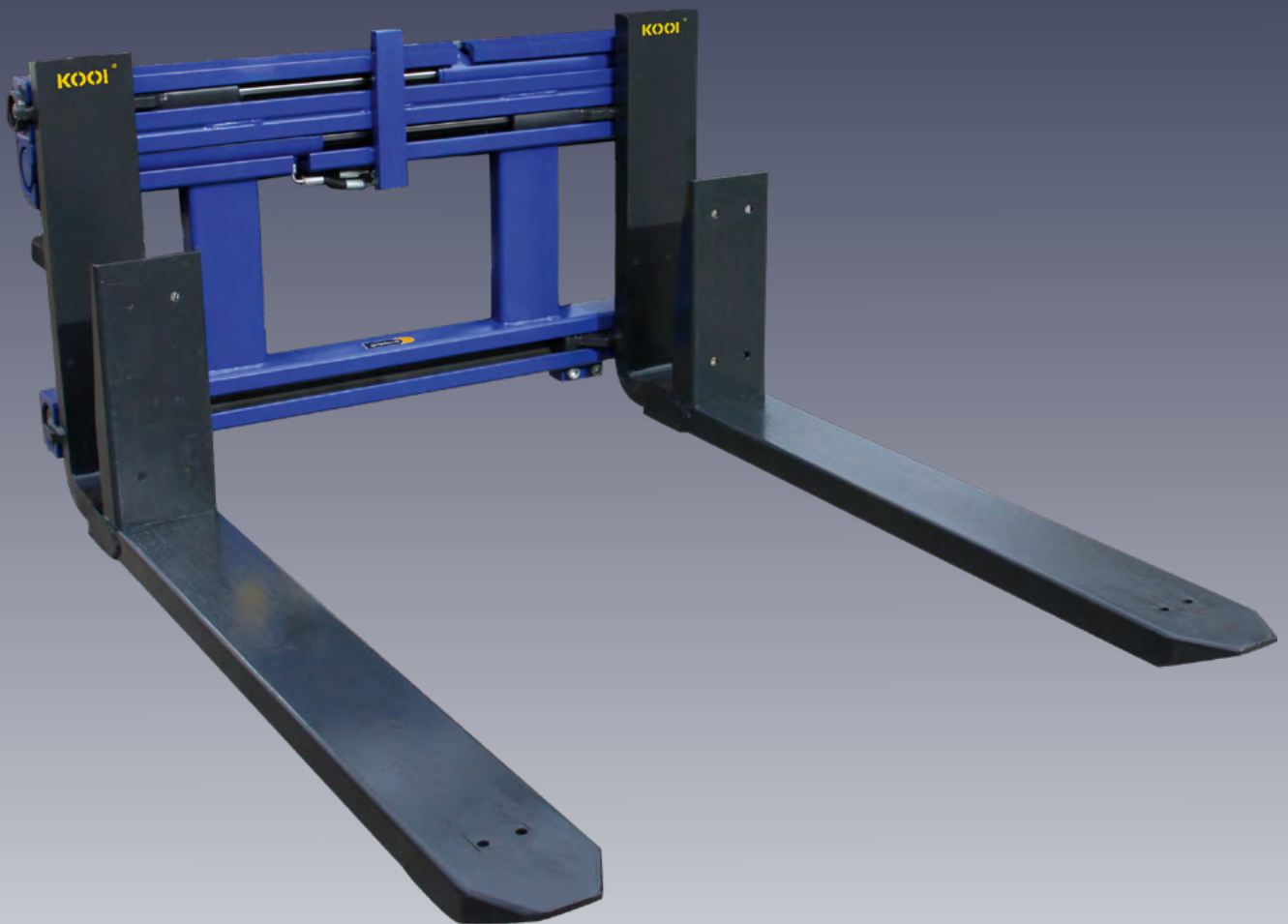


griptech

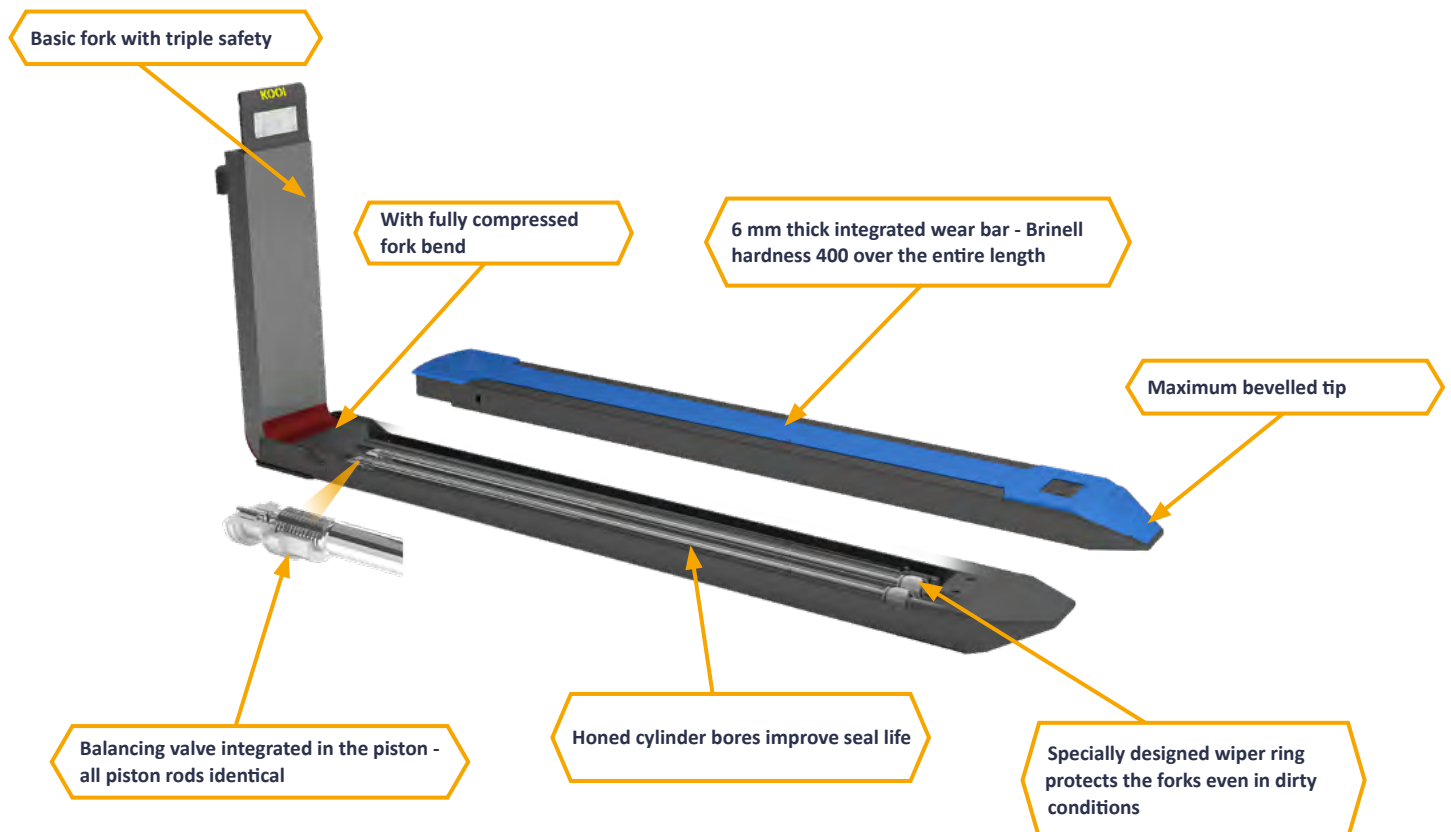
KOOI® REACHFORKS

and combinations with fork positioners



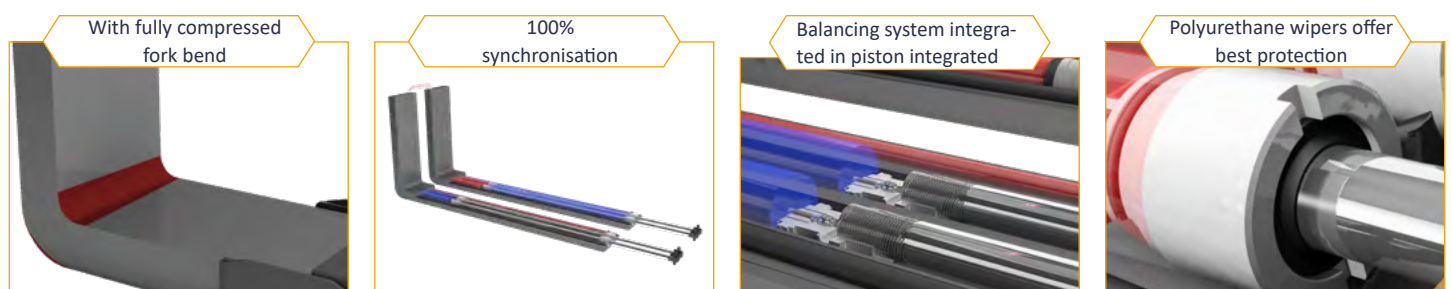
100.000 Pairs sold: KOOI® Reachforks proven quality since 1980

- ▶ 100% synchronisation
- ▶ 1 or 2 cylinder (high-performance model) in each fork
- ▶ With fully compressed fork bend
- ▶ 6 mm thick wear bar integrated in the outer fork: **The most wear-resistant outer fork on the market!**



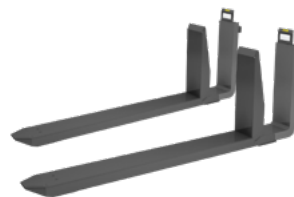
Functional principle of forced synchronisation

For forced synchronisation, the cylinders are connected in series. For this purpose, the cylinder bores in the right fork are larger than those in the left fork, so that the volume in the two forks, which is shown in red, is 100% identical. When the KOOI® Reachforks are extended, the oil flows via a connecting hose from the right fork into