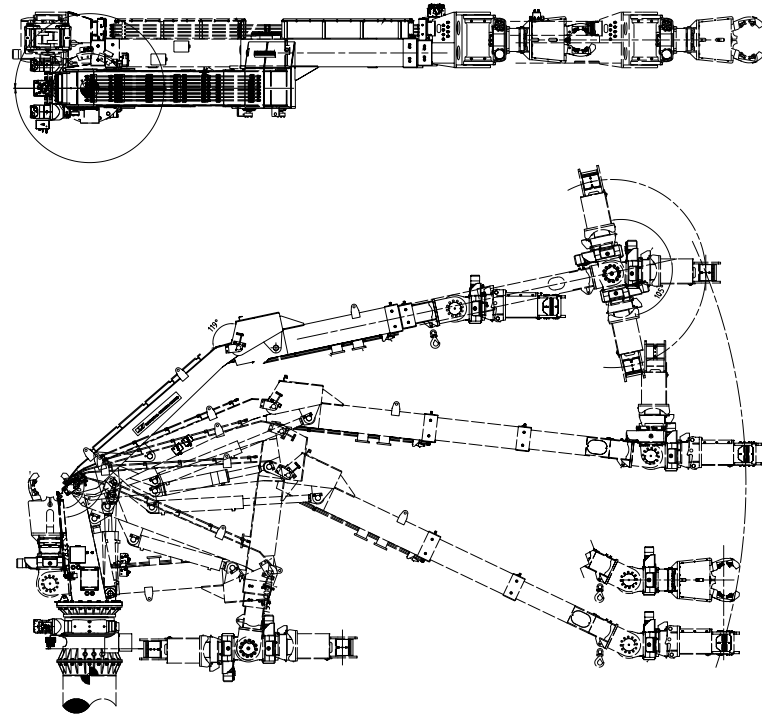


## UHT

### Description

The Utility Handling Tool (UHT) is a telescopic, multi-axis knuckle boom type lifting arm. It enables hands-free and safely lifting and guiding of equipment like subs, crossovers and small pipes on the drill floor area. The 360° head rotation enables handling from horizontal to vertical position and vice versa. The Utility Handling Tool is remote controlled, hydraulically driven and equipped with a lifting hook. Both the gripper and guide heads are equipped with hydraulic self-clamping connectors enabling hands-free head swapping.



### Technical specifications

#### DESIGN DATA

Service	Lifting, guiding and handling
Area classification	IEC Zone 1
Design code / standards	FEM "Rules for the design of hoisting appliances"
Design temperature	[°C] -20 to +45

#### PERFORMANCE DATA

Horizontal reach	[mm]	746 to 7406
Telescope stroke	[mm]	1,835
Slew angle-boom	[degrees]	±180°
Slew angle-head	[degrees]	360° perpetual rotation
Tilt angle-inner arm	[degrees]	64°
Tilt angle-outer arm	[degrees]	123°
Tilt angle-head	[degrees]	+93° (up) to -105° (down)

Gripper head tubular size	[in]	2 ½ to 10
Guide head tubular size	[in]	2 ¾ to 30
Safe Working Load (SWL), hook	[kg]	1,200
Safe Working Load (SWL), lift head	[kg]	500
Weight, UHT, dry	[kg]	3,500

#### SHIPMENT DATA

Equipment shipment size (LxWxH)	[mm]	3,000 x 1,230 x 2,310
Equipment shipment net weight	[kg]	4,100

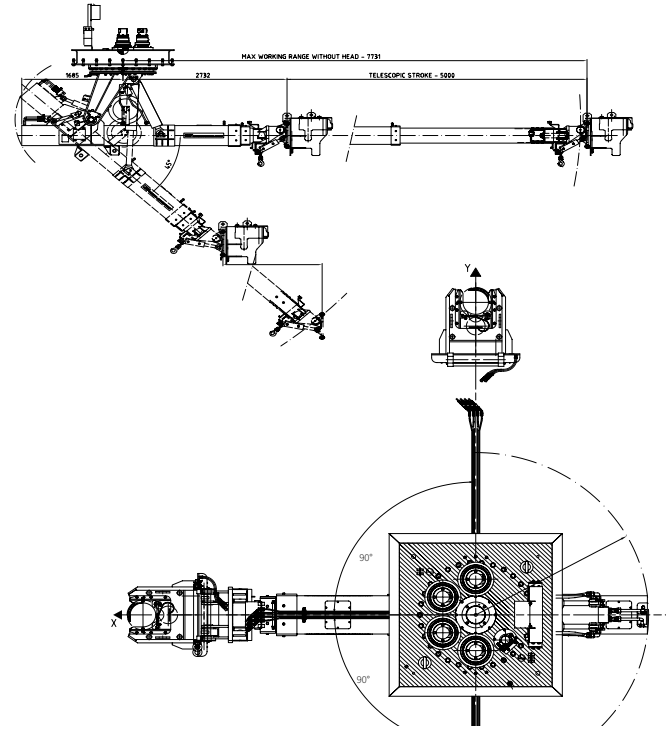
#### UTILITY CONSUMPTION

Hydraulic oil supply pressure,	[bar]	207
Hydraulic oil flow	[l/min]	180
Power consumption	[W]	100

## DFMA-U

### Description

The Drill Floor Manipulator Arm (DFMA-U) is a heavy duty guide and lifting arm that handles large horizontal static and dynamic loads. It is designed for hands-free, safe and efficient handling of various equipment and large range of tubulars dimensions. Normal working area is between well-center, V-door and lay down area (like riser catwalk etc.). The DFMA-U is underslung mounted, hydraulically driven, with local control stand and electric remote operation.



