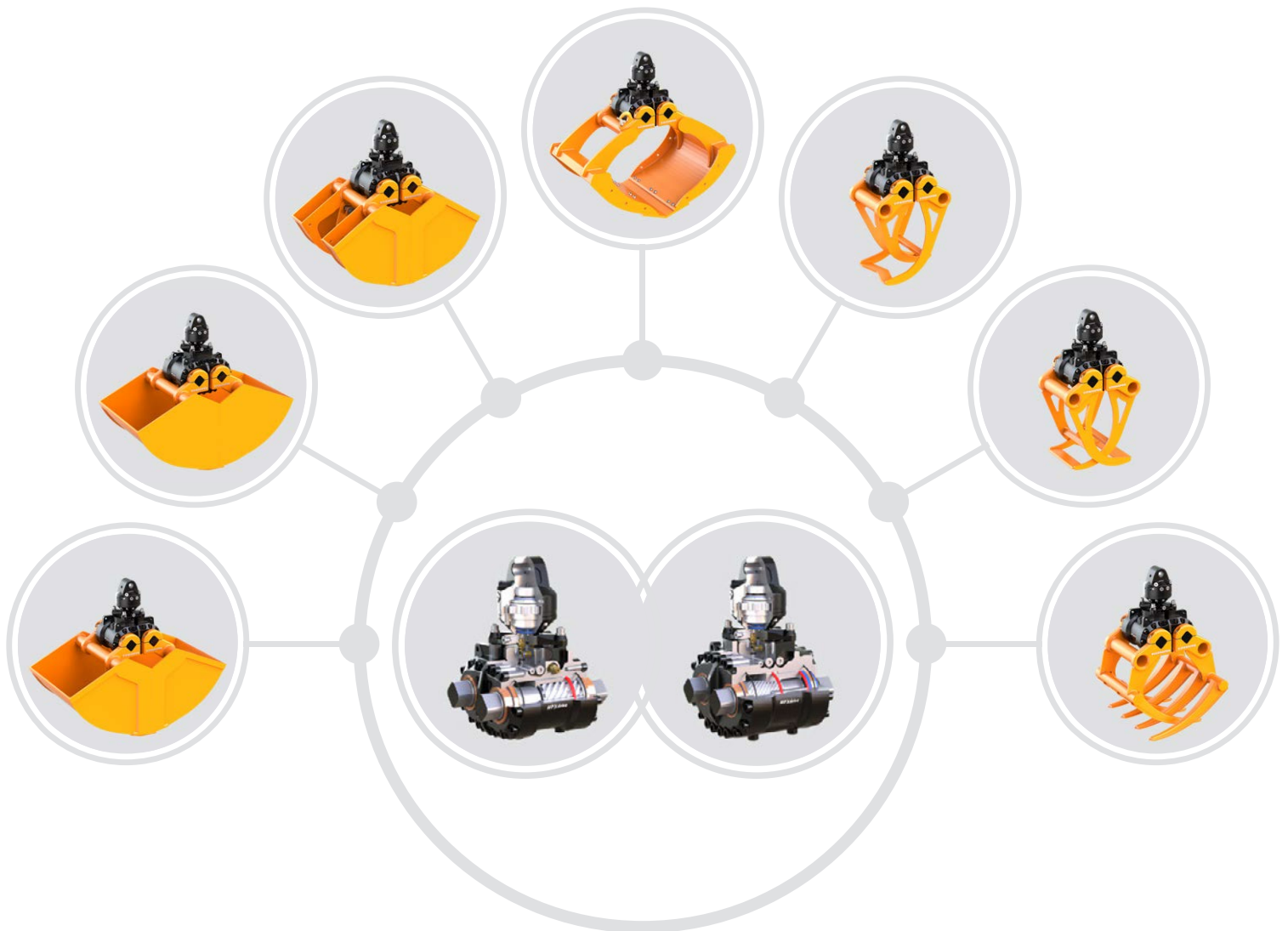




HPXdrive Technology Crane

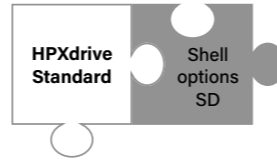


HPXdrive STANDARD

The HPXdrive Standard (SD) guarantees a secure working in daily tasks. Integrated pressure relief valves keep the operation independent from the carrier's operating pressure. The drive unit HPXdrive can be equipped with a standard flange rotator as well as with a shaft rotator. When used in combination with a shaft rotator, there are several options to connect the rotator with the drive unit, e.g. with our quick change device.

GRAPPLE TYPES:

- ▷ KM 604HPX Standard clamshell bucket
- ▷ KM 626HPX Small volume clamshell bucket
- ▷ KM 604U HPX Universal grapple with open shells
- ▷ KM 613HPX Rock grapple
- ▷ KM 632HPX Timber grapple
- ▷ KM 641HPX Hay and forestry grapple



HPXDRIVE SD WITH FLANGE
DIRECT CONNECTION



HPXDRIVE SD WITH SHAFT
WITH KM 502 (4500)
REDUCTION LINK



HPXDRIVE SD WITH SHAFT
WITH KM 505
QUICK CHANGE DEVICE
STANDARD



HPXDRIVE SD WITH SHAFT
WITH KM 505 HD
QUICK CHANGE DEVICE
HEAVY DUTY

HPXDRIVE STANDARD
EXCHANGEABLE SHELLS

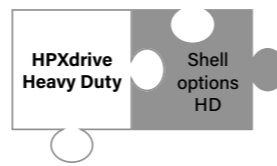


HPXdrive HEAVY DUTY

The HPXdrive Heavy Duty (HD) is a robust drive unit for heavy duty tasks. The wear-resistant, hydrostatic bearings provide for a higher level of efficiency, resulting in higher closing forces. There are also versions for Z-cranes available with the HPXdrive Heavy Duty. The HD drive can also be equipped with either a standard flange or a shaft rotator.

