

## HANDLING SOLUTIONS

KOOI

REACHFORKS

**KOOI** 

EQUIPMENT®

KOOI

PALLETLESS

KOOI

SYSTEMS



## **WHAT WE DO AND WHY**

Meijer Handling Solutions aims to add value to our customers' and end-users' logistical supply chains. We are the world's market leader in hydraulic lift truck forks, known as KOOI-REACHFORKS®. Also, we are known for our palletless handling attachments such as the patented ROLLERFORKS® and our unique PushPull systems. The latest product to be introduced to the market is the Stationary Pull Installation, a stand-alone 'Push/Pull' to transfer goods form one load carrier onto another load carrier.

Decades of experience in the material handling industry combined with a highly skilled support staff has allowed Meijer to develop the intelligence and necessary, (technical), know-how in order to provide the best advice, service and support concerning your logistics issues. From forklift attachments to complex customer-specific solutions,

Meijer Handling Solutions KNOWS WHAT TO DO!



HENDRIK MEIJER

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Meijer Handling Solutions is the original inventor of the hydraulic extendable forks, and with more than 35 years of experience and thousands of satisfied customers, the KOOI-REACHFORKS® have become the benchmark in materials handling. With one and two cylinders in each fork and an integrated synchronization system, Meijer Handling Solutions guarantees you the best telescopic fork on the market.

KOOI-REACHFORKS® can be used for one-sided loading/unloading, double deep stacking, multi-pallet handling and as extension forks. It is even possible to fit the telescopic forks with cameras to aid overhead pallet stacking.

KOOI-REACHFORKS® offer the following advtantages:

- Speed up (un)loading time by around 25%.
- Improve space utilization, gain 30% or more storage space.
- Cut internal transport costs by 50%.
- · Reduce damages to both goods and pallets.



Double-deep stacking Page 5



One-sided (un)loading Page 6



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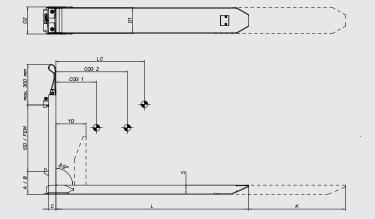


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Double-deep stacking



#### **Double-deep stacking:**

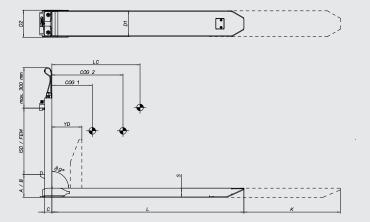
Mainly used on reachtrucks for double-deep stacking in warehouses.

- Increases warehouse capacity up to 30%

Single Range								
Model	Capacity on LC 600 mm (kg)	Section D1/D2xS (mm)	L/K (mm)	C (mm)	CoG1 (mm)	CoG2 (mm)	Weight (kg)	ISO/ FEM
RG2 20 1100/0750 RG2 20 1200/0850 RG2 20 1350/1000	2000	131/139 x 57	1100/0750 1200/0850 1350/1000	45	370 415 480	530 600 710	147 156 170	2A
RG2 30 1100/0750 RG2 30 1200/0850	3000	131/139 x 57	1100/0750 1200/0850	45	350 395	508 580	157 166	3A
RG2 30 1350/1000	3000	101/100 x 3/	1350/1000	13	460	680	180	JA
RGN2 35 1350/1000 RGN2 35 1350/1000	3500	131/139 x 62	1200/0850 1350/1000	50	417 463	590 665	180 198	3A
TFG2 30 1050/0800 TFG2 30 1150/0900 TFG2 30 1300/1050	3000	131 / 139 x 62	1050/0800 1150/0900 1300/1050	50	350 390 455	505 575 680	168 178 193	3A
TRG2 30 0950/0900	2000	170/170 v 67	095/0900	E0.	267	412	182	24
TRG2 30 1050/1000 TRG2 30 1200/1150	3000	170/179 x 67	1050/1000 1200/1150	50	356 448	553 698	213 243	3A

- Minimum operating pressure 10 MPa, maximum 25 MPa.
- Type RG delivered including one hydraulic hose.
- All forks have a 6 mm thick integrated wear plate (400 HB) under the complete outer sleeves for longer life span.
- For optimal speed and minimum loss of pressure the recommended minimum hose diameter is 8 mm.
- In cold-storage applications KOOI-REACHFORKS® can be used down to -30 degrees Celcius, contact your dealer.
- The lift truck manufacturer must determine the combined KOOI-REACHFORKS® and lift truck capacity.
- Capacities shown are nominal and apply to the forks and not the lift truck. Other capacities and dimensions on request.

#### One-sided loading and unloading



#### One-sided (un)loading:

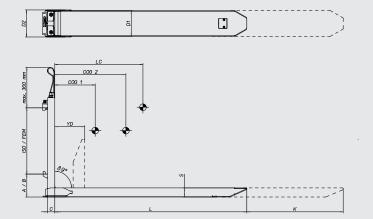
Mainly used on counterbalance and side-loader lift trucks for one side loading.

- Saving time up to 25%.
- Redusing fuel etremely.
- Improve safety (remains in sight).

