



DRILL FLOOR EQUIPMENT

Drill Floor Manipulator Arm (DFMA)

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The function of the Drill Floor Manipulator Arm is to tail and guide tubulars between the V-Door ramp / Catwalk / Conveyor, Setback Area, Mousehole and Well Centre position.

Key Features

- Robust design for enhanced performance, quality and safety;
- Telescopic Arm with reach to suit Drill Floor layout and client requirements;
- Slew, Tilt and Extend functions on the Telescopic Arm
- Option for mounting. Drill Floor mounted on a pedestal or underslung from the Top Drive Guide Rails;
- Range of heads available to suit tubular diameters;
- Rollers fitted on Riser Head to protect Riser buoyancy;
- Tilt and rotate functions on the heads to accommodate for handling leaning tubulars;
- Optional padeye on the Racker Head for general handling around the Drill Floor;
- Control options available. Operators cabin, Drill Floor Console or Radio Control. Backup manual control on the DFMA;
- Hydraulically actuated;
- Interlocked and integrated with Drilling System Zone Management.

Tubular Range

2-7/8" to 60"



DRILL FLOOR EQUIPMENT

Hydraulic Cathead



Hydraulic Cathead

The function of the Cathead is to provide the force necessary to make up and break out drill pipes and collars. The Cathead working with the manual rig tongs provide the required torque. The Cathead is a drill floor mounted tool.

Key Features

- Robust design for enhanced performance, quality and safety;
- Mounted to suit the drill floor arrangement;
- Control options available. Drillers cabin, Drill Floor mounted console or Radio Control;
- Torque adjustment to suit make up or break out requirements;
- Interlocked and integrated with Drilling System Zone Management;
- Suitable for Zone 1 operation.

Pull Force	Operation Arc	Rope Travel
0 – 150KN	± 90 degrees	2500mm



Hydraulic Power Unit (HPU)

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As part of a handling system the Hydraulic Power Unit is critical to operation. Hydraulic Power Units are provided to suit all applications from single individual items of equipment to complete handling systems with available flowrates in excess of 1000 ltr/min and pressures in excess of 345 bar (5000 psi).

Key Features

- Robust design for enhanced performance, quality and safety;
- Fixed or variable displacement pumpsets to suit application;
- Pressure, return and offline filters;
- Water or air blast cooled;
- Flow / pressure monitoring to ensure efficient usage and reduced power consumption;
- Stainless steel tank;
- Suitable for hazardous area;
- Control options available. Drillers Cabin or local station;
- Standard safety features including high temp probe, low and ultimate low level switches;
- Acoustic enclosure option.



Drill Line Spooler

TSC Drill Line Spoolers form an integral part of the Drilling System package. The Spoolers store the Drill Line and provide the facility to deploy during the Cut and Slip operation. One of the main considerations during the design development was to ensure that the reel change-out process was quick, efficient and safe for personnel.

Key Features

- Robust design for enhanced performance, quality and safety;
- Rope storage capacity and speed of operation are specific to client requirements;
- Heavy duty steel frame complete with certified lift eyes and forklift pockets;
- Removable drive shaft complete with retractable drive plate;
- Split bearings for ease of shaft installation and removal;
- Guards around moving parts;
- Two direction rotation of drum;
- Hydraulic, pneumatic or electric motor actuation;
- Suitable for hazardous area operation;
- Access stairs to provide easy access to shaft and bearings for reel change-out;
- Control options available. Locally mounted Control Station. Proportional control for increased safety;
- Standard safety features including fail to safe braking on all drives in addition to load holding valves.



Iron Roughneck



Iron Roughneck

Key Features

- Robust design for enhanced performance, quality and safety;
- 2 Jaw or 3 Jaw options;
- Manual, semi or full automatic control modes;
- Automatic clamp pressure setting relative to tubular diameter;
- Well centre and mousehole operations;
- Operation from roughneck, drill floor panel, drillers chair or radio control;
- Mousehole tilt accommodated on IRN1000 and IRN2000 models;
- Bit Breaker adaptors.

