X-Y Racking Pipe Handling

*For reference only, please contact your local sales contact for more information.

PRS-8

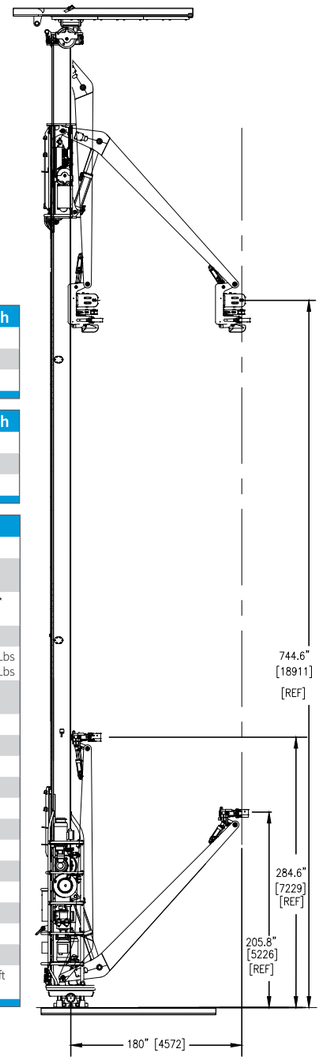
The PRS-8 is a pipe racking system that utilizes modular and robust PRS design standards to ensure uniformity and optimum flexibility. A modern AC control system delivers consistent reliability with high performance, enabling operators to maintain safe, high-speed operations across its functional range. The PRS-8 offers both automated tripping and a hoist stroke for offline stand building. Compact design- X-Y Racking Configuration. A traditional X-Y fully latched fingerboard layout is used with the PRS-8. This compact design maximizes available drill pipe storage area while being suitable for retrofit into many of today's MODU derricks

- Engineered for durability and reliability
- Ease of installation, commissioning, and operation
- Suitable for dynamic applications

PRS-8i SWL		Maximum Reach	
TONS	MT	METERS	INCHES
11.0	9.98	3.0	120.0
7.3	6.6	3.7	144.0

PRS-8i ER SWL		Maximum Reach	
TONS	MT	METERS	INCHES
11.0	9.98	3.0	120.0
7.3	6.6	4.6	180.0

Specifications	
Weight	65,754 lbs (29,825 kg)
Max. Column Height (Vertical)	87'
Max Reach Out (m)	12' (3.7m); 15' (4.6 m)* (optional)
Vertical Travel (m)	64.5 ft (19.66M)
Hoist Capacity	120'' Arm Ext. 22,000 Lbs 180'' Arm Ext. 16,000 Lbs
Hoisting Arm Reach (Horizontal)	144'' Max. 24.5'' Min
Column Rotation	225 Degrees
Arms	2
TUBULAR CAPACITIES	
Pipe Size	Triple, Range II
Diameter (in) standard	3 ½'' – 9 ¾''
UTILITY REQUIREMENTS	
Number of Motors	4 Electric
Stand Building	Y
Riser Handling	Y
Thread Comp	N
Hoisting Mechanism	Dual Electric Motor
Prime Mover	Electric
Column Travel	Mechanical Main Shaft Through Column



Hydraracker XY

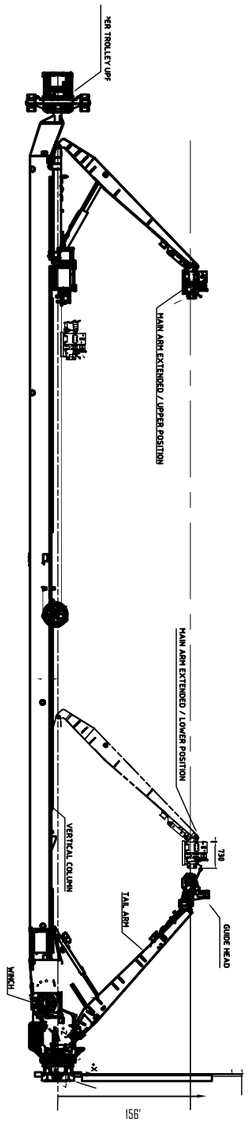
The machine supports the tubular weight and performs all normal racking operations.

The main components in the HydraRacker are the Rotating Vertical Column with Tail Arm, Main Arm, Upper and Lower Horizontal Drive, Hoisting Winch, Elevator and Control System (PLC). Engineered for durability and ease of operation, the XY Column Rackers optimize operational flexibility and efficiency. These machines utilize a state-of-the-art robotics control system that deliver consistent reliability and high performance. NOV's XY Column Rackers offer automated tripping and offline standbuilding capacities in a static of dynamic environment.

- Engineered for durability and reliability
- Ease of installation, commissioning, and operation
- Suitable for dynamic applications.

SWL		Maximum Reach	
TONS	MT	METERS	INCHES
11.0	9.98	3.0	120.0
7.3	6.6	3.7	144.0

Specifications	
Weight	53,793 lbs (24,400 kg)
Max. Column Height (Vertical)	88'
Max Reach Out (m)	12' (3.7m); 15' (4.6 m)* (optional)
Vertical Travel (m)	42.65ft (13M)
Hoist Capacity	120'' Arm Ext. 22,000 Lbs 180'' Arm Ext. 16,000 Lbs
Hoisting Arm Reach (Horizontal)	144'' Max. 24.5'' Min
Column Rotation	± 1125 Degrees
Arms	2
TUBULAR CAPACITIES	
Pipe Size	Triple, Range II
Diameter (in) standard	3 ½'' – 9 ¾''
UTILITY REQUIREMENTS	
Number of Motors	4 Electric
Stand Building	Y
Riser Handling	Y
Thread Comp	N
Hoisting Mechanism	Dual Electric Motor
Prime Mover	Electric
Column Travel	Mechanical Main Shaft Through Column