Double range								
Model	Capacity on LC 600 mm (kg)	Section D1/D2xS (mm)	L/K (mm)	C (mm)	CoG1 (mm)	CoG2 (mm)	Weight (kg)	ISO/ FEM
RG4 25 1100/0750 RG4 25 1200/0850 RG4 25 1350/1000	2500	161/169x57	1100/0750 1200/0850 1350/1000	45	363 406 473	536 607 717	178 189 206	2A
RG4 35 1100/0750 RG4 35 1200/0850 RG4 35 1350/1000	3500	161/169x57	1100/0750 1200/0850 1350/1000	45	344 386 451	506 576 683	189 200 217	3A
RG4 45 1100/0750 RG4 45 1200/0850 RG4 45 1350/1000	4500	161/169x57	1100/0750 1200/0850 1350/1000	45	344 386 451	506 576 683	189 200 217	3A
RG4 58 1100/0750 RG4 58 1200/0850 RG4 58 1350/1000	5800	161/169x62	1100/0750 1200/0850 1350/1000	50	314 354 415	449 512 610	233 245 264	4A
RE4 32 1100/0750 RE4 32 1200/0850 RE4 32 1350/1000	3200	161/169x47	1100/0750 1200/0850 1350/1000	45	328 369 433	486 554 660	176 185 200	3A

- Minimum operating pressure 10 MPa, maximum 25 MPa.
- Type RE delivered including separate flow divider and four hydraulic hoses. Type RG delivered including one hydraulic hose.
- All forks have a 6 mm thick integrated wear plate (400 HB) under the complete outer sleeves for longer life span.
- For optimal speed and minimum loss of pressure the recommended minimum hose diameter is 8 mm.
- In cold-storage applications KOOI-REACHFORKS® can be used down to -30 degrees Celcius, contact your dealer.
- The lift truck manufacturer must determine the combined KOOI-REACHFORKS® and lift truck capacity.
- Capacities shown are nominal and apply to the forks and not the lift truck. Other capacities and dimensions on request.

Multi-pallet handling



#### **Multi-pallet handling:**

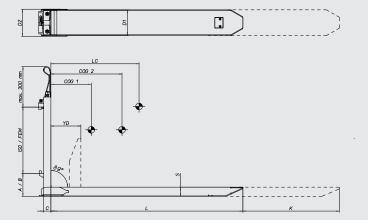
Mainly included on multipallet handlers.

- Ideal for handling beverage.
- Cut down time for (un)loading.
- Savings on fuel.

Slim range								
Model	Capacity on LC 600 mm (kg)	Section D1/D2xS (mm)	L / K (mm)	C (mm)	CoG1 (mm)	CoG2 (mm)	Weight (kg)	ISO/ FEM
RE2 27 1150/0700			1150/0700		445	630	106	
RE2 27 1250/0800	2700	89/81x63	1250/0800	60	490	705	113	2A
RE2 27 1400/0950			1400/0950		565	825	122	
RE2 37 1150/0700			1150/0700		415	575	132	
RE2 37 1250/0800	3700	89/81x73	1250/0800	60	465	650	139	3A
RE2 37 1400/0950			1400/0950		535	755	151	

- Slim Range forks need a minimum overlap of 400 mm (retracted length-stroke).
- Minimum operating pressure 10 MPa, maximum 25 MPa.
- Type RE delivered including separate flow divider and four hydraulic hoses.
- All forks have a 6 mm thick integrated wear plate (400 HB) under the complete outer sleeves for longer life span.
- For optimal speed and minimum loss of pressure the recommended minimum hose diameter is 8 mm.
- In cold-storage applications KOOI-REACHFORKS® can be used down to -30 degrees Celcius, contact your dealer.
- The lift truck manufacturer must determine the combined KOOI-REACHFORKS® and lift truck capacity.
- Capacities shown are nominal and apply to the forks and not the lift truck. Other capacities and dimensions on request.

#### **Dual pallet handling**



#### **Dual pallet handling:**

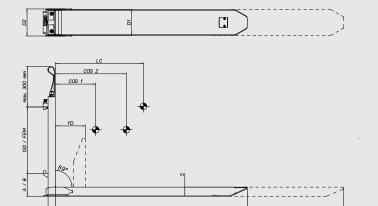
Mainly on counterbalance and reachtrucks for variable lengths and dual pallet handling.

- Damages of oversized forks will be history!
- Improving handling speed by lifting two pallets.

Extension range								
Model	Capacity on LC 600 mm (kg)	Section D1/D2xS (mm)	L / K (mm)	C (mm)	CoG1 (mm)	CoG2 (mm)	Weight (kg)	ISO/ FEM
REE2 17 0800/0400			0800/0400		215	240	90	
REE2 17 1000/0200	1700	128/128x40	1000/0400	40	290	310	105	2A
REE2 17 1200/0800		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1200/0800	1	375	495	116	
	<u>'</u>							
RGE2 20 0800/0400			0800/0400		233	293	113	
RGE2 20 1000/0200	2000	131/131x57	1000/0200	45	316	340	133	2A
RGE2 20 1200/0800			1200/0800		397	520	145	
RGE2 30 0800/0400			0800/0400		220	275	122	
RGE2 30 1000/0200	3000	131/131x57	1000/0200	45	302	327	144	3A
RGE2 30 1200/0800			1200/0800		382	515	158	

- Minimum operating pressure 10 MPa, maximum 25 MPa.
- Type RE delivered including separate flow divider and four hydraulic hoses. Type RG delivered including one hydraulic hose.
- All forks have a 6 mm thick integrated wear plate (400 HB) under the complete outer sleeves for longer life span.
- For optimal speed and minimum loss of pressure the recommended minimum hose diameter is 8 mm.
- In cold-storage applications KOOI-REACHFORKS® can be used down to -30 degrees Celcius, contact your dealer.
- The lift truck manufacturer must determine the combined KOOI-REACHFORKS® and lift truck capacity.
- Capacities shown are nominal and apply to the forks and not the lift truck. Other capacities and dimensions on request.