GRAPPLE TYPES:

- ▷ KM 605HPX Heavy duty clamshell bucket
- ▷ KM 605HPX-Z Heavy duty clamshell bucket for Z-cranes
- ▷ KM 605U HPX Universal grapple with open shells
- ▷ KM 605U HPX-Z Universal grapple with open shells for Z-cranes
- ▷ KM 613HPX-HD Rock grapple
- ▷ KM 632HPX-HD Timber grapple
- ▷ KM 641HPX-HD Hay and forestry grapple



HPXDRIVE HD WITH FLANGE
DIRECT CONNECTION



HPXDRIVE HD WITH SHAFT
WITH KM 502 (4500)
REDUCTION LINK



HPXDRIVE HD WITH SHAFT
WITH KM 505
QUICK CHANGE DEVICE
STANDARD



HPXDRIVE HD WITH SHAFT
WITH KM 505 HD
QUICK CHANGE DEVICE
HEAVY DUTY

HPXDRIVE HEAVY DUTY
EXCHANGEABLE SHELLS



**Functional exchange,
depending on demands!**

With increasing costs and environmental awareness, working efficiently is essential. When compared with a conventional cylinder-driven grab, the HPXdrive stands out thanks to its extended lifetime. Not only maintenance downtimes are reduced but also operational expenses. The integrated shell exchange system and the different available shell options provide high flexibility on one hand, and lower the cost of ownership for additional attachments on the other hand.

CUSTOMER BENEFITS:

FLEXIBLE OPERATION

Fast and easy response to requirements, to be more competitive.

LOW MAINTENANCE

The HPXdrive has no greasing point that need to be lubricated on a daily basis. Maintenance costs and time savings.

LESS WEAR

The compact and extremely robust design, without hydraulic cylinders or short hoses, lowers risk of damages.

