

A close-up, diagonal view of several coiled tubing tools against a black background. The tools consist of black outer sheaths and silver-colored inner mandrels. The mandrels have a series of longitudinal slots. The tools are arranged in a way that shows their length and the coiled nature of the tubing.

dti

Coiled Tubing Tools

IMPACT TOOLS

Hydraulic Jars

Our Dual Action Hydraulic Jar enables controlled, repeatable, upward or downward jarring onto the work string. Our Vortex Metering Technology (VMT) has been incorporated across our range of hydraulic jars to ensure the most reliable jarring time delay in the industry.

- Most reliable jar timing in the industry
- Dual action - controlled upward or downward jarring
- No calibration - simple to operate and redress
- Pressure balanced hydraulic piston

Size	Inside Diameter	Length of Jar	Length of Accelerator	Stroke	Firing Load (lbs)	Min. Tensile Load (lbs)
1-11/16"	0.56"	56.0"	54.5"	12"	0-10,000	31,000
2-1/8"	0.75"	56.0"	67.2"	12"	0-15,000	75,600
2-7/8"	1.00"	56.5"	63.4"	12"	0-35,000	198,000



IMPACT TOOLS

Hammerhead Bi-Directional Impact Hammer

The Hammerhead Bi-Directional Impact Hammer delivers a high-frequency, controllable up or down impact to a downhole device. The ability to deliver high frequency impacts with low applied force and without the necessity to cycle the coiled tubing make the Hammerhead an attractive alternative to using a Jar. The frequency and magnitude of the impact is controlled via the flow rate and applied force. A short length combined with flexibility in up, down or bi-directional impact makes this tool suitable for many applications including shifting sleeves, breaking disks, pulling plugs, scale removal, cleanouts, tubing swaging and broaching.

Further design developments have enhanced the efficiency of the Impact Hammer by increasing the stroke and subsequently the flow and set-down/ pull-up operating envelopes. A Hammerhead Stroker Tool can also be used to optimise the performance of the hammer when there is little effective length of coiled tubing above.

- Compact length
- High frequency controllable impacts
- Can be configured as up, down or bi-directional
- Reduces coiled tubing fatigue compared with jarring
- Mechanism does not rely on elastomeric seals making it suitable for use in corrosive and high temperature wells

Size	Length of Accelerator	Length of Hammer	Stroke	Pump Rate (gal/min)	Operating Pressure (psi)
1-11/16"	47.5"	52.0"	4"	10-40	500-3,000
2-1/8"	47.5"	53.5"	4"	10-40	500-3,000
2-7/8"	63.4"	55.0"	4"	10-70	500-3,000



Multi-Lateral Entry System

The Coiled Tubing Multi-Lateral Entry System is designed to allow controlled and repeatable entry of a lateral wellbore. It can be used to enter multiple laterals in a single trip and is commonly used for high volume cleanout work.

The system consists of a Torque Through Slip Connector, Motor Head Assembly, High Torque Indexing Tool, Hydraulic Knuckle Joint and Pump Out Choke Probe. A CT Flow Control Valve can also be used to allow circulation without activating the Multi-Lateral Entry Tools. The CT High Torque Indexing Tool rotates the tools below by 30° each time

the Bottom Hole Assembly (BHA) pressure is cycled (15° & 45° rotation are also available). Continuing to pressure up the toolstring activates the Hydraulic Knuckle Joint which kicks over the Choke Probe. The Probe is suitably sized so that the Hydraulic Knuckle Sub will not fully articulate unless the BHA is located at the casing window. The casing window is located by cycling the High Torque Indexing Tool and picking up and lowering the toolstring. When the casing window is found a pressure drop will be seen by the operator as the Hydraulic Knuckle Sub fully articulates and a circulation port opens.

- The CT High Torque Indexing Tool produces high torque values to ensure the entire BHA is oriented each time the pump is cycled
- The Hydraulic Knuckle Sub features a bleed port to generate a pressure indication when the casing exit window has been located
- Can be used for Jetting Tunnelling Applications
- The choke in the Pump Out Choke Probe can be sheared out to enable high cleanout rates to be pumped once the desired lateral has been located
- The Hydraulic Knuckle Sub delivers a large articulation force to ensure reliable hole finding

Size	Indexing Tool Length	Hydraulic Knuckle Length	Typical Operating Pressure
1-11/16"	58"	27"	3,000 psi
2-1/8"	50"	29"	3,000 psi
2-7/8"	60"	23"	3,000 psi





Technology innovation with quality and reliability at the core.

DTI is a specialist in innovative downhole technology for the global energy industry. We design and manufacture tools to solve current and emerging challenges for the oil and gas, gas storage, CCUS, hydrogen storage and geothermal production sectors.

WWW.DTI.UK.COM | +44 1202 690001 | ENQUIRE@DTI.UK.COM

UK - enquire@dti.uk.com

Europe - eur@dti.uk.com

North America - nam@dti.uk.com

Latin America - lam@dti.uk.com

North Africa - afn@dti.uk.com

Sub-Saharan Africa - ssa@dti.uk.com

Middle East - me@dti.uk.com

Asia Pacific - apac@dti.uk.com