Heavy-duty applications



#### **Heavy-duty applications:**

Ideal for handling timber, concrete, sea containers and more.

- For extreme capacities up to 110,000 Lbs.

Heavy duty range - for extreme capacities									
Model	Capacity on LC 600 mm (kg)	Section D1/D2xS (mm)	L / K (mm)	C (mm)	CoG1 (mm)	CoG2 (mm)	Weight (kg)	ISO/ FEM	
DO 4 77 4400/0750					005	405	004		
RG4 77 1100/0750			1100/0750		325	485	331		
RG4 77 1200/0850	7700	215/227x68	1200/0850	50	370	555	349	4A	
RG4 77 1350/1000			1350/1000		435	665	376		
RG4 105 1100/0750			1100/0750		331	492	392		
RG4 105 1200/0850	10500		1200/0850	60	371	558	413	4A	
RG4 105 1350/1000			1350/1000		433	659	446		
RE4 105 1100/0750			1100/0750		315	445	420		
RE4 105 1200/0850	10500	215/227x76	1200/0850	60	360	510	443	5A	
RE4 105 1350/1000			1350/1000		425	610	477		

- Minimum operating pressure 10 MPa, maximum 25 MPa.
- Type RE delivered including separate flow divider and four hydraulic hoses. Type RG delivered including one hydraulic hose.
- All forks have a 6 mm thick integrated wear plate (400 HB) under the complete outer sleeves for longer life span.
- For optimal speed and minimum loss of pressure the recommended minimum hose diameter is 8 mm.
- In cold-storage applications KOOI-REACHFORKS® can be used down to -30 degrees Celcius, contact your dealer.
- The lift truck manufacturer must determine the combined KOOI-REACHFORKS® and lift truck capacity.
- Capacities shown are nominal and apply to the forks and not the lift truck. Other capacities and dimensions on request.

#### Options and accessories

Palletstops (welded on)								
Model Height (mm)								
Y2	200/400							
Y3	850/1000/1200/1600							
Demountable Y2								







Load backrest (connected on outer fo	orks. including pallet stops Y2)
Model	Dimensions
Standard	On request
Special	On request



# Oil connections Possible variations Both on top One on top and one on the inner side One on top and one on the outer side On inner and outer side Both at the back of the forks JIC coupelings (for USA) 90° coupelings



Wear strip (under outer forks, extra thickness ± 5 mm)
Model
Extra hardened plate on the underside of the outer forks
Extra wear strip in fork taper

Options and accessories

Stainless steel forks

(outer forks, pallet stops, heel, side of the inner forks)

Model



#### Camera

Model







## **MANUAL KOOI-REACHFORKS®**

A cheaper alternative for hydraulic KOOI-REACHFORKS® are the patented Manual KOOI-REACHFORKS®. These lift truck forks are extended in length manually. The mechanical movable outer sleeves are secured to the base fork and remain mounted on the forklift truck. These forks offer a lower cost alternative to hydraulic KOOI-REACHFORKS® and they are ideal for companies that don't need fork extensions that frequently, but only come across the need once in a while.

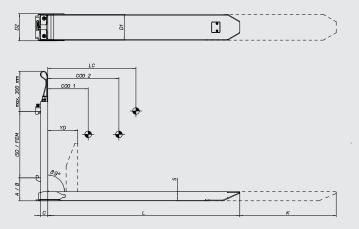
The manner of adjusting the outer sleeve is highly innovative. It simply involves moving a pin (which also serves as a grease nipple) sideways, causing the locker to be retracted. As soon as the locker is disengaged, the outer sleeve can be moved using the other hand until the locker engages again at the different length.

Manual KOOI-REACHFORKS® offer the following advantages:

- . Remain mounted on the forklift truck so they are always available
- · Ligthweight construction that is easily extended.
- · Innovative outer forks which cannot catch on tensioning straps.
- · Fast extension in one simple movement.
- No hydraulic parts.
- · Low maintenance costs.
- No loose parts.



#### MANUAL KOOI-REACHFORKS®



#### Manual

Ideal for companies that don't need fork extensions that frequently, but only come across the need once in a while.

- Damages of oversized forks will be history!
- Improving handling speed by lifting two pallets.

