

# CLEVER MECHANICAL ATTACHMENT FOR SLIPSHEET HANDLING

- For handling pallets and slipsheets.
- Almost no maintenance.
- No need for hydraulics.
- No need for higher-rated forklift trucks.
- Quick to assemble.



# STREAMLINING SEA CONTAINER OPERATIONS FOR FASTER, GREENER SHIPPING WITH KOOI® ROLLERFORKS

As the industry leader in mechanical slip sheet attachment, KOOI® RollerForks, which is developed by Meijer Handling Solutions, are designed to streamline palletless handling processes and minimize product damage, especially when handling, for example, bagged goods, FIBC, and carton boxes. Whether in logistics, warehousing, or production environments, KOOI® RollerForks significantly improves the efficiency and safety of material handling tasks, especially for floor-loaded goods.

# What are KOOI® RollerForks?

The advantage of mechanical RollerForks for loading and unloading sea containers lies in their efficiency and cost-effectiveness. These specialized forks are designed with integrated rollers, enabling the easy handling of pallet-less shipments. By facilitating the quick movement of goods with slipsheets, RollerForks eliminates the need for pallets, reduces shipping weight, and increases container space. This leads to lower transportation costs and improved operational speed. Furthermore, RollerForks are environmentally friendly as they decrease the reliance on wooden pallets, contributing to sustainable logistics practices while enhancing loading and unloading efficiency in sea container operations.

# Boost productivity and minimize maintenance costs

RollerForks are designed for quick attach - and detachment from a standard forklift fork carriage. With no hydraulic components, this mechanical slip-sheet attachment is ideal for use with standard forklifts without any additional modifications. RollerForks offer a more cost-effective solution than a Push/Pull attachment, making them suitable for businesses that occasionally need to unload containers, as well as those that frequently handle high container volumes.

The handling speed for floor-loaded goods is impressive, as the forks simply slide under the slipsheet, lifting the load efficiently – much like pallet handling. A 40ft sea container with 20 packages can be unloaded in as little as 20 minutes. No risk of oil leaks and no hinged parts make the Roller-Forks virtually maintenance-free.



# THE VERSATILE USE OF ROLLERFORKS VS. PUSH-PULL ATTACHMENT

The difference between a push-pull and RollerForks lies mainly in the mechanism and efficiency for handling slip-sheets (thin sheets that replace pallets). Here are the key differences:

# Mechanism

- Push-Pull: Uses hydraulic power to grip slip-sheets and pull the load onto the forks. It has a gripper that clamps the slip-sheet and retracts it onto the forks.
- RollerForks: Operates without hydraulics. The forks have rollers that, by friction with the floor, automatically push the slip-sheet upward as the fork slides under the load.

# **Installation and Requirements:**

- Push-Pull: Requires a hydraulic connection on the forklift, which may require heavier and more expensive forklifts.
- RollerForks: No hydraulic connections needed and can be used with standard forklifts without additional modifications

# **Cost and Maintenance:**

- Push-Pull: Higher purchase and maintenance costs due to the hydraulic components.
- RollerForks: Lower purchase and maintenance costs, as there are no hydraulic parts, making the forks virtually maintenance-free.

# **Ease of Use and Speed:**

- Push-Pull: Requires more time due to multiple steps (grip, pull, position) and can be more complex to operate.
- RollerForks: Faster and easier to use, especially when loading and unloading floor-loaded goods. Often, a single movement is enough to pick up the load, similar to handling a standard pallet.

In summary, RollerForks are more efficient and cost-effective for companies that regularly use slip-sheets and are suited to lighter applications, while push-pull systems are often used for heavier applications where hydraulic power is necessary. RollerForks are ideally for handling floor loaded goods.



KOOI® ROLLERFORKS



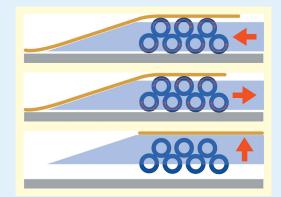
Convert a standard pallet into a "RollerForks Pallet" to quickly and safely remove the load from the pallet without causing damage. The additional inserts, created by placing extra beams on the top deck, allow the RollerForks to easily maneuver under the slipsheet, making it simple to position loads like bagged goods onto the RollerForks.



Once the load is positioned on the Roller-Forks, it can be transported into the container or truck. When the RollerForks make contact with the floor, the rollers will move upwards, and as the forklift reverses, the load will remain in the same position. This is due to the RollerForks' principle of a double-layer roller system, where the rollers always rotate in opposite directions.

# How do KOOI® RollerForks work?

A RollerFork consists of a special forklift fork that acts as a support frame with a unique hinge at the heel, allowing it to remain flat on the floor. Inside the fork are two layers of rollers, one on top of the other, that engage each other when the forks are moved across the floor. The primary principle is that the upper rollers rotate at the exact same speed but in the opposite direction of the lower rollers, which are in contact with the ground. When the RollerForks® are lifted off the ground, the rollers lower automatically, securely holding the load on the forks. Made from high-grade materials, the RollerForks® experience minimal wear and tear, as there are no axial forces involved, and any dirt or dust simply falls to the floor.



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# **About Meijer Handling Solutions**

Meijer Handling Solutions is the global leader in material handling attachments. We are committed to providing innovative solutions like KOOI® ROLLERFORKS to help businesses improve their operational efficiency and reduce costs.

# **Production and safety standards**

Meijer handling Solutions requires its KOOI® ROLLERFORKS to be of the highest quality and we can only guarantee this by complying with all applicable international standards.



#### ISO 9001-2008

Model for quality assurance in design/development, production, installation and servicing.



# ISO 13284

Fork arm extensions and Telescopic fork arms. Technical characteristics and strength requirements. (Safety factor of 3 at all times).



# ISO 4406

Hydraulic fluid power - Fluids Method for coding level of contaminations by solid particles.



# ISO 3834-2

Quality requirements for welding. Fusion welding of metallic materials.



#### ISO 2330

Manufacturing, testing, and marking requirements for solid-section fork arms, for quantity production and with all types of mounting.



CE

European Machinery Directives 2006/42/EC



Scan for more information