HIGHER EFFICIENCY

More power thanks to the constant closing force during the entire gripping process. Tasks are finished faster and wear is kept to a minimum.

Compact design



The HPXdrive has a compact and very robust design, no greasing points and, when mounted with a KINSHOFER rotator, short connecting hoses are no longer needed (internal oil feedthrough).

HPXDRIVE GRAPPLE



OPEN

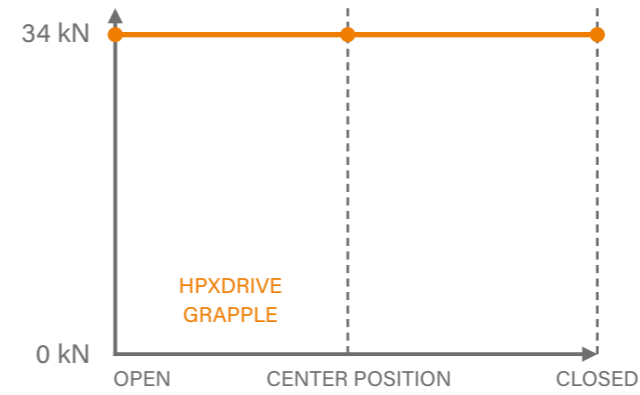
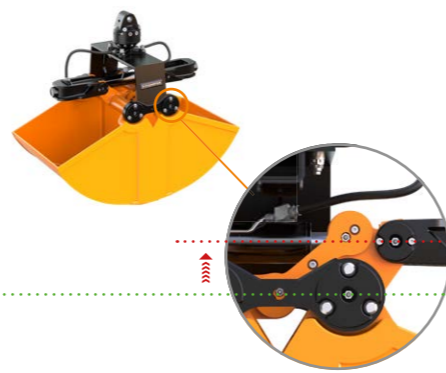
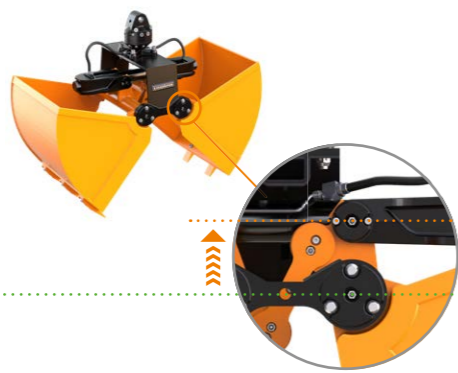


CENTER POSITION

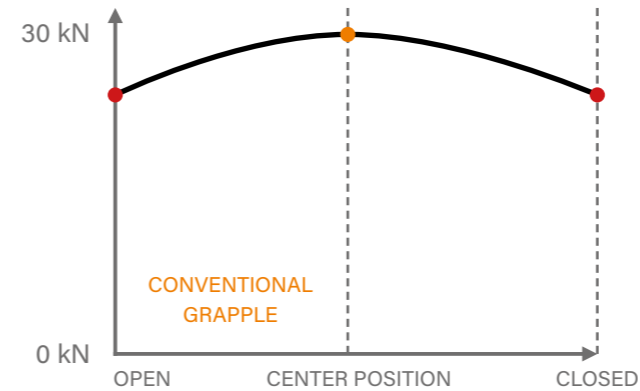


CLOSED

CONVENTIONAL GRAPPLE



CLOSING FORCE PROCESS



Hydraulic drive unit HPXdrive

CLOSING FORCE

Compared to conventional cylinder grabs, HPXdrive closing force is high and constant during the entire open/close cycle. Movement of the arms is generated by two hollow shafts, which run opposed, and have a helix thread, hydraulically driven by a single piston. The resulting closing force remains constant wherever the position of the shells.