Manual KOOI-REACH	FORKS® including	replaceable wear	plate					
Model	Capacity on LC 600 mm (kg)	Section D1/D2xS (mm)	L/K (mm)	C (mm)	CoG1 (mm)	CoG2 (mm)	Weight (kg)	ISO/ Fem
MME 17 0800/0400			0800/0400		220	245	95	
MME 17 0800/0200	1700	132x41	0800/0200	40	220	245	95	2A
MME 17 1000/0200	1700	132X41	1000/0200	40	295	315	110	ZA
MME 17 1200/0800			1200/0800		380	500	121	
MME 20 0800/0400			0800/0400		235	295	114	
MME 20 0800/0400			0800/0400		235	295	114	
MME 20 1000/0200	2000	132x58	1000/0200	45	315	415	131	2A
MME 20 1200/0800	2000		1200/0800	43	405	545	150	
MME 20 1400/1000			1400/1000		484	640	161	
MME 24 0800/0200			0800/0200	45	220	275	104	2A
MME 24 0800/0400	2400	132x45	0800/0400		220	275	104	
MME 24 1000/0200	2100	102/10	1000/0200		300	325	121	
MME 24 1200/0800			1200/0800		385	515	135	
MME 30 0800/0200			0800/0200		220	275	122	
MME 30 0800/0400			0800/0400		220	275	122	
MME 30 1000/0200	3000	132x58	1000/0200	45	300	325	144	3A
MME 30 1200/0800			1200/0800		390	515	158	
MME 30 1400/1000			1400/1000		470	645	176	
MME 35 0800/0200			0900/0200		220	200	140	
MME 35 0800/0200			0800/0200 0800/0400		230 230	300 300	140	
MME 35 1000/0200	3500	122,462	1000/0200	50	320	390	160	3A
MME 35 1200/0800	აუ00	132x63	1200/0200	ນປ	400	550	183	
MME 35 1400/1000			1400/1000		485	680	205	
IVIIVIE 33 1400/1000			1400/1000		400	000	200	

- Extra adjustments for in-beween position. Type MME including replaceable wearplate under innerforks.
- In cold-storage applications KOOI-REACHFORKS® can be used down to -30 degrees Celcius, contact your dealer.
- The lift truck manufacturer must determine the combined KOOI-REACHFORKS® and lift truck capacity.
- Capacities shown are nominal and apply to the forks and not the lift truck. Other capacities and dimensions on request.



## **LOOSE FORK EXTENSIONS**

These outer sleeves simply slide over the existing lift truck forks providing additional length of a predetermined size. Usage is recommended for applications with very infrequent need for differing fork length. Fork extensions offer a lightweight design with robust handling ability.

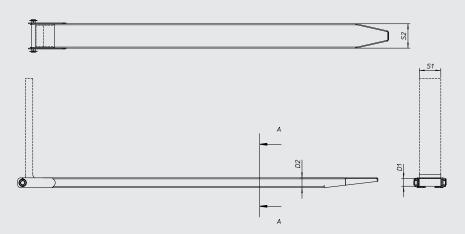
The loose fork extensions of Meijer Handling Solutions have an innovative design that is partially open along its lower surface, but has the characteristics of a closed sleeve. Extensive expertise in the field of bending and sheet metalworking has resulted in loose fork extensions that meet the most stringent quality standards.

The Meijer Handling Solutions fork extensions offer the following advantages:

- Loads can be handled where the load centre (LC) is located beyond the fixed forks' basic length.
- · All-round, continuous cross-section without welds.
- · Lightweight construction compared to a full sleeve cross-section.
- · Profiled, pointed nose for easy pallet insertion..



#### **LOOSE FORK EXTENSIONS**



For applications with very infrequent need for differing fork lenght

Fork Extensions							
Model	Capacity on LC 600 mm (kg)	Section D1xS1 (mm)	Section D2xS2 (mm)	L (mm)	Sheet thickness (mm)	Weight (kg)	Extra weight /100 mm (kg)
E15-1600-035080	1500	35 x 80	46 x 93			22	1,5
E18-1600-035100	1800	35 x 100	46 x 113	1600	4	24	1,6
E24-1600-035130	2400	35 x 130	46 x 143			27	1,8
E19-1600-040080	1900	40 x 80	51 x 93			23	1,5
E24-1600-040100	2400	40 x 100	51 x 113	1600	4	25	1,6
E29-1600-040120	2900	40 x 120	51 x 133	1000		27	1,8
E32-1600-040130	3200	40 x 130	51 x 143			28	1,9
E31-1600-045100	3100	45 x 100	56 x 113			26	1.7
E37-1600-045100	3700	45 x 100	56 x 133			28	1,7 1,8
E39-1600-045125	3900	45 x 120	56 x 138	1600	4	29	1,9
E40-1600-045130	4000	45 x 130	56 x 143			29	1,9
	1000						1,0
E38-1600-050100	3800	50 x 100	63 x 115			35	2,2
E46-1600-050120	4600	50 x 120	63 x 135			37	2,4 2,4
E48-1600-050125	4800	50 x 125	63 x 140	1600	5	38	2,4
E54-1600-050140	5400	50 x 140	63 x 155			40	2,6
E58-1600-050150	5800	50 x 150	63 x 165			41	2,6

- Insertion length should be a minimum of 60% for open and closed extensions.
- Capacities shown are nominal and apply to the forks and not the lift truck.
- The lift truck manufacturer must determine the combined KOOI-REACHFORKS® and lift truck capacity.
- Other capacities and dimensions on request.



## **MAST HEIGHT EXTENSIONS**

The Mast Height Extension (MHE) attachment will allow you to add additional lift height to your current forklift trucks without changing the mast, (upright). By adding a Mast Height Extension to your existing lift truck the same lift-truck can then handle extra pallets at a higher level without a larger load centre being required. The MHE can also be used to improve under-door clearance issues allowing a truck to pass through whilst maintaining the ability to reach higher levels.

The Mast Height Extensions mounts to a standard FEM (ITA) type fork carriage and it allows the use of existing lift truck forks with full adjustability, (fork spread), within the MHE carriage frame.

