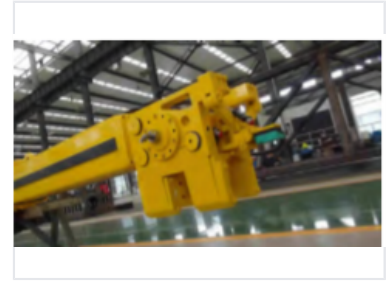
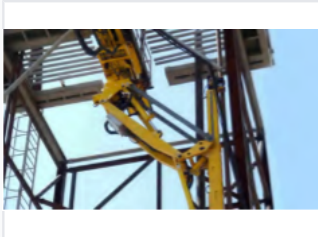


# Automated Pipe Racking System

This automated pipe racking system provides hands-free pipe handling on the monkey board. It accurately controls motion, offering high positioning accuracy and reliable operation with a touch-sensing function for careful drill string management.



## ADDITIONAL IMAGES



## Overview

### Automated Pipe Racking System

This automated pipe racking system is designed for high-efficiency, unattended operation on the monkey board during petroleum prospecting. It features precise motion trajectory control and a unique touch sensing function to ensure drill strings are handled with care. The system includes an emergency power failure processing unit and comprehensive video surveillance, ensuring safe and reliable performance in demanding drilling environments.

## Operational Capabilities

<b>Trip-in/out Efficiency</b>	30-40 tubulars per hour
<b>Key Safety &amp; Control Features</b>	Fully Automatic, Unattended Operation, Touch Sensing, Emergency Power Failure System, Video Surveillance

## Technical Specifications

### Technical Parameters

	Unit	PRML-2/11	PRML-4/11	PRME-10
Applicable Pipe Diameter	mm in	89-168 3 1/2-6 5/8	89-168 3 1/2-6 5/8	73-254 27/8-10
Max. Clamping Weight	kg lb	2,000 4,400	4,000 8,800	N/A
Max. Drill Collar Diameter	mm in	279.4 11	279.4 11	254 10
Slewing Angle	deg	±90°	±90°	±90°
Variable Travel Distance	mm in	Customized	Customized	Customized
Horizontal Travel Distance	mm in	Customized	Customized	Customized
Vertical Travel Distance	mm in	2,300 90.5	2,400 94	N/A
Average Cycle Time	S	90	120	80
Hydraulic System (NAS9 class)/Voltage	MPa L/min	21 150	21 180	380V
Driving Mode		Electronically Controlled Hydraulic	Electronically Controlled Hydraulic	Electrical Control
Weight (including monkey board)	kg lb	13,000 28,660	15,000 33,069	10,500 23,000

Comparison of technical parameters for the PRML and PRME series pipe racking systems.

### Model Specifications

Specification	PRML-2/11	PRML-4/11	PRME-10
Pipe Diameter (mm)	89-168	89-168	73-254
Max Clamping Weight (kg)	2,000	4,000	N/A
Max Drill Collar Diameter (mm)	279.4	279.4	254
Vertical Travel (mm)	2,300	2,400	N/A
Cycle Time (s)	90	120	80
Total Weight (kg)	13,000	15,000	10,500

### Driving Modes

- Electronically Controlled Hydraulic (PRML-2/11, PRML-4/11)
- Electrical Control (PRME-10)

### Slewing Angle

90 deg