STARTING POSITION:
Shells mounted



STEP 1:
Loosen 4 retaining bolts on one side



STEP 2:
Remove loose bolts and clamping parts and place exchange aid



STEP 3:
Loosen bolts on other side, Remove bolts and clamping parts and place exchange aid



CHANGE POSITION:
HPXdrive is loose



STEP 4:
Lift HPXdrive and place it above the other set of shells



STEP 5:
Remove exchange aids first and then bolt on clamping parts on one side. Repeat on the other side



FINAL POSITION:
Shells are mounted



Exchangeable shells with HPXdrive

Thanks to the shell exchange system you lower your fleet investment costs. Fast and easy, just choose and switch the suitable shell option according to the task. The reliable shell exchange system features an easy loosening of the shells in case of exchange and a safe and steady holding of loads during every task. Setup times are reduced to a minimum.

Both your competitiveness and working process flexibility are optimized.

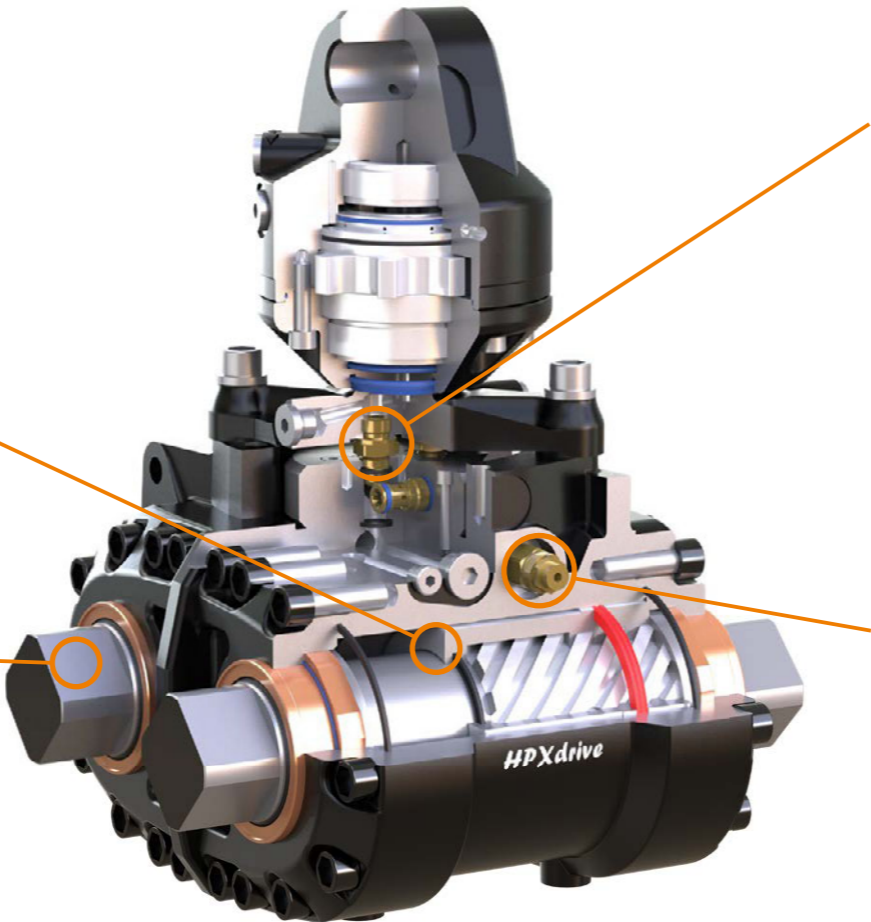
HPXdrive Standard

FUNCTION:
SHAFT & PISTON

The linear movement of the piston is converted into a rotary motion of the two shafts by rotating the helix threads. The use of a compensation rod to synchronise the shells is not necessary and the generated closing force is constant during the entire operation.

SYSTEM:
EXCHANGE OF SHELLS

The hydraulic drive is equipped with a simple shell exchange system, which takes 10 minutes with a 5-step-exchange process. You can switch to different shells e.g. demolition grab, clamshell bucket or timber grab, using only one drive unit. The nitrided shafts and piston feature a robust surface resulting in a minimized wear.