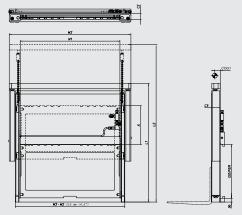
The system simply requires a single hydraulic function and its sleek design provides excellent visibility with minimum lost load thickness. It's even available with quick-change mounting hooks for applications which only require occasional use or movement from one truck to another.

The Mast Height Extension offers the following advantages:

- · Excellent visibility.
- Minimum lost load thickness.
- Existing lift trucks can be used.
- · Lift truck forks can be moved sideways.



#### **MAST HEIGHT EXTENSIONS**



#### **MHEH**

Designed to adjust the height of a standard lift-truck mast.

- To handle extra pallets at a higher level.
- Improve visibility

Mast Height Extensi	Mast Height Extension - one hydraulic function needed.										
Model	Capacity on LC 600 mm (kg)	Stroke (mm)	L1/L2 (mm)	W1 (mm)	W2 (mm)	C2 (mm)	C3 (mm)	CoG1 (mm)	CoGv1 (mm)	CoGv2 (mm)	Weight (mm)
MHEH 20 0300 550		300	0820/1120					30	415	540	118
MHEH 20 0500 550		500	1020/1520		750	50	85	31	495	680	136
MHEH 20 0700 550	2000	700	1220/1920	550				32	585	830	154
MHEH 20 1000 550		1000	1520/2520					33	720	1045	180
MHEH 20 0300 800	2000	300	0820/1120		1000	50	85	28	415	550	138
MHEH 20 0500 800		500	1020/1520	800				29	495	695	156
MHEH 20 0700 800		700	1220/1920					30	580	850	174
MHEH 20 1000 800		1000	1520/2520					32	710	1065	200
MHEH 30 0300 800		300	0930/1230					25	465	615	177
MHEH 30 0500 800	2000	500	1130/1630	000	1000	57	0.5	28	540	775	194
MHEH 30 0700 800	3000	700	1330/2030	800	1000	5/	85	29	620	926	212
MHEH 30 1000 800		1000	1630/2630					30	745	1150	240
MHEH 30 0300 1000		300	0930/1230	1		I	I	23	450	610	210
MHEH 30 0500 1000	-	500	1130/1630					25	530	770	230
MHEH 30 0700 1000	3000	700	1330/2030	1000	1200	57	85	27	600	930	250
MHEH 30 1000 1000	-	1000	1630/2630	-				28	715	1163	280

- Possible in combination with KOOI-REACHFORKS®.
- Optional: quick change mounting hooks.
- The lift truck manufacturer must determine the combined Mast Height Extension and lift truck capacity.
- Capacities shown are nominal and apply to the attachment and not the lift truck. Other capacities and dimensions on request.
- Remark: When tilting mast carriage please contact Meijer Handling Solutions.



## **SINGLE HEIGHT SHIFT SYSTEMS**

With the Single Height Shift system one of the two forks can be raised or lowered by 100 mm to compensate for the difference in height ensuring the safe loading and unloading of goods without damaging or moving off the forks when driving bumpy areas. Because the cylinders are fitted into the sides of the vertical sections of the forks, the system does not add anything to the front dimensions and the lift truck retains an optimum residual load capacity.

The Single Height Shift System (SHSSL) can be used on most any type of forklift including specialized lift trucks such as sideloaders, rough terrain forklifts and mountable lift trucks, allowing these machines to deliver building materials safely and without damage.

When used in combination with KOOI-REACHFORKS® (hydraulic extendable forks) the Single Height Shift System can be operated for one sided loading and unloading but also one of the hydraulic forks can operate independently. Which makes the forklift truck much more flexible.

The Single Height Shift System offers the following advantages:

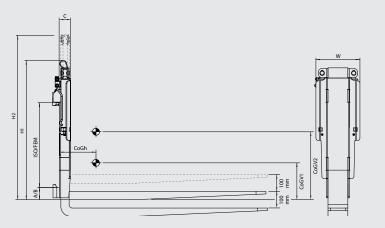
- Safe operation without damages in hilly and rough terrain.
- Minimum lost load thickness.
- Can be fitted to any type of forklift.







#### **SINGLE HEIGHT SHIFT SYSTEMS**



#### **SHSSL**

To compensate the difference in height without damaging the load.

Compensate bumps over rough terrain.

Single Height Shift System with standard lift truck forks - one hydraulic function										
Model	Capacity on LC 600 mm (kg)	Vertical movement up/down (mm)	W (mm)	H1 (mm)	C (mm)	CoGh (mm)	CoGv1 (mm)	CoGv2 (mm)	Weight (kg)	ISO/ Fem
SHSSL 35.12-120/45	3500	100/100	270	1025	69	240	275	360	195	3B
SHSSL 45.12-120/50	4500	100/100	270	1025	69	255	265	355	210	3B
SHSSL 65.12-130/60	6500	100/100	280	1025	79	285	250	345	265	3B
SHSSL 58.12-150/50	5800	100/100	300	1025	69	248	260	350	257	3B
SHSSL 80.12-150/60	8000	100/100	300	1197	79	230	340	425	333	4B
SHSSL 77.12-200/50	7700	100/100	350	1197	69	235	330	420	372	4B

- Price includes standard lift truck forks. (two hydraulic functions needed).
- The lift truck manufacturer must determine the combined attachment and lift truck capacity.
- Capacities shown are nominal and apply to the attachment and not the lift truck. Other capacities and dimensions on request.

