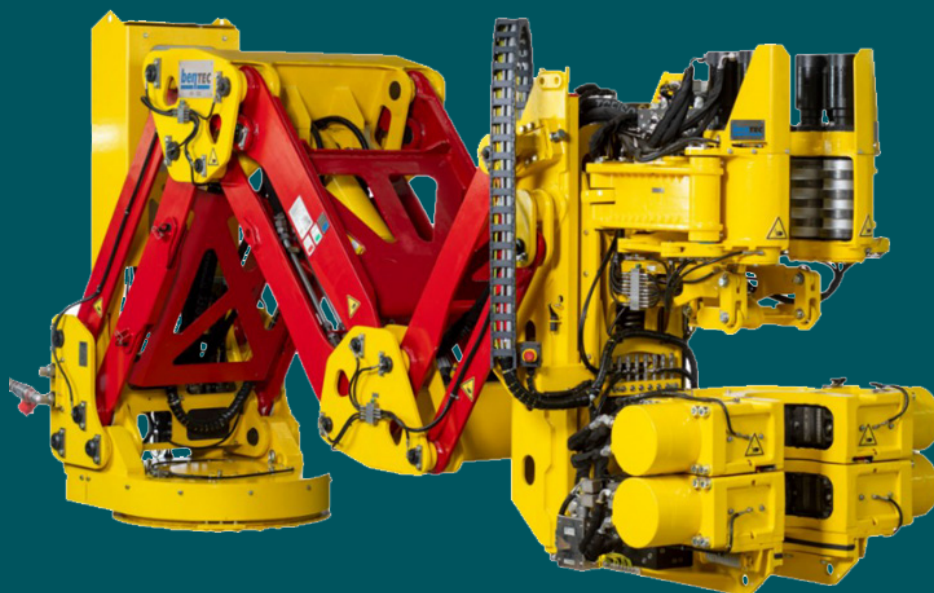


IRON ROUGHNECK

IR-120



BENTEC IRON ROUGHNECK IR-120s are built to maximise the efficiency of pipe handling operations.

They provide a safe and versatile alternative to conventional pipe connection techniques for Make-up / Break-out operations

Unique Features

- Fastest cycle time down to 37 seconds per cycle
- Simplified electric-over-hydraulic system requires up to 60% less hydraulics
- Precise torque measurement, dynamic clamping system
- Unique Tool Joint Finder enables automatic pre-positioning
- Torque Readout System for automatic Make-up/Break-out operations
- Hydraulically powered and electrically controlled unit
- E-Torque List – an electronic recording and storage tool
- Central lubrication system
- Spin out sensor
- Interchangeable with competitors' Iron Roughnecks
- Suitable for Onshore & offshore
- HSE improvements due to automatic positioning
- CE & ATEX conformity

Available Models:

IR-120 – Local Control Panel

IR-120-Remote – Remote Controlled

Iron Roughneck

IR-120

Technical Data / Specifications

Torque Make-up	100,000 ft-lbs / 135,600 Nm
Torque Break-out	120,000 ft-lbs / 162,700 Nm
Tool Joint Connection O.D. Range	3 1/8" - 9 3/4"
Spinner Speed (Nominal)	80 rpm @ 5" DP, 46 gpm/176 ℓ/min./170 bar
Spin Torque	3,000 ft-lbs 4,000 Nm @ 5" DP, 46 gpm/176 ℓ/min.
Max. Connection Height	69.2" / 1,759 mm
Min. Connection Height	30" / 759 mm
Max. Horizontal Travel*	512 ft / 3,657mm
Max. Hydraulic Requirements	58 gpm @ 3,046 psi. / 220 ℓ/min. @ 210 bar
Min. Hydraulic Requirements	35.3 gpm @ 2,466 psi. / 130 ℓ/min. @ 210 bar
Torque Wrench Working Angle	40°

Controls	Local Control Panel or Remote Controls via Zone Rated HMI or Zone Rated Wireless Controls
Remote Capabilities	Sequence Assisted Automation
Mount	Pedestal / Floor Mount Socket
Pedestal Rotation	300°
Casing Ready	No

Width	55.5" / 1,410 mm
Height (From Drill Floor Level)	97.4" / 2,474 mm
Height (Transport)**	86.6" 2,200 mm
Depth (Retracted)	89.4" / 2,271 mm
Weight	19,800 lbs / 8.9 t
Max. Temperature	131 °F / +55 °C
Min. Temperature	-40 °F / -40 °C

*Horizontal Travel is the defined distance between Center of Wrench when retracted and Center of Wrench when extended

**Socket Pin removed from the unit for transport

Key Features

- Fastest Cycle Time for Make / Break of connection min. 37 seconds
- Make & Break Cycles available as automated sequences
- Hard wired, HMI-based or Wireless Remote Controls (zone rated)
- Each torque process is measurable with the highest accuracy and stored in the HMI unit or 3rd party systems
- Combined electric over hydraulic approach
- Central Lubrication System
- Available Drilling Enhancement Software
- Digital Pipe Tally
- Emergency Operation (Remote Version Only) - Optional

Benefits

- Up to 50% reduction in flat time during Make & Break of connections
- Floorhands or Drillers can focus on the actual task
- Holistic Control for all functions or sequences and simplified troubleshooting
- High level of automation
- More reliable and valuable feedback for Drill String Make-up Torque Documentation
- Less hydraulics requiring less maintenance



The **IR-120** operates purely hydraulically, simple and robust for safe drilling operations. This design includes the essential functions to make-up and break out pipe connections.

The **IR-120-Remote** model operates electrically and Hydraulically. It includes automated features for; make & break sequences, remote positioning system and a torque readout system for partial or fully automated make & break operations.

The compact dimensions of the BENTEC Iron Roughneck make it easy to install in any existing or new build rigs. The design allows a simple interchange with competitors' IRs. BENTEC developed both IR model ranges for use as either a portable unit on land rigs or permanent installation on offshore rigs. The existing hydraulic power unit (Rig HPU) powers the IR, although a separate HPU is available. BENTEC Iron Roughnecks comply with the latest European CE and ATEX standards, as well as with the latest international API standards, maintaining the highest level of industry quality and safety.

BENTEC

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