

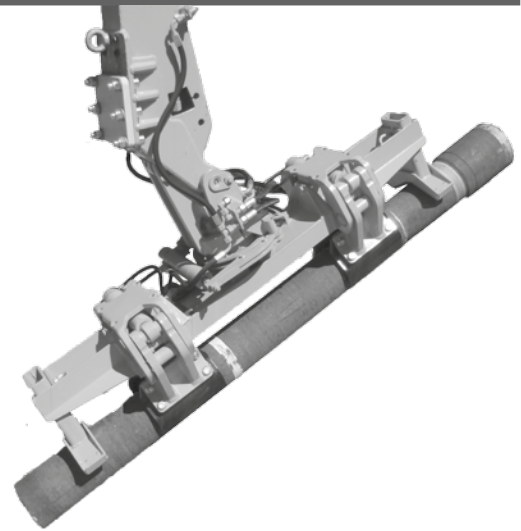
Manipulator / 3-Axes-Manipulator

930-1000 Special / 931-1000

The pole grapple KM 930-1000 Special is a perfectly matched attachment for drilling sites. Poles can be gripped easily and positioned precisely.

The 3-Axes-Manipulator KM 931 features maximum manoeuvrability for your attachments at the loader crane's tip – and provides flexibility of the loader crane's use in any arc position.

- **3-axes-manipulator: maneuverability** by three hydraulic functions: gripping, rotating and tilting (3rd hydraulic cycle needed).
- **Endless rotation.**
- **High loads** up to 1000 kg.
- **Precise positioning** guaranteed by self-locking worm drive (KM 931-1000).
- **5-line feedthrough.**
- **KM 930-1000 Special** provides an **exchangeable jaw system.**



Pole Grapple KM 930-1000 Special						
Type	Load capacity	Gripping range	Width E	Number of tines	Self weight	Closing force
	(kg)	(min./max.) (mm) / (inch")	(mm)		(kg)	(kN)
KM 930-1000 Special	1000	(100/185) / (4/7,3")	1600	2	385	2 x 16
Exchangeable jaws	---	(170/220) / (6,6/8,6")	---	---	---	---

Package consists of: manipulator, hydraulic pilot controlled brake, **KINSHOFER** rotator, non-return valve

Please note: tubes or poles have to be grabbed always in the centre of gravity

3-Axes-Manipulator KM 931-1000						
Type	Load capacity	Slewing angle	Tilting angle	Rotation	Self weight	
	(kg)				(kg)	
KM 931-1000	1000	130°	± 80°	360° endless	290	

Package consists of: manipulator, hydraulic pilot controlled brake, worm drive, non-return valve

Please note: tubes or poles have to be grabbed always in the centre of gravity

Accessories	
Type	Description
KM 980-2	solenoid valve for additional oil circuit to change over to 3 circuits (for gripping, lifting, turning) when only 2 circuits are available, ready for mounting – 12 V or 24 V, working pressure max. 250 bar, oil flow 60 l/min (do-it-yourself assembly)
KM 980-2 c	solenoid valve KM 980-2 complete attachment kit including assembly components, hose guard, hoses and mounting on the KM 930 manipulator – 12 V or 24 V, working pressure max. 250 bar, oil flow 60 l/min (incl. mounting)

Requirements of Truck Crane		
Three hydraulic circuits needed		
Operating pressure:	⚠ KM 930-1000 Special 20 MPa (200 bar)	⚠ KM 931-1000 20 - 24 MPa (200 - 240 bar)
Pump capacity:	20 - 30 l/min	20 - 40 l/min

Technical Drawings