## **MEIJER**

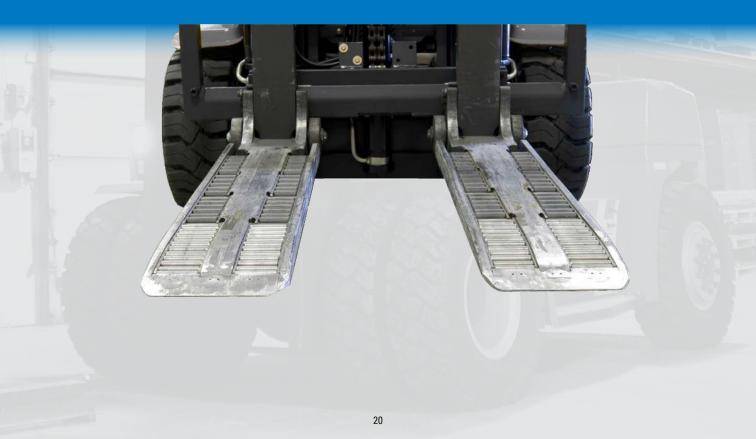
HANDLING SOLUTIONS

## **ROLLERFORKS**®

Meijer Handling Solutions knows the use of pallets for the storage of goods is unavoidable in a company. But what if you want to save time and space by sending your goods to the customer without using pallets? Meijer Handling Solutions introduces the ROLLERFORKS® which can be used for palletless handling. ROLLERFORKS® are in fact 'standard' lift truck forks with two layers of rollers. When the under most row of rollers touches the floor, it causes the uppermost rollers to rotate in the opposite direction whereby the forks slide under the slipsheet without disturbing the products. When the forks are lifted up,the rollers 'fall' downwards and place the products securely on the upper side of the forks, enabling the products to be unloaded in the opposite loading order.

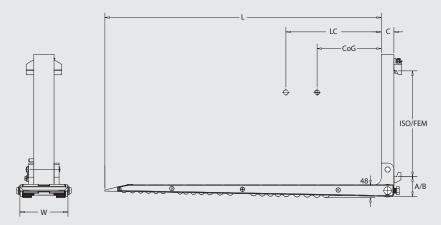
**ROLLERFORKS**® are ideal for handling single-stacked good and offer the following unparalleled advantages over push-pull attachments:

- · Less expensive.
- · No hydraulics required.
- · Higher-rated forklift truck unnecessary.
- · Compatible with standard pallets.
- · Improved safety and visibility.
- Higher operating speed.
- · Reduced maintenance costs.
- · Simplified handling procedures.
- · No axial forces exerted.



## **ROLLERFORKS**®

Palletless handling of single stacked goods



Model	Capacity on LC 500 mm (kg)	L (mm)	W (mm)	C (mm)	CoG (mm)	Weight (kg)	ISO/ FEM
RFC 10-1100	1000	1100	400	==	343	130	2A
RFC 10-1200	1000	1200	190	50	394	135	2A
RFC 15-1100	4500	1100	100	F0	378	115	2A
RFC 15-1200	1500	1200	160	160 50		123	2A
RFC 20-1100		1100			337	147	2A
RFC 20-1200	2000	1200	210	60	388	155	2A
RFC 24-1100		1100			332	151	2A
RFC 24-1200	2400	1200	210	60	383	160	2A
RFC 30-1100	0000	1100	040	00	320	255	3A
RFC 30-1200	3000	1200	310	60	373	270	3A
RollerForks® fo	or refrigerated contain	ners					
RFCC 10-1100	1000	1100	250	50	380	130	2A
RFCC 10-1200	1000	1200	230	50	420	138	2A
RFCC 20-1100	2000	1100	270	60	349	160	2A
RFCC 20-1200	2000	1200 270 60		bU	385	171	2A
RFCC 24-1100	2400	1100	270	00	349	164	2A
RFCC 24-1200	2400	1200	270	60	391	176	2A

#### Options

Foldable palletstop to reduce the blade length. Retracted 50 mm, extended 200 mm

ROLLERFORKS® (RFCH, RFCCH) with a heavy solid duty taper, 240 HB.

Tube welded on the fork back to reduce the length (when length is shorter than 1000 mm).



## **PUSH-PULLS**

This hydraulic forklift attachment is used for handling multiple stacked goods and comes with only one function to operate the faceplate and gripper. The Meijer Handling Solutions pushpull attachment is made up of laser cut components making the attachment less in weight but keeping the strength of using solid material.

The push-pull attachment is the perfect solution for when the standard lift truck needs to be converted to a slip sheet forklift. Meijer Handling Solutions offers two different push-pull attachment principles:

- · carriage mounted push-pull
- fork mounted push-pull

The carriage mounted push-pull is hooked onto the forklift carriage.

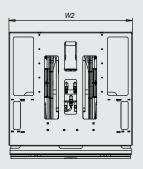
The system is most appropriate in a situation where a company has a constant need for a slip sheet forklift because containers are loaded and unloaded frequently during the day.

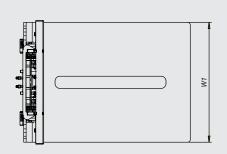
The fork mounted push-pull is adapted onto the existing forklift truck forks. This system is most appropriate when companies load or unload containers once in a while with their existing forklift truck.