the left fork, whereby the left fork is forced to extend as well. When the forks are retracted, the oil flows in exactly the opposite direction. If a leak, e.g. in the piston seals, would cause the forks to run unevenly, a balancing system ensures that the forks are brought into line. In addition, the equalising system can be used for flushing (bleeding).



Series for retracting and extending with load

- RG4:** 2-cylinder in each fork "heavy duty" model with a load capacity up to 40.000kg with 6mm integrated wear bar.
- RG2:** 1-cylinder version, extra narrow (fork width 139mm) with increased working speed. For forklift trucks up to 2.5t load capacity.



Series for extending and retracting without load

- RGE2:** Use as hydraulic fork extension with flat underside (no snagging). Ideal for picking and transporting different pallet sizes.
- REE:** Extra thin telescopic fork only 40mm thick.



Series with shortened basic length

- TFG2:** Specially designed for reach trucks and double-deep storage. 1-cylinder design ensures high working speed.
- TRG2:** Triplo-KOOI® Reachforks extends in two stages so that the basic length can be almost doubled.

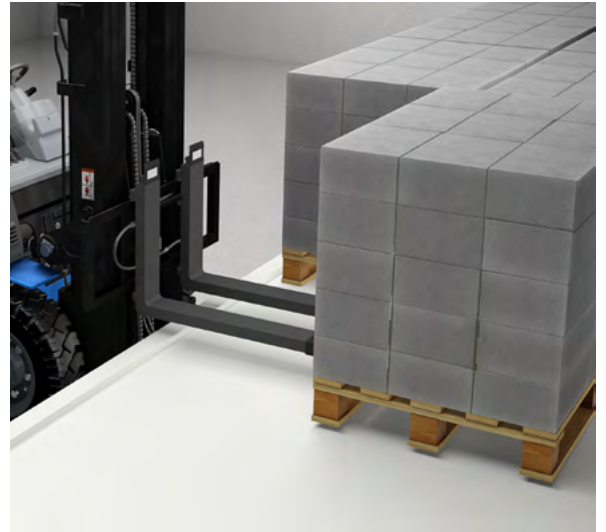


Special versions available on request

- ▶ Special versions available on request
- ▶ Versions according to ATEX-EN 1755-2015
- ▶ Electronic length indicator for automatic adjustment of different fork lengths
- ▶ Special cross-sections

One-sided loading and unloading

With the KOOI® Reachforks, trucks or railway wagons can be loaded and unloaded from one side. The lorries only need to be opened from one side. Therefore spending more time, by driving around the truck is no longer necessary. Tests have confirmed time advantages of up to 20%. If space is limited, loading and unloading from one side saves a lot of space.



