BRIDGE RACKING SYSTEM



THE GRIPPING AND LIFTING CAPABILITY OF THE BRIDGE RACKING CRANE COMBINED WITH THE CAPTURED GUIDANCE OF THE LOWER RACKING ARM ENABLES VERTICAL STANDS OF PIPE TO BE HANDLED AND GUIDED SAFELY BETWEEN SETBACK TO MOUSEHOLE TO WELL CENTRE

The Bridge Racker consists of:

- 1. Bridge Racking Crane (BRC) this is mounted in Derrick, above the Fingerboards
- 2. Lower Racking Arm (LRA), also referred to as Z-Arm, this is mounted at Drill floor level in the Setback area

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The BRC is a double girder overhead crane type construction running on parallel rails (Long Travel) mounted high in the derrick. Travel in the perpendicular plane (Cross Travel) is achieved via a bogie running on rails mounted on each crane girder. Mounted on its underside is a slew ring, onto which is mounted the slew column and grip head. This combination of functions enables the grip head to access all the stand positions in the Fingerboards and lift and transfer each stand between Fingerboards / Well-centre / Mousehole.

Bridge Racking Crane:

DESCRIPTION	SPECIFICATION
Lifting Capacity	5000kg, up to 10Te for special applications
Tubular Range	Up to 20" casing grip heads (Using interchangeable grip head)
Slewing Range	Continuous, 360deg
Mode of Lift	Hydraulic gripping
Long Travel	Rack & Pinion Drive (with Anti-lift)
Cross Travel	Rack & Pinion Drive (with Anti-lift)
Grip Head Stroke	Up to 4500mm
Controls	Pilot-hydraulic/electro-hydraulic (various control enhancements available)
	NB: Technical data may be subject to change

Lower Racking Arm (Z-Arm):

DESCRIPTION	SPECIFICATION
Lifting Capacity	None – guiding only
Tubular Range	Up to Ø 93/4" (Other bespoke options upon request)
Method of Travel	Rack & Pinion
Slewing Range	Continuous, 360deg
Boom Type	Telescopic (Hydraulic cylinder actuated)
Gripper Type	Rotating finger type (for compactness)
Hydraulic Cylinders	All fitted with counterbalance valves to ensure safety/stability between operations/loss of power
	NB: Technical data may be subject to change

FEATURES	BENEFITS
Fully Captured Handling of Vertical Stands	Eliminates manual handling
Compact Grip Head	Easy access to busy racking area
BRC Tubular Range	Available up to 20" Casing grip heads
LRA Tubular Range	Up to 9 3/4" (bespoke on request)
Grip Head Stroke	Up to 4,500mm
BRC & LRA Control	Synchronised
Safety	Anti-Collision option available
Working Loads	Up to 10,000kg
Slewing	Continuous, 360deg
BRC Lifting Capacity	5,000kgs (up to 10Te if required)
Hydraulic Gripping	Simplifies the handling sequence as the stand can be gripped anywhere, not just under the tool foot
Controls	Pilot-Hydraulic or Electro-Hydraulic
Combined Functions	Enables the grip head to access all the stand positions in the fingerboards and lift and transfer each stand