

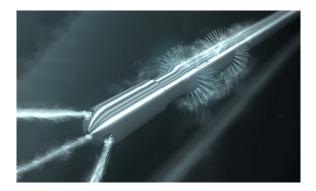


The CoilHose Light Well Circulation System is a hybrid well intervention system that combines the operational efficiency of a wireline deployment with the capability to perform a range of nitrogen and fluid pumping applications.

Through the deployment of a flexible high-pressure hose in the wellbore, the CoilHose system enables a hydraulic intervention to be carried out on restricted deck space locations more efficiently compared to traditional competing methodologies. This therefore enables the reduction of capital, operational and carbon footprint of the hydraulic well intervention.

Key applications

- Well unloading
- Nitrogen pumping
- Chemical jetting
- Well circulation
- Scale removal
- DHSV and Wellhead Jetting
- Wax and asphaltene removal
- Acidizing
- Deployment of memory logging tools



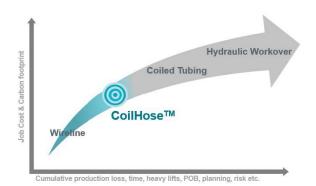
Features and benefits

- System utilizes a flexible high-pressure hose to perform a thru-tubing hydraulic intervention
- Alternative small footprint solution to Coiled Tubing for key hydraulic intervention applications
- Efficient critical path rig-up time of 3 4 hours when using lightweight PCE
- System is gravity fed into the well which enables higher run in and pull out of hole speeds verses competing systems
- Multi-discipline intervention crew
- CoilHose can installed on different drum and unit configurations to give flexibility on deployment
- Operationally efficient system which can reduce the overall cost of the well intervention operation





CoilHose Light Well Circulation System



Operational envelope

- Nitrogen pumping and chemical jetting are key applications
- Up to 10,000 ft / 3,048m well depth
- Greater than 60° well deviations require enhanced Cerberus modelling
- Suitable for wellhead pressures up to 2,000 psi / 139 bar
- Max BHT 302 °F / 150 °C
- System is not suitable for pumping cement, lifting sand or mechanical services such as milling and setting / pulling plugs

Specifications	MK IV CoilHose	MK VI CoilHose
Maximum depth (deviation dependent)	4,000 ft / 1,219 m ^{1.}	10,000 ft / 3,048 m
Temperature rating	-40° to 150°C / -40° to 302°F	-40° to 150°C / -40° to 302°F
Working pressure	12,500 psi / 862 bar	12,500 psi / 862 bar
Burst pressure limit	50,000 psi / 3,447 bar	31,250 psi /2,155 bar
Differential collapse pressure	4,670 psi / 322 bar psi 2.	3,000 psi / 207 bar ^{1.}
Breaking strength	14,330 lbf / 6,500 kgf	15,500 lbf / 7,031 kgf
Outer diameter	0.768" / 19.5 mm	0.925" / 23.5 mm
Inner diameter	0.386" / 9.8 mm	0.394" / 10.0 mm
Wall thickness	0.191" / 4.85 mm	0.266" / 6.76 mm
Weight in air	0.49 lb/ft / 0.73 kg/m	0.42 lb/ft / 0.62 kg/m
Guideline fluid pump rate	0.06 - 0.22 bbls/min / 10 - 35 litres/min	0.06 - 0.22 bbls/min / 10 - 35 litres/min
Guideline N2 pump rate	400 - 650 scf/min / 11 - 18 scm/min	400 - 650 scf/min / 11 - 18 scm/min

^{1.} Winch drum configuration and well deviation dependent

² Minimum 6,000 psi / 414 bar is maintained in the hose at all times during the operation via a Pressure Activated Circulation Sub in the CoilHose BHA

