Cameron’s SmartRacker™ III-XY triple column racker is an advanced pipe handling system for jackup rigs, semi-submersible rigs and drillships.

The SmartRacker III-XY triple column racker performs all vertical pipe handling operations on the drillfloor, including racking stands, building stands in the mousehole, picking up singles from the catwalk, laying out singles to the catwalk and tripping in-and-out of the fingerboard. The SmartRacker III-XY is fully-automated with a “robotic” control system that controls and monitors all operations and protects the machine and rig from operator failure. The machine can be operated in auto-mode, semi-automatic mode, manual mode, override mode and emergency mode. With its unique gripper head design, it can handle all types of pipe, including production tubing, drillpipe, casing and spiral drill collar.

Using AC technology for all main functions, the SmartRacker III-XY is accurate and reliable, and easy and quick to operate. This efficient handling system is designed for the most demanding applications in an offshore environment. It is designed according to DNV and NORSOK regulations and is CE marked.

Main Features
- Versatile for handling of triple stands, horizontal-to-vertical, as well as assistance in handling smaller bits, subs and objects
- Fully-automated functions with focus on extremely simple use
- All main functions driven by hydraulic motors for better performance and extreme accuracy
- One gripper head handles all drillpipe, casing and drill collar from 3-1/2” to 13-5/8” (2-7/8” optional); no need to stop and wait to change heads
- Accurate soft stabbing function saves threads on drillpipes
- Works in concert with the SmartCat™ for horizontal-to-vertical operations; no need for overhead v-door machines
- Pickup elevator with fail-safe mechanical lock range from 2-7/8” to 13-5/8” pipe size
- Upper and lower guide arm adjustable vertically for different stand lengths
- Robust design with few well-protected sensors
- User-friendly HMI with onscreen operator guidance

Safety Features
- Fail-safe design philosophy
- Fully-automated; all operations controlled from the drilling control room
- Monitoring and interlocks to avoid damage to machine or surroundings; smooth end stops
- Gripper arm lifted using dual lifting wire, dual winch motors and gears, as well as dual fail-safe winch brakes
- Dual design (upper trolley motor, gear and brake/lower trolley motor, gear and brake/column rotate motor, gear and brake)
- Low-maintenance design throughout using high-quality components and low-maintenance bearings
- Maintenance access at defined points
- Full integration with Zone Management System
- Fail-safe gripper head with accumulator to maintain pressure in case of hydraulic power loss
**Scope of Supply**

AC-driven triple column racker composed of:
- Rotatable soft stabbing arm
- One flush-mounted rail in drillfloor
- One AC-driven lower drive trolley
- One lower guide arm
- One main column with AC-driven winch
- One main arm with gripper head and pickup elevator
- One upper AC-driven trolley
- One upper supporting beam
- VFD cabinets for AC motors
- SmartRacker control system
- Hydraulic/electrical interface at top beam
- Emergency lowering and relocating system

**Options**

- Pickup elevator hang-off in derrick
- Pickup elevator cradle on drillfloor
- Auxiliary lifting tools for lifting objects other than pipes
- Low-temperature package for installation in conditions below -20° C
- High-temperature package for installation in conditions above 40° C
- Adapters for the handling of special objects
- 2-7/8” tubing adapter for the gripper head
- Riser guide tool
- Extended reach up to 4.6 m
- Zone Management System

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**Technical Specifications**

<table>
<thead>
<tr>
<th></th>
<th>SI</th>
<th>Imperial (US)</th>
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<tbody>
<tr>
<td>Maximum lifting capacity</td>
<td>10 tonnes</td>
<td>11 tons</td>
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<tr>
<td>Vertical main arm travel</td>
<td>12 m</td>
<td>39 ft</td>
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<tr>
<td>Horizontal travel</td>
<td>4 m (to suit derrick size)</td>
<td>13’ 1-1/2” (to suit derrick size)</td>
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<td>Arm reach</td>
<td>4.0 m</td>
<td>13.1 ft</td>
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<td>Gripper head pipe size range</td>
<td>88.9 mm to 346 mm</td>
<td>3-1/2” to 13-5/8”</td>
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<tr>
<td>Pickup elevator pipe size range</td>
<td>73 mm to 346 mm</td>
<td>2-7/8” to 13-5/8”</td>
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<tr>
<td>Column rotate angle</td>
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<td>Pipe length</td>
<td>10.4 m</td>
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<td>Stand length up to</td>
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<td>Temperature range</td>
<td>-20° C to 40° C</td>
<td>-4° F to 104° F</td>
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<td>Total weight</td>
<td>38 tonnes</td>
<td>42 tons</td>
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