STRUCTURE:
UNIT

The Kinshofer rotator and the HPXdrive form a compact and robust unit. It withstands external forces as hydraulic connections are integrated with an oil feedthrough; short hoses are not necessary. Therefore, leaks due to damaged hoses cannot happen and the unit is safe to use in water protection areas. As the drive unit runs in a permanent oil bath, there is no lubrication necessary.

SAFETY:
SAFETY VALVES



The HPXdrive is equipped with two pressure relief valve and protects the grab in case of overloading. The integrated non-return valve guarantees a secure retention of loads. Installation of valves at the carrier machine is not necessary.

Hydraulic drive unit Standard

All SD-shells are exchangeable

Type	HPXdrive	Opening	Closing force
KM 604HPX	SD-module	1390 mm	19 kN
KM 626HPX	SD-module	890 mm	31 kN
KM 604U HPX	SD-module	1590 mm	17 kN
KM 613HPX	SD-module	1200 mm	18 kN
KM 632HPX	SD-module	1220 mm	18 kN
KM 641HPX	SD-module	1190 & 1630 mm	14 & 18 kN

Information about the closing force refers to the max. working pressure of 250 bar.

Accessories



KM 604HPX:
CLAMSHELL BUCKET WITH HPXdrive



KM 626HPX:
SMALL VOLUME CLAMSHELL BUCKET WITH HPXdrive



KM 604U HPX:
UNIVERSAL GRAPPLE WITH OPEN SHELLS AND HPXdrive



KM 613HPX:
ROCK GRAPPLE WITH HPXdrive



KM 632HPX:
TIMBER GRAPPLE WITH HPXdrive



KM 641HPX:
HAY & FORESTRY GRAPPLE WITH HPXdrive



DIGGING EXTENSION FOR KM 604HPX
No external hose connections!