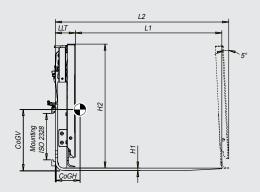


## **PUSH-PULLS**

#### Palletless handling of multi-stacked goods

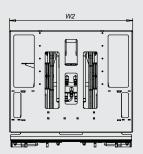


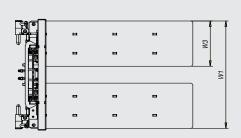


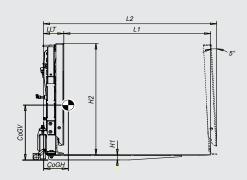


Carriage mounted Push-Pull, one hydraulic function needed												
Model	Capacity on LC 600 mm (kg)	W1 (mm)	W2 (mm)	W3 (mm)	LLT (mm)	L2 (mm)	L1 (mm)	H1 (mm)	H2 (mm)	CoGh (mm)	ISO/ FEM	Weight (kg)
PP-SM16-12P-10	1600	985	1018		170	1380	1200	20	1020	305	П	470
PP-SM20-12P-10	2000	985	1018		170	1380	1200	20	1020	305	II	470

- Recommended pressure at least 130 bar and recommended flow 10 l/min.
- Optional quick change coupling and change carriage hooks.







Fork mounted Push-Pull, one hydraulic funtion needed												
Model	Capacity on LC 600 mm (kg)	W1 (mm)	W2 (mm)	W3 (mm)	LLT (mm)	L2 (mm)	L1 (mm)	H1 (mm)	H2 (mm)	CoGh (mm)	ISO/ FEM	Weight (kg)
PP-SQ16-12P-10	1600	985	1018	415	167	1380	1200	8	1020	140	Q	350
PP-SQ20-12P-10	2000	985	1018	415	167	1380	1200	10	1020	165	Q	362

- Recommended pressure at least 130 bar and recommended flow 10 l/min.
- Mounting on standard lift truck forks with a maximum thickness of 45 mm and length 1100 mm.
- Optional quick change coupling.



## **ROLLERFORKS® PUSH-PULLS**

#### HANDLING SOLUTIONS

This innovation combines the cost-saving benefits of ROLLERFORKS® along with proven push-pull technology creating a revolutionary pallet-less handling solution. The ROLLERFORKS® Push-Pull is a system made up of one or two face-plate unit(s) with RollerForks® instead of platens. A standard fork positioning system allows the RollerForks® to move sideways hydraulically. Therefore, it is an ideal attachment for handling differently sized slipsheeted goods as well as different sized pallets.

By using the unique ROLLERFORKS® Push-Pull attachment combo, it is now possible to load and unload containers and/or trailers with loads stacked on top of one another faster than ever before. The innovative system is nearly twice as fast as conventional push-pull systems!

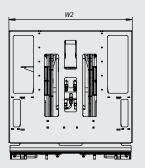
The ROLLERFORKS® Puh-Pull offers the following advantages:

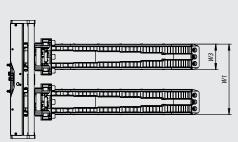
- Ideal for handling single and multiple stacked goods.
- · Improved handling speed lowers cycle time and cost.
- Offers versatility for use with standard pallets as well as palletless loads.
- Fork width can be adjusted to provide the best possible load stability.

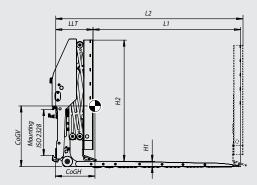


## **ROLLERFORKS® PUSH-PULLS**

Palletless handling of single and multi-stacked goods







ROLLERFORKS® Push/Pull, two hydraulic functions needed												
Model	Capacity on LC	W1	W2	W3	LLT	L2	L1	H1	H2	CoGh	ISO/	Weight
	600 mm (kg)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	FEM	(kg)
PP-SM17-12R-FS-10	1700	580-850	1018	210	295	1545	1250	50	1020	595	П	543
"Cold storage application"												
PP-SM17-12RC-FS-10	1700	640-910	1018	270	295	1545	1250	50	1020	575	Ш	534

- Fork positioner included.
- Recommended pressure at least 160 bar and recommended flow 10 l/min.
- Optional 8/3 valve and quick change.



## **ROLLERIZED TINE EXTENDERS**

The Rollerized Tine Extender (RTE) is specifically developed for handling air cargo pallets. Examples of such pallets are: 463L, HCU-6/E or PMC cargo pallets used for military and civil transport. These standardized pallets are used for transporting air cargo.

Rollerized Tine Extenders are used for forklift trucks and easily slip onto existing lift truck forks transforming the forks into a roller cargo platform.

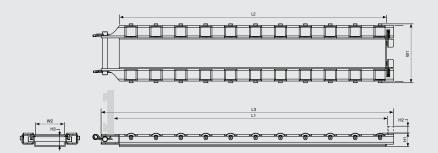
Rollerized Tine Extenders consist of a hollow cross-section with a single layer of rollers on each side. They can be fitted to regular forklift truck tines like a sleeve and secured using locking pins. Used in this way, the rollers are unable to descend so the load remains seated on the rollers at all times. Rollerized Tine Extenders have been fitted with a stop to prevent the load sliding off the rollers whenever the forklift truck brakes. The load can be pushed or rolled off the forks manually if the mast is tilted forwards and the stops have been folded out of the way. On special request, Rollerized Tine Extenders are available in various types and ratings.