Star Racker

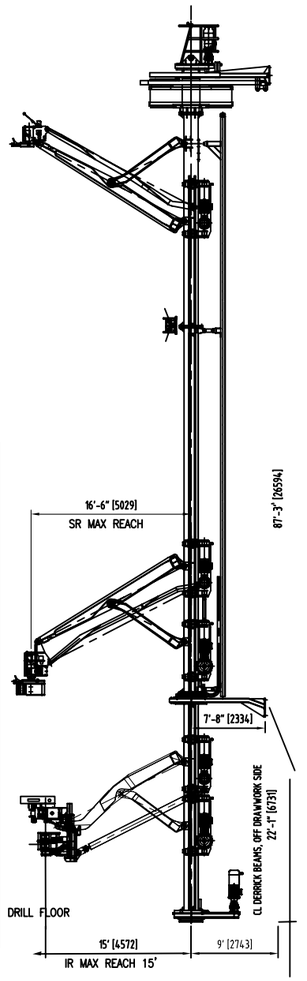
The Star Racker is designed to provide a remote operated machinery for moving tubular stands between well center and setback storage area. The machine is horizontally supported to the derrick at 22' of the derrick and at the fingerboard level. The Star Racker has also a positioning arm for Iron Roughneck.

The Star Racker consists of the following main parts:

- Column with supports and rotation system
- Lower racking arm with hoist
- Upper racking arm
- Iron Roughneck positioning arm
- Fingerboard for DP and casing finger
- Electrical control cubicles inclusive PLC and AC drive for remote control.
- Casing guiding claw.
- Single joint tool with soft stabbing– casing

SWL		Maximum Reach	
TONS	MT	METERS	INCHES
11.0	9.98	5.029	197.99
3.25	2.95	5.029	197.99

Specifications	
Weight	57800 lbs. (26200kg)
Max. Column Height (Vertical)	87.3' (26594 mm)
Max Reach Out (m)	16'-6' (5.029m); 16'-6' (5.029 m)*
Vertical Travel (m)	81 ft (24.69M)
Hoist Capacity	120'' Arm Ext. 22,000 Lbs 180'' Arm Ext. 16,000 Lbs
Hoisting Arm Reach (Horizontal)	144'' Max. 24.5'' Min
Column Rotation	+180 degree access for maintenance
Arms	3
TUBULAR CAPACITIES	
Pipe Size	Triple, Range II
Diameter (in) standard	3 1/2" in. to 9 3/4 in.
UTILITY REQUIREMENTS	
Number of Motors	4 Electric
Stand Building	Y
Riser Handling	Y
Thread Comp	N
Hoisting Mechanism	Dual Electric Motor
Prime Mover	Electric
Column Travel	Mechanical Main Shaft Through Column



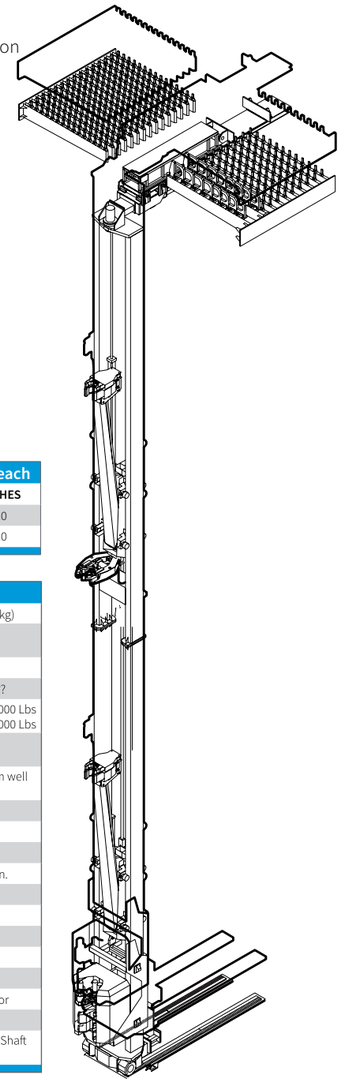
PHM 3i

This automated pipe handling machine system handles up to 93 ft stands of pipe or drill collars during drilling or tripping. The PHM-3i system elimated the need for rig floor hands and a derrickman to manually handle pipe. One attendant can manage normal pipe-handling procedures using the supplied control panels.

- Engineered for durability and reliability
- Ease of installation, commissioning, and operation

SWL		Maximum Reach	
TONS	MT	METERS	INCHES
11.0	9.98	3.0	120.0
7.3	6.6	3.7	144.0

Specifications	
Weight	92,785 lb (42,087 kg)
Max. Column Height (Vertical)	87' (26517 mm)
Max Reach Out (m)	16'-6' (5029 mm)
Vertical Travel (m)	64.5 ft (19.66M) ???
Hoist Capacity	120'' Arm Ext. 22,000 Lbs 180'' Arm Ext. 16,000 Lbs
Hoisting Arm Reach (Horizontal)	120'' Max. 24.5'' Min
Column Rotation	90° Left/right from well center
Arms	2
TUBULAR CAPACITIES	
Pipe Size ?	Triple, Range II
Diameter (in) standard	2 7/8 in. to 9 3/4 in.
UTILITY REQUIREMENTS	
Number of Motors	2 Electric
Stand Building	Y
Riser Handling	Y
Thread Comp	N
Hoisting Mechanism	Dual Electric Motor
Prime Mover	Electric
Column Travel	Mechanical Main Shaft Through Column



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