SCRAPER FOR KM 604HPX

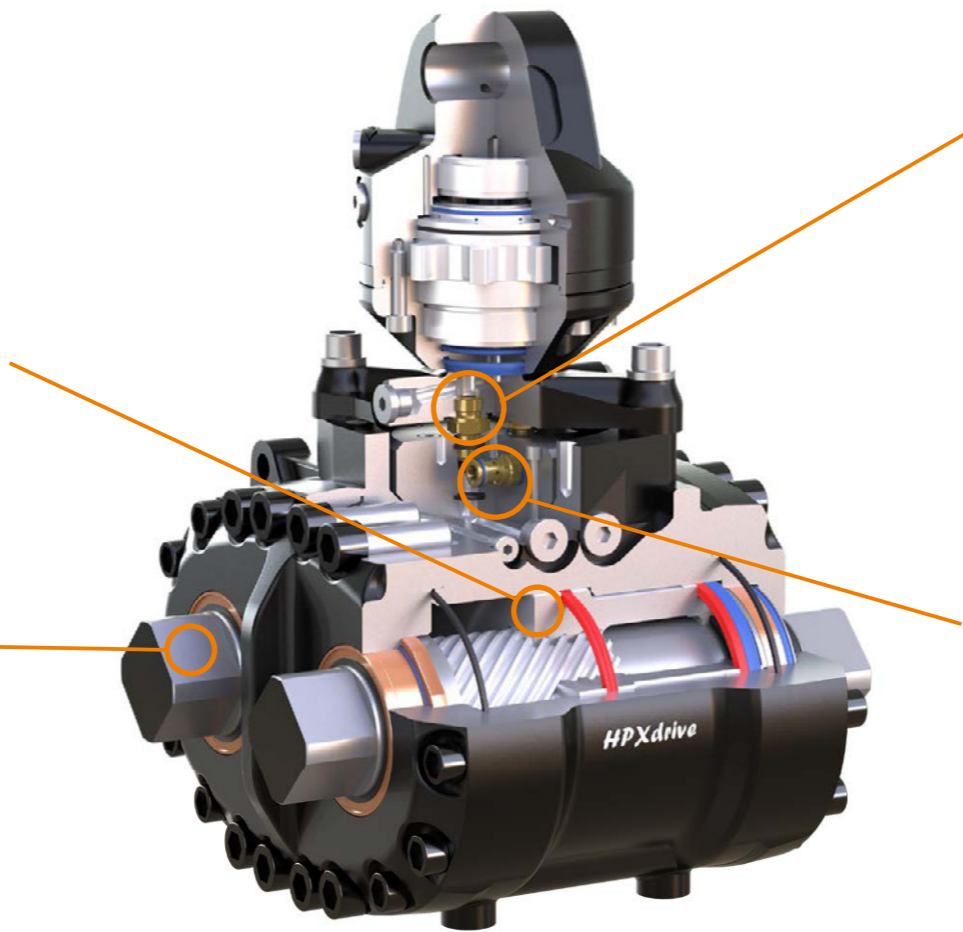
HPXdrive Heavy Duty

FUNCTION:
SHAFT & PISTON

The linear movement of the piston is converted into a rotary motion of the two shafts by rotating the helix threads. The use of a compensation rod to synchronise the shells is not necessary and the generated closing force is constant during the entire operation. The wear-resistant, hydrostatic bearings provide a higher level of efficiency and thus higher closing forces. Closing force remains constant during the entire operation.

SYSTEM:
EXCHANGE OF SHELLS

The hydraulic drive is equipped with a simple shell exchange system, which takes 10 minutes with a 5-step-exchange process. You can switch to different shells e.g. demolition grab, clamshell bucket or timber grab, using only one drive unit. The nitrided shafts and piston feature a robust surface resulting in a minimized wear.



STRUCTURE:
UNIT

The Kinshofer rotator and the HPXdrive form a compact and robust unit. It withstands external forces as hydraulic connections are integrated with an oil feedthrough; short hoses are not necessary. Therefore, leaks due to damaged hoses cannot happen and the unit is safe to use in water protection areas. As the drive unit runs in a permanent oil bath, there is no lubrication necessary.

SAFETY:
SAFETY VALVES



The HPXdrive is equipped with an integrated non-return valve that guarantees a secure retention of loads. Components safety is guaranteed up to 320 bar. Installation of valves at the carrier machine is not necessary.



KM 605HPX:
CLAMSHELL BUCKET WITH HPXdrive



KM 605HPX-Z:
CLAMSHELL BUCKET WITH FLAP AND HPXdrive FOR Z-CRANES



KM 605U HPX:
UNIVERSAL GRAPPLE WITH OPEN SHELLS AND HPXdrive



KM 605U HPX-Z:
UNIVERSAL GRAPPLE WITH FLAP, OPEN SHELLS AND HPXdrive FOR Z-CRANES



KM 613HPX-HD:
ROCK GRAPPLE WITH HPXdrive



KM 632HPX-HD:
TIMBER GRAPPLE WITH HPXdrive



KM 641HPX-HD:
HAY & FORESTRY GRAPPLE WITH HPXdrive

Hydraulic drive unit Heavy Duty

All HD-shells are exchangeable

Types	HPXdrive	Opening	Closing force
KM 605HPX	HD-module	1420 mm	34 kN
KM 605HPX-Z	HD-module	1420 mm	34 kN
KM 605U HPX	HD-module	1545 mm	28 kN
KM 605U HPX-Z	HD-module	1545 mm	28 kN
KM 613HPX-HD	HD-module	1710 mm	22 kN
KM 632HPX-HD	HD-module	1290 mm	31 kN
KM 641HPX-HD	HD-module	1720 mm	23 kN

Information about the closing force refers to the max. working pressure of 320 bar.

Accessories



DIGGING EXTENSION FOR KM 605HPX
No external hose connections!



SCRAPER FOR KM 605HPX

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