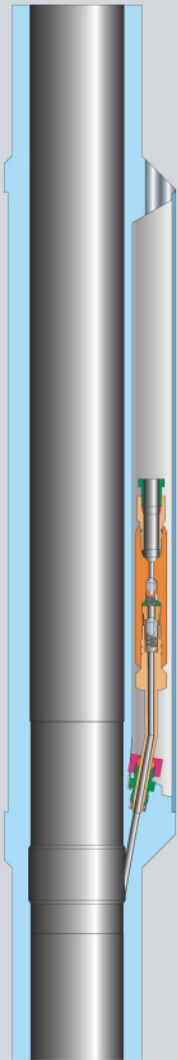


HPCI-DC High-Pressure Chemical Injection Mandrel

Schlumberger

HPCI-DC high-pressure chemical injection mandrel.



HPCI-DC chemical injection mandrels provide the ability to inject chemicals in applications beyond the pressure, temperature, and tensile-load resistance restrictions of conventional products. This HPCI-DC chemical injection mandrel is a one-piece, corrosion-resistant, eccentrically machined body that provides an integral protection lug, two redundant check valves, and an integral tube connector.

Description and operation

These mandrels are available in tubing sizes from 3.500 to 7.000 in. [88.9 to 177.8 mm] and pressure ratings from 5,000 to 20,000 psi [34,475 to 137,900 kPa]. They provide redundant, field-proven, corrosion-resistant check valves rated to 400°F [204°C]. These one-piece mandrels feature integral tube connections, check-valve protectors, and control-line lugs. The HPCI-DC is constructed from stainless steel or nickel alloys for service in wells with high concentrations of H₂S or CO₂. The metallurgy selected conforms to NACE standard MR0175 for sulfide stress cracking resistance. The one-piece eccentric mandrel design of the HPCI-DC allows for easy redress after it has been in service.

HPCI-DC chemical injection mandrels are assembled as part of the tubing string when a well is being prepared for chemical injection. A stainless steel or Monel[®] chemical-injection capillary tube is run between the surface and the injection mandrel. The dual-reverse flow checks can be tested by applying pressure in the tubing and monitoring the pressure on the control line.

Applications

- High-pressure, high-temperature, corrosive environments

Benefits

- Manufactured from corrosion-resistant alloys
- One-piece design for easy redress

Features

- Dual-check valves
- Available in a wide range of tubing sizes
- Pressure ratings from 5,000 to 20,000 psi [34,475 to 137,900 kPa]
- One-piece eccentric mandrel design

HPCI-DC High-Pressure Chemical Injection Mandrel Specifications

Tubing[†]		Max. OD (in. [mm])	Min. ID (in. [mm])
Size (in. [mm])	Weight (lbm/ft)		
3.500 [88.9]	9.3	5.400 [137.2]	2.687 [72.8]
4.500 [114.3]	12.8	6.258 [158.9]	3.582 [91.0]
5.500 [139.7]	17.0	7.215 [183.3]	4.767 [121.1]

[†] Other sizes available on request. Contact your local Schlumberger representative.

www.slb.com/oilfield

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