Tubular Range

2-7/8" to 9-3/4"

Core Models

- IRN 1000: Rail mounted
- IR120: Pedestal mounted
- IRN 2000: Rail mounted
- IR150: Pedestal mounted

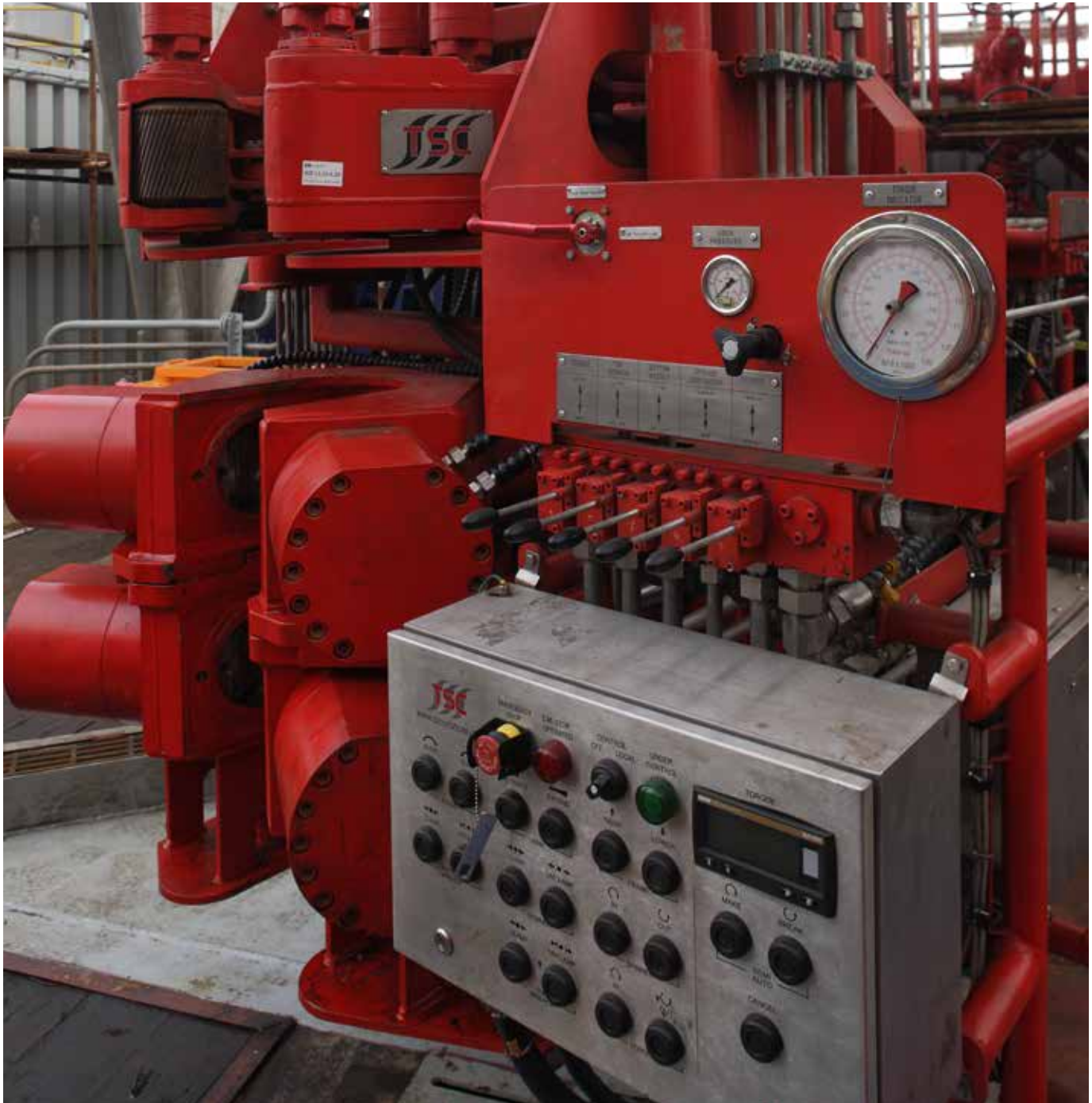
Model	Make up Torque (ft-lb)	Break Out Torque (ft-lb)	Spinner Speed (rpm)	Stickup Height Min/Max(mm)	Reach (inch)	Weight (Kg)
IRN1000	100,000	122,000	0-140	740/1540		7500
IRN2000	100,000	122,000	0-140	740/1240		9500
IR120	100,000	120,000	0-100	860/1610	120	6500
IR150	100,000	120,000	0-100	860/1610	150	7000

DRILL FLOOR EQUIPMENT

3 Jaw High Performance Torque Wrench

3 Jaw High Performance Torque Wrench

- Self-aligning triple clamping jaw for higher but uniform clamping force;
- Less wear and deformation on tool joints;
- Less wear on dies, reduced slippage on tubular and longer operation between changes;
- Increased reliability.



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Hoisting Equipment

Drill Floor Equipment

Tubular & Riser Handling Equipment

Deck Crane

Tensioning & Skidding Equipment

BOP & Subsea Handling Equipment

Pumps

Mud System

Well Control System Equipment

Jacking Systems

Lifting, Mooring & Winch Packages

Land Rig Solutions