### Technical specifications

#### DESIGN DATA

Service	Equipment handling on drillfloor/ tubular guiding
Area classification	IEC Zone 1
Design code / standards	FEM "Rules for the design of hoisting appliances"
Design temperature	[°C] -20 to +45

#### PERFORMANCE DATA

Horizontal reach	[mm]	7,700 (without interchangeable head)
Telescope stroke	[mm]	5,000
Slew motion	[degrees]	±180°
Tilt motion	[degrees]	0 (up) 45 (down)
Guide head tubular size	[in]	3 ½ to 9 ½
Riser guide head tubular size	[in]	56
Safe Working Load (SWL), hook	[kg]	2,500
Weight, DFMA-U, dry	[kg]	6,450 (without interchangeable head)
Weight, DFMA-U, control valve unit	[kg]	520

#### SHIPMENT DATA

Equipment shipment size (LxWxH)	[mm]	4,600 x 1,900 x 2,700
Equipment shipment net weight	[kg]	7,180

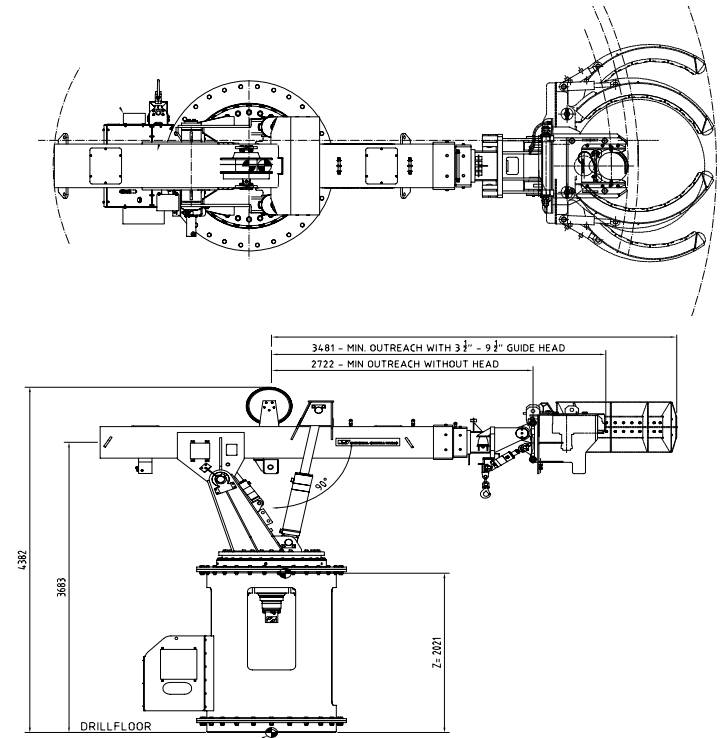
#### UTILITY CONSUMPTION

Hydraulic oil supply pressure,	[bar]	207
Hydraulic oil flow	[l/min]	215
Power consumption	[W]	60

## DFMA-P

### Description

The Drill Floor Manipulator Arm (DFMA-P) is a heavy duty guide and lifting arm that handles large horizontal static and dynamic loads. It is designed for hands-free, safe and efficient handling of various equipment and large range of tubulars dimensions. Normal working area is between well-center, V-door and lay down area (like riser catwalk etc.). The DFMA-P is pedestal mounted, hydraulically driven, with local control stand and electric remote operation.



### Technical specifications

#### DESIGN DATA

Service	Equipment handling on drillfloor/ tubular guiding
Area classification	IEC Zone 1
Design code / standards	FEM "Rules for the design of hoisting appliances"
Design temperature	[°C] -20 to +45

#### PERFORMANCE DATA

Horizontal reach	[mm]	7,700 (without interchangeable head)
Telescope stroke	[mm]	5,000
Slew motion	[degrees]	±180°
Tilt motion	[degrees]	0 (up) 34 (down)
Guide head tubular size	[in]	3 ½ to 9 ½
Riser guide head tubular size	[in]	48
Safe Working Load (SWL), hook	[kg]	2,500
Weight, DFMA-U, dry	[kg]	7,500
Weight, DFMA-U, wet	[kg]	7,600

#### SHIPMENT DATA

Equipment shipment size (LxWxH)	[mm]	4,000 x 2,600 x 4,500
Equipment shipment net weight	[kg]	8,100

#### UTILITY CONSUMPTION

Hydraulic oil supply pressure,	[bar]	207
Hydraulic oil flow	[l/min]	215
Power consumption	[W]	60