

# VERTICAL TUBULAR HANDLING

# DRILL FLOOR MANIPULATOR ARM



EFC GROUP

The Drill Floor Manipulator Arm (DFMA) is a handling device used for guiding/tailing vertical tubulars on and around the drill floor.

It can be used for a variety of operations between the V-Door, Well Centre, Mousehole and the set back area.

Using a DFMA reduces the need for manual handling presence on the drill floor, and enhances the safety of operations involving vertical tubular handling.



## KEY BENEFITS

- Safe handling of Drillpipe on drill floor.
- Tailing of casing and riser between catwalk and Well-centre.
- Can be retro-fitted onto all types of rig.
- Fast change-outheads to suit tubulars up to Ø54" and beyond.
- Control options available to integrate with other drilling controls & logic (including Anti-Collision).
- Customised options to suit drilling programs & drill floor layouts.
- Pedestal mounted and underslung versions.



DESIGNED & CONSTRUCTED  
TO OPERATE IN ZONE 1 & SAFE AREAS

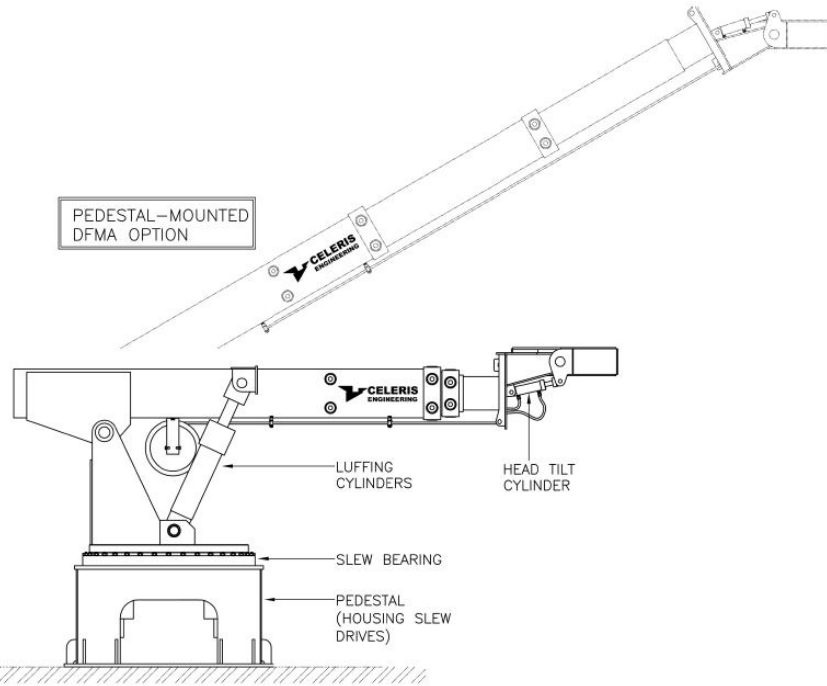


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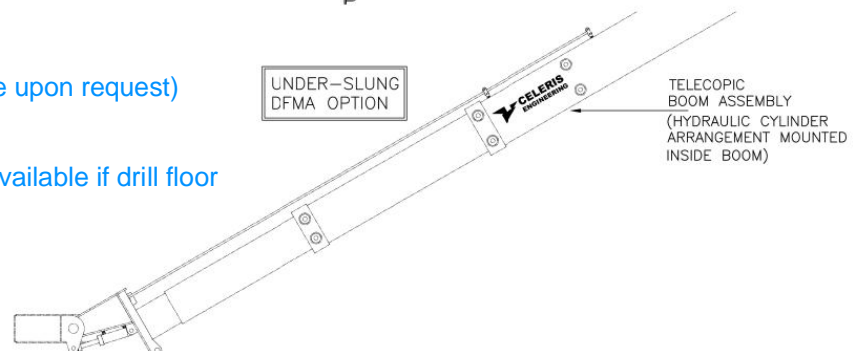
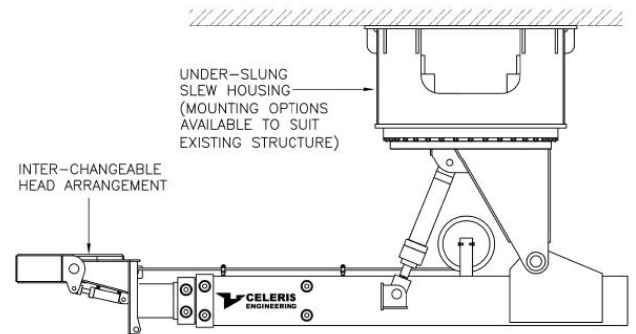


## Typical Specification

- Slewing range:** 360° continuous  
(Slew limits available upon request)
- Slewing torque:** 82kNm  
(Additional torque available if drill floor layout requires)
- Maximum overturning Moment:** 200kNm
- Telescopic boom stroke:** 4500mm
- Telescopic push/pull force:** 50kN
- Hydraulic cylinders:** 17/4PH condition H1150 stainless steel rods, 50µm chrome plating.  
Counter balance valves fitted to ensure stability/safety between operations/loss of power.
- Tubular sizes:**
- Drill-pipe head Up to  $\varnothing$  9½"
  - Intermediate head Up to  $\varnothing$  21"
  - Riser head Up to  $\varnothing$  54"
- (Alternative head design available upon request)

## Functions

- Boom luff up / down
- Boom extend / retract
- Head tilt up / down
- Slew clockwise / anti-clockwise
- Claws close / open



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