

Robotic Pipe Handler

RPH-7000



The Canrig® electric Robotic Pipe Handler (RPH-7000) is a flexible nine degrees of freedom robot where the lower manipulator arm can operate between horizontal and vertical, and therefore, handle tubulars from horizontal and vertical without a separate dedicated HTV machine.

The RPH-7000 can exchange its handling tools, as a gripper or spinner-gripper. With its unique spinner-grippers, the RPH-7000 can spin pipe directly into or out of the stickup, and thereafter, the roughneck only has to do the make and break operation. Protectors are not needed.

When handling stands, the RPH-7000 consists of a lower and an upper manipulator arm. These two manipulator arms can be operated separately, thereby enabling activities such as offline stand building without interfering with the drilling operation. Torque wrenches mounted on the vertical column or in the derrick can torque drill pipe or casing up to 100 kNm.



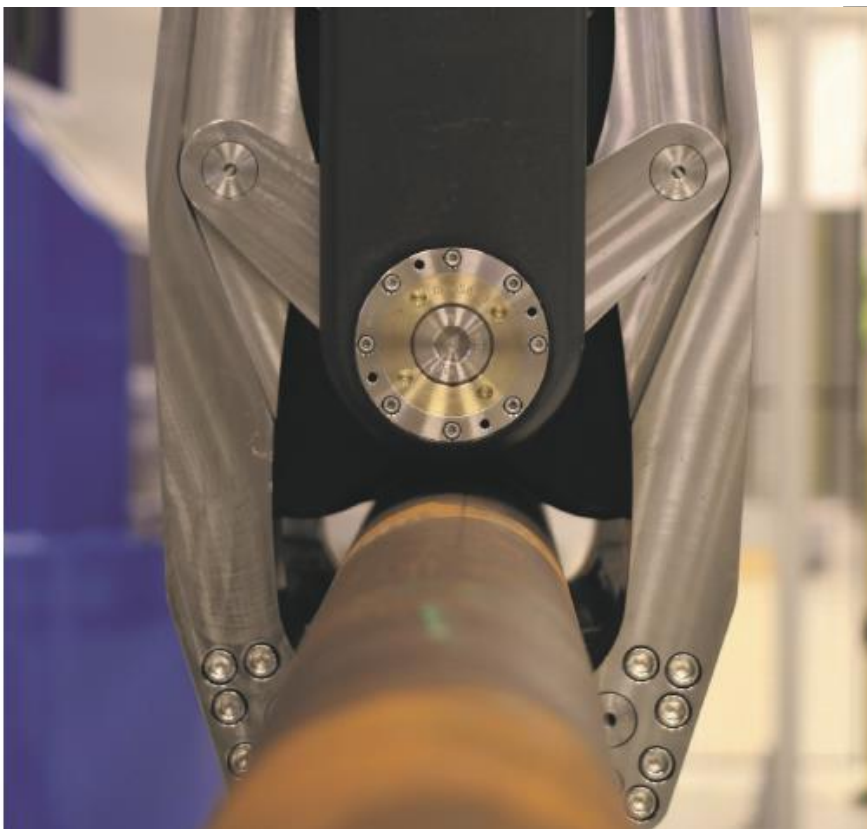
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Features & Benefits

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| <ul style="list-style-type: none">• Fully electric, nine axis robot for pipe and casing | <ul style="list-style-type: none">• Built-in HTV capability |
| <ul style="list-style-type: none">• Self-contained with hardware controls built-in for easy installation and integration | <ul style="list-style-type: none">• 3500kg handling capacity on each pipe handler manipulator arm |
| <ul style="list-style-type: none">• Capable of spinning stands | <ul style="list-style-type: none">• Stand/casing building capability |
| <ul style="list-style-type: none">• Low maintenance requirement | <ul style="list-style-type: none">• Lower arm/gripper can be used for BHA components and lifting subs |



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Technical Data	Value
Services	<ul style="list-style-type: none">• Handle drill pipe, drill collars (without spiral grooves), casing and tubing from horizontal to vertical or to/from set-back, and spin the tubulars into/out from stick up• Building stands of drill pipe, casing and tubing
Handling Capacity	3,500kg per manipulator arm; 7,000kg in total
Pipe Capacity (diameter)	4 to 14 inches with standard grippers. Automatic change of gripper for other sizes.
Torque Wrench Capacity For Standing Building	100,000 Nm
Weight	65,000kg depending on column height
Height	33.25 meter (configurable)
Power Requirements	<ul style="list-style-type: none">• Approximately 180 kW peak, 55 kW on average• Voltage: 400-480 VAC, 50/60 Hz / 3 phase+ N• Circuit Breaker: 200A• Built-in Energy Recovery System