Double-deep pallet storage

The concept of double-deep pallet storage in warehouses offers an interesting alternative to traditional pallet storage.

- ▶ Compared to single-row storage, storage capacity can be increased by about 30%.
- ▶ With regard to multiple-deep storage (e.g. drive-in or deep stacking systems), reaching the pallets is much better and the investment is lower.
- ▶ Compared to narrow aisle storage, accessibility is somewhat less favourable. However, the advantages are a lower investment and the possibility to drive with 2 forklifts in the aisle at the same time (with a comparable storage capacity).

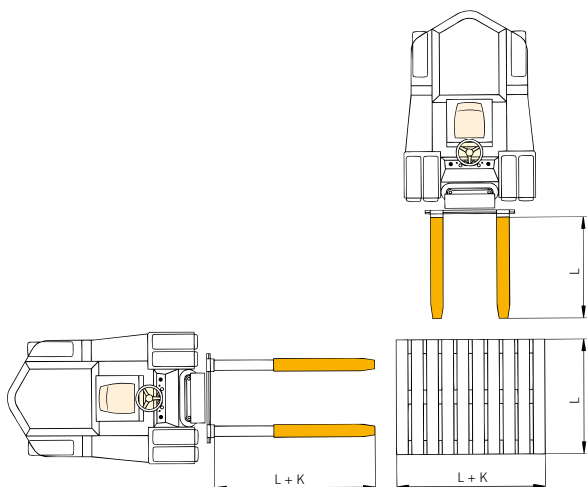


Double pallet transport

One or two pallets can be transported one behind the other and a truck can be loaded directly from one side. With a long travel distance, the time saved is considerable, in addition the truck remains relatively slim and the driving safety is still good.

The KOOI® Reachforks are designed without stops for these applications.





Hydraulic extension forks

Extension forks offer the possibility to transport different pallet sizes or load depths without damage due to protruding fork tips. In addition, the load is always supported over the entire entry depth. The special design of the RGE series offers a completely flat underside of the fork. This prevents the forks from catching on the pallet when it is pulled back.



The combination with fork positioners

We build a range of different fork positioners, where the KOOI® Reachforks can be positioned either within the frame width (ZVR, FPX or ZVC series) or to outside the frame width (FPN series). Our unique 'Integra' guide design with protected integrated adjustment cylinders provides optimum visibility and reduced risk of damage.

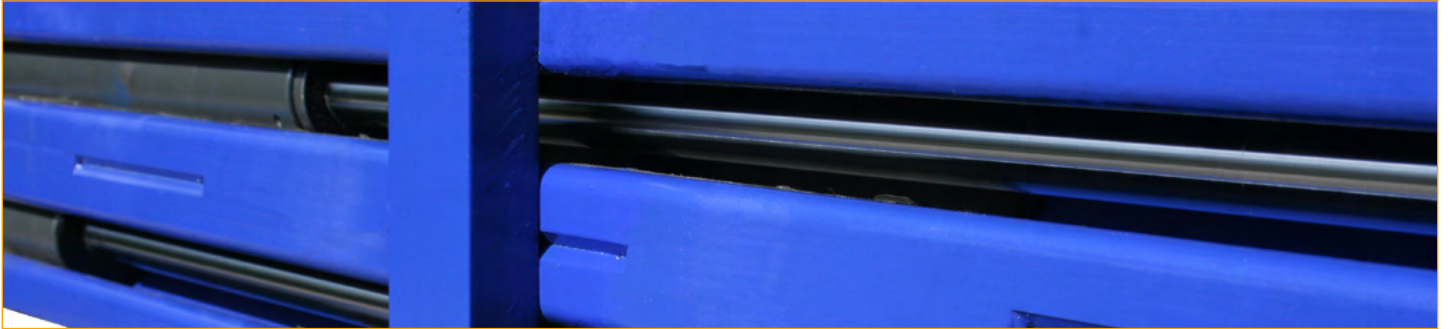
For reach trucks we supply a special design to reduce the turning radius.