## **ROLLERIZED TINE EXTENDERS**

Air cargo pallets



#### **RTE**

For handling air cargo pallets.

- Mostly used by US-Army and other Defence Forces.

Model	Capacity on LC	W1	W2	L1	L2	L3	H1	H2	H3	Weight
	600 mm (kg)	(mm)	(kg)							
L				1		1	1			1
RTE 50-1850				1850	1900	2078				340
RTE 50-2250				2250	2300	2478				408
RTE 50-2450	5000	400	160	2450	2500	2678	110	65	75	442
RTE 50-2750				2750	2800	2978				496
RTE 50-3150				3150	3200	3378				564
RTE 80-1850				1850	1900	2078				442
RTE 80-2250				2250	2300	2478				510
RTE 80-2450	8000	480	230	2450	2500	2678	110	65	80	544
RTE 80-2750				2750	2800	2978				598
RTE 80-3150				3150	3200	3378				666

<sup>—</sup> Optional rubber bump-stoppe.

<sup>-</sup> Other capacities and dimensions on request.



## **STATIONARY PALLET CHANGERS**

The Stationary Pallet Changer, (SPC) is a remote-controlled efficient and compact stand-alone unit which provides excellent performance. It's ideal for applications where goods need to be transferred from wooden to plastic pallets or vice-versa. The stationary pallet changer is mainly used in industries where some products, i.e. liquids, cannot be inverted as this would cause problems with validation or in industries where goods are packed in fragile packaging materials.

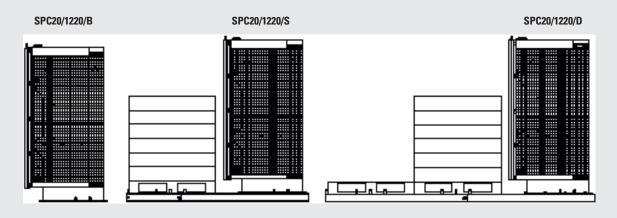
The pallet changer allows companies currently using manual labor to drastically reduce operational costs and avoid injury risks and it provides an affordable alternative to more complex transfer systems. Compared to pallet inverters the Stationary Pallet Changer offers the following advantages:

- Improved handling speed
- . No clamping of goods
- No inversion of load
- Simple construction
- Less maintenance because of no rotation parts
- · Faceplate speed reduction for end positions
- Remote controlled
- Plug & play



#### **STATIONARY PALLET CHANGERS**

Transferring goods from one load carrier onto another load carrier



Model	Capacity (kg)	L (mm)	H (mm)	Width (mm)	Power Supply	Faceplate speed	A (mm)	Weight (kg)	Safety Circuit
SPC20/1220/B		1171	2192	1100				1041	
SPC20/1220/S	2000	2571	2307	1200	3ph/400V/16A/50Hz	7-16 sec	185	1477	CAT3/PLd
SPC20/1220/D		3790	2307	1200	or			1681	

#### Options

Warning buzzer
Warning beacon light (LED)
Warning oil level and temperature.

Option - Thin Loading Platform (TLP) in combination with SPC20/1220/B

Galvanised - single version

Galvanised - double version

Stainless steel - single version

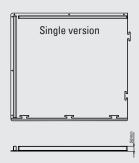
Stainless steel - double version

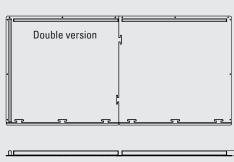


Mostly used for liquids and granulates



Other capacities, dimensions, voltages, amperes, etc. on request.







## STATIONARY PULL INSTALLATION

The stand-alone Stationary "Push/Pull", SPI, provides a highly efficient and cost effective means of transferring unit loads from one load carrier to another. It's especially useful for keeping wooden pallets outside of cleanroom areas in order to comply with hygiene regulations.

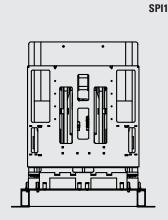
#### **Cost saving benefits:**

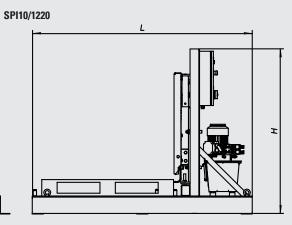
- Reduce contamination risks.
- Avoid unnecessary costs (eliminate the need for an additional forklift).
- Reduce product damage (no pushing forces and no clamping forces on goods).
- Improve throughput rate (stationary placement for standardized process).
- Lower operational costs (low maintenance and low energy consumption).



## **STATIONARY PULL INSTALLATION**

Transferring goods from one load carrier onto another load carrier





#### **SPI**

Used to transfer goods from one load carrier to another within a cleanroom.

Model	Loading Capacity (kg)	L (mm)	H (mm)	Width (mm)	Power Supply	Weight (kg)	Safety Circuit
SPI10/1220	1000	2000	1515	1305	3ph/400V/16A/50Hz or 3ph/208V/16A/60Hz	790	CAT3/PLd

Standard options	
Warning buzzer	
Warning beacon light (LED)	
Warning oil level and temperature.	
Full surround safety light curtain	
Galvanised or stainless steel construction parts	
Other voltages, amperes and canacities on request	

## **THEIJER**HANDLING SOLUTIONS

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