

HDM 50/225
HDM 85/335
HDM 170/425

Hydraulic manipulator
for rods and casing

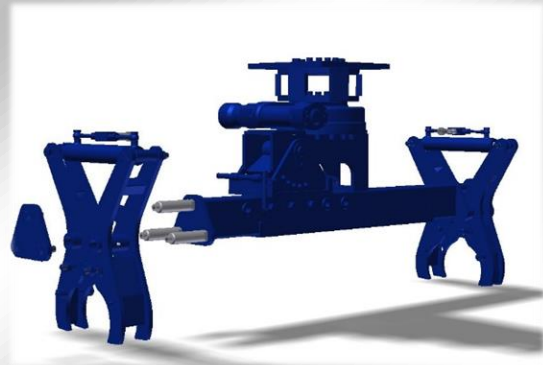


Application Area

This handling system is designed as an attachment for excavators, for picking up and handling of

- casing and rod combinations
- single drill rods
- hollow bars

The HDM Manipulator design is based on a basic unit (hydraulic rotator, inclination and beam structure) in combination with 3 different types of clamp devices. These sets of clamp devices can easily be interchanged by a bolting connection and hydraulic quick couplers. The following sets of clamps are available:



Handling system	Clamping range	Type of rod	Rod length	Rod weight
HDM 50/225	Ø50 - 225 mm	Hollow bar Ø51-117 mm	2 – 4 mtr	350 kg
		Single rods 63.5 - 219.1 mm	2 – 4 mtr	
		Double rods 63.5 - 219.1 mm	2 – 4 mtr	
HDM 85/335	Ø85 - 335 mm	Single rods 88.9 - 323.9 mm	1.5 – 4 mtr	500 kg
		Double rods 88.9 - 323.9 mm	1.5 – 4 mtr	
HDM 170/425	Ø170 - 425 mm	Single rods 177.8 - 419.1 mm	1.5 – 4 mtr	750 kg
		Double rods 177.8 - 419.1 mm	1.5 – 4 mtr	



Technical Specifications

Description	Description
Dimension, weight	
Length	1.770 mm
Width (depending on clamp set)	550-750 mm
Height	950 mm
Weight (excl. quick mounting system)	350 kg
Rotator device	
Rotation angle	360° endless
Rotation speed	360° in 7 s
Rotation torque	5 kN
Oil pressure	120 - 180 bar
Oil flow	20 - 70 l/min
Control	
Principle	100% hydraulically controlled
Quantity of hydraulic functions	3
Oil pressure	180 bar (max. 210 bar)
Oil flow	20 - 70 l/min
Drilling positions	
Vertical drilling	yes
Inclination for inclined drilling	0-60°
General	
Oil for control	Class HLP 46 or equivalent
Lubrication grease	Standard lubrication grease

Transport Unit

For storage and transport of the HDM Manipulator a transport box / steel frame is available. This piece is made of welded steel. It has four lifting points at each corner and also channels for forklift handling. It is painted in RAL-5010. Other RAL-colors at customer's request.

Hydraulic kit for connection to excavator

Additionally, a hydraulic kit is available. This kit consists of all hydraulic hoses for the hydraulic connection between the excavator and the HDM Manipulator.

Excavator requirements

For a safe and stable working procedure an excavator of sufficient weight is recommended as following:

Handling system	Excavator weight
HDM 50/225	6-8 ton
HDM 85/335	8-14 ton
HDM 170/425	8-14 ton

The HDM Manipulator works only on hydraulics, no electrical parts and controls are needed. The excavator only needs to have 3 independent hydraulic functions (one feed and one return line per function).

Mechanical connection between excavator and HDM Manipulator

The HDM Manipulator is always delivered with a universal steel square base plate on top. Additionally, one piece of steel contra plate is supplied. Both plates have a bolting pattern of 8 pieces of bolt holes Ø24 mm. The excavator specific quick mounting system can be welded to this contra plate.

At customer's request, a quick mounting system head plate can be delivered. The following types are available: CW10 / CW30 / MS03 / MS08 / S40 / S45. Others on request.



CW-quick mounting



MS-quick mounting



Hütte Bohrtechnik GmbH

Ziegeleistrasse 36
D-57462 Olpe
Germany
Tel.: +49(0)2761/9644-0
Fax: +49(0)2761/63852
info.huette@casagrandegroup.com

www.casagrandegroup.com