The combination with multiple pallet forks

For picking up one or two pallets at a time, the multi-pallet fork is the ideal attachment. With the special, narrow KOOI® Reachforks, one-sided loading and unloading can be carried out. For example, up to two pallets of full loads or 4 pallets of empties can be picked up.

KOOI® Reachforks | In combination with fork positioners



„Integra“ series

Griptech has developed a unique guide design as a guide body for various fork positioners. The base consists of extruded omega profiles with a round, inner guide to accommodate the adjustment cylinders and sliding arms. The rectangular outside forms the interface for the suspension hooks or the directly welded mast stringers. The large moment of resistance of the omega profiles results in a stable frame construction without back plate.

The integrated adjustment cylinders and piston rods are protected against damage and reduce operating costs. All cylinders are pendulum mounted in the guide profile to reduce stress on the seal sets. As a result of the protected integrated cylinders, the visibility is unique.

The round guide provides an optimal contact surface in all directions under a wide range of loads. High-quality and durable, wear-resistant PA bushings are located between the sliding arm and the omega profile.

Overall, the „Integra“ guide design offers very good visibility for the driver, favourable stem dimensions for improved residual load capacity and a smaller risk of damage and thus reduced operating costs.

KOOI® Reachforks with fork positioners FPX

Adjustment within the frame width

With this „Integra“ guide construction, both adjustment cylinders are integrated and protected in the upper Omega guide profiles. The frame is very stable due to the double guide. The visibility and front dimension are optimised. The connection hoses are routed inside the load protection grille as standard. Available without, with integrated or with separate sideshift.

Features:

- ▶ Adjustment cylinders integrated in the omega guide profiles in a protected manner
- ▶ Unrestricted visibility
- ▶ Tubes of the KOOI® Reachforks are guided in the frame in a protected manner



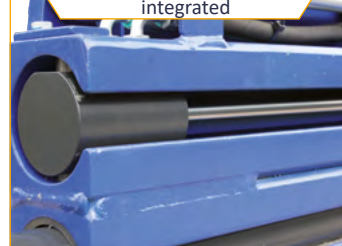
Forks in closed Position



Round sliding guide



Piston rod protected integrated



Separate sideshift with sideshift hooks



KOOI® Reachforks with fork spreader FPN

Adjustment beyond the frame width

The Griptech fork spreader FPN with an adjustment range up to outside the frame width is particularly suitable for picking up long loads and wider pallets.

Features:

- Robust guide body with smallest possible front dimension
- Maximum visibility
- Piston rods protected in guide profile
- KOOI® Reachforks screwed on
- 6mm thick wear bar integrated in the outer fork



KOOI® Reachforks with multi pallet handler DVV

For 1-2-4 pallets

With this equipment several pallets can be transported side by side and one behind the other. In case of higher pallet turnover frequency, this combination offers great time savings. With the specialized slim KOOI® Reachforks, a Euro pallet can also be picked up lengthwise.

Features:

- Adjustment cylinder integrated in the omega guide profiles in a protected manner
- Unrestricted visibility



KOOI® Reachforks with fork adjustment ZVR

High performance model, adjustment within the frame width

For applications that require changing the fork spacing within the frame width, the ZVR fork positioner with a robust shaft guide is the ideal attachment for all applications and is specially designed for combination with KOOI® Reachforks. Clearance and headroom are optimized and the hoses of the KOOI® Reachforks are laid flat at the top of the frame. The frame width can be selected wider than the original fork carriage. KOOI® Reachforks with 100% forced synchronization, synchronization of the fork adjustment via a distributor valve.

Implementation variants:

- As an attachment without sideshift
- As an attachment with integrated or separated sideshift
- Version integrated in the mast (ZVRI series)





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