

## TORQUE-THRU KNUCKLE JOINT

The **LiMAR**<sup>®</sup> Torque-Thru Knuckle Joint is designed to provide a point of flexibility within a Coiled Tubing Bottom Hole Assembly (BHA) whilst maintaining a torque-thru capability.

Configuring a Torque-Thru Knuckle Joint within the BHA enables it to pass unrestricted over nipple shoulders, tubing crossovers and other points where a rigid BHA may encounter difficulty.

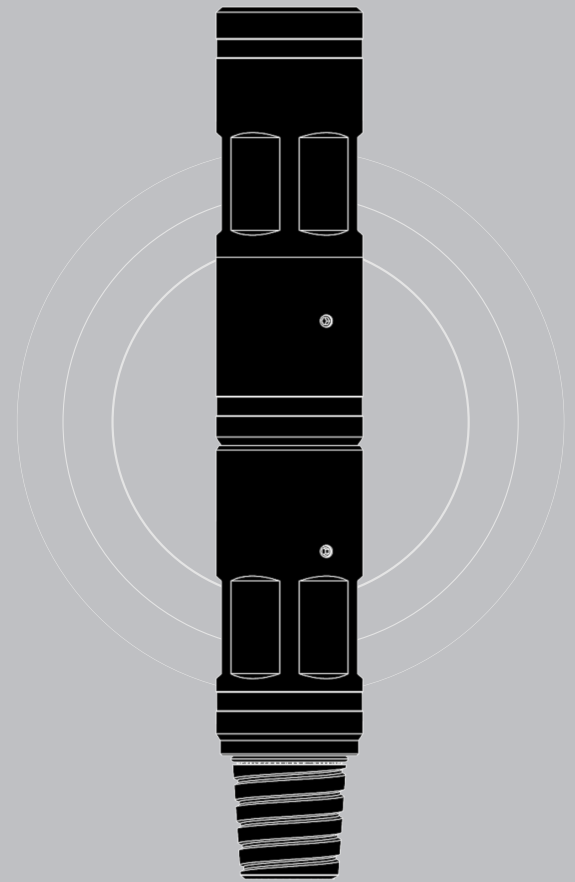
An internal hexagonal profile prevents the ball joint from rotating within the socket therefore providing the torque-thru capability required for use in conjunction with down hole motors, etc.

**TOOL APPLICATIONS:**

- To provide a point of flexibility within a Coiled Tubing BHA whilst maintaining a torque-thru capability.

**DESIGN FEATURES & BENEFITS:**

- Large thru bore
- Torque-thru ball joint
- Available in a range of sizes to suit industry standard BHA's
- 10 degree deflection angle from centre line
- Connection options to suit customer requirements
- Simple, robust design ensuring ease of operation for the end user
- Selected components QPQ treated
- Hexagonal flats for safe make-up & break-out
- Corrosion resistant materials



**TECHNICAL DATA**

Assembly Part No.	Actual OD	Maximum ID	Make up Length
104-1500-XXX-RX	1.500"	0.500"	10.45"
104-1687-XXX-RX	1.687"	0.656"	11.00"
104-1750-XXX-RX	1.750"	0.656"	11.00"
104-2125-XXX-RX	2.125"	0.787"	12.13"
104-2250-XXX-RX	2.250"	0.787"	12.13"
104-2375-XXX-RX	2.375"	0.875"	13.38"
104-2875-XXX-RX	2.875"	1.187"	14.82"
104-3125-XXX-RX	3.125"	1.187"	14.90"

XXX - Last 3 digits of part number denotes connection type - Please refer to the connection code data sheet.  
 For additional sizes or further information please contact [sales@limaroiltools.com](mailto:sales@limaroiltools.com)