintain internal components. A simple, eight-bolt design enables five-minute internal inspection.

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