

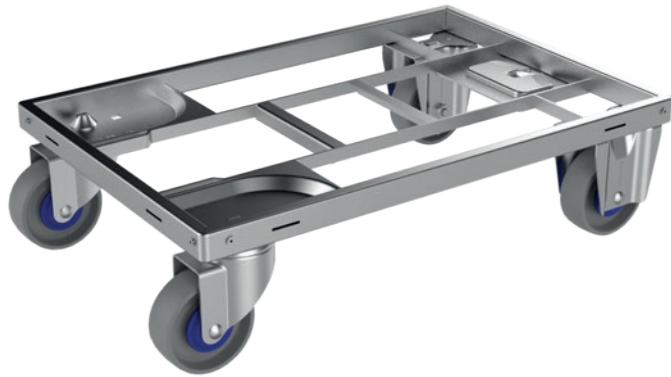
Product Portfolio



LEAN LOGISTICS

The backbone of Lean manufacturing

Lean Dolly Type I



TECHNICAL SPECIFICATION

External dimensions	600 x 400 x 162 mm
Tare weight with CPD wheels, no corners	6,5 kg
Wheel size	100 mm wheels
Wheel configuration	2 fixed & 2 swivel
Wheel material	CPD, rubber or PU
Working capacity	
- CPD – standard and ESD	250 kg
- Rubber – standard and ESD	250 kg
- PU – standard and ESD	250 kg
Surface treatment	Blue zinc plated acc. to EN-ISO2081
Safe stacking	up to 15 units (1950 mm)
Compatibility with Lean Adaptor Pallets	- Next Generation (HADP10030, HADP10032, HADP10045)

OPTIONS

- Total brake on 1 or 2 swivel wheels
- RFID and Tracking compatibility
- Corner supports
- ESD compatibility

ALSO AVAILABLE IN ISO- AND US-DIMENSIONS

- 600 x 500 mm
- 24" x 15"
- 24" x 22.5"

DESIGNED TO CARRY SLC'S AND TRAYS

- 1 stack of 600 x 400 mm
- 2 stacks of 300 x 400 mm
- 4 stacks of 300 x 200 mm

ACCESSORIES

- Ergonomic handle
- Strapping device
- Oil dripping pan

Lean Dolly Type II



TECHNICAL SPECIFICATION	
External dimensions	600 x 400 x 162 mm
Tare weight with CPD wheels, no corners	7,0 kg
Wheel size	100 mm wheels
Wheel configuration	4 swivel
Wheel material	CPD, rubber or PU
Working capacity:	
- CPD – standard and ESD	250 kg
- Rubber – standard and ESD	250 kg
- PU – standard and ESD	250 kg
Surface treatment	Blue zinc plated acc. to EN-ISO2081
Safe stacking	up to 15 units (1950 mm)
Compatibility with Lean Adaptor Pallets	- Next Generation (HADP10030, HADP10032, HADP10045)

OPTIONS

- Total brake on 1 or 2 swivel wheels
- RFID and Tracking compatibility
- Corner supports
- ESD compatibility

ALSO AVAILABLE IN ISO- AND US-DIMENSIONS

- 600 x 500 mm
- 24" x 15"
- 24" x 22.5"

DESIGNED TO CARRY SLC'S AND TRAYS

- 1 stack of 600 x 400 mm
- 2 stacks of 300 x 400 mm
- 4 stacks of 300 x 200 mm

ACCESSORIES

- Ergonomic handle
- Strapping device
- Oil dripping pan

Lean Dolly Type III



With 4 swivel wheels



TECHNICAL SPECIFICATION

External dimensions	400 x 400 x 178,5 mm
Tare weight with CPD wheels	6 kg
Wheel size	100 mm wheels
Wheel configuration	2 fixed & 2 swivel or 4 swivel
Wheel material	CPD, rubber or PU
Working capacity:	
- CPD – standard and ESD	160 kg
- Rubber – standard and ESD	160 kg
- PU – standard and ESD	160 kg
Surface treatment	Blue zinc plated acc. to EN-ISO2081
Safe stacking	up to 8 units (1200 mm)
Compatibility with Lean Adaptor Pallets	- Next Generation (HADP10030, HADP10032, HADP10045)

OPTIONS

- Total brake on 1 or 2 swivel wheels
- RFID & Tracking compatibility
- ESD compatibility

DESIGNED TO CARRY SLC'S AND TRAYS

- 1 stack of 400 x 400 mm

ACCESSORIES

- Ergonomic handle
- Strapping device

Lean Dolly Type V



TECHNICAL SPECIFICATION

External dimensions	604 x 404 x 157 mm
Tare weight with CPD wheels, with corners	7,5 kg
Wheel size	100 mm wheels
Wheel configuration	4 swivel
Wheel material	CPD, rubber or PU
Working capacity:	
- CPD – standard and ESD	250 kg
- Rubber– standard and ESD	250 kg
- PU – standard and ESD	250 kg
Surface treatment	Blue zinc plated acc. to EN-ISO2081
Safe stacking	up to 15 units (1950 mm)
Compatibility with Lean Adaptor Pallets	- Next Generation (HADP10030, HADP10032, HADP10045)

OPTIONS

- Total brake on 1 or 2 swivel wheels
- RFID & Tracking compatibility
- ESD compatibility

ALSO AVAILABLE IN ISO- AND US-DIMENSIONS

- 600 x 500 mm
- 24" x 15"
- 24" x 22.5"

DESIGNED TO CARRY SLC'S AND TRAYS

- 1 stack of 600 x 400 mm
- 2 stacks of 300 x 400 mm
- 4 stacks of 300 x 200 mm

ACCESSORIES

- Ergonomic handle
- Strapping device
- Oil dripping pan

Lean Dolly Type VII



With sliding draw bar system



TECHNICAL SPECIFICATION

External dimensions	604 x 404 x 162 (382) mm
Tare weight with CPD wheels, no corners	7 kg
Wheel size	100 mm wheels
Wheel configuration	2 fixed & 2 swivel
Wheel material	CPD, rubber or PU
Maximum Load Capacity:	
- CPD – standard and ESD	250 kg
- Rubber – standard and ESD	250 kg
- PU – standard and ESD	250 kg
Working capacity in tugger train	1000 kg
Max amount per tugger train	7–8 units
Surface treatment	Blue zinc plated acc. to EN-ISO2081
Safe stacking	up to 15 units (1955 mm)
Compatibility with Lean Adaptor Pallets	- Next Generation (HADP10030, HADP10032, HADP10045)
Recommended max speed	6 km/h

OPTIONS

- Total brake on 1 or 2 swivel wheels
- RFID & Tracking compatibility
- Corner supports
- Stealth version sliding tow system
- ESD compatibility

ALSO AVAILABLE IN ISO AND US-DIMENSIONS

- 600 x 500 mm, 24" x 15", 24" x 22.5"

DESIGNED TO CARRY SLC'S AND TRAYS

- 1 stack of 600 x 400 mm
- 2 stacks of 300 x 400 mm
- 4 stacks of 300 x 200 mm

ACCESSORIES

- Ergonomic handle
- Strapping device
- Oil dripping pan

Lean Dolly Type VIIC with Elevated Deck



TECHNICAL SPECIFICATION

External dimensions	612 x 404 x 683 mm
Tare weight with CPD wheels, no corners	18 kg
Wheel size	100 mm wheels
Wheel configuration	2 fixed & 2 swivel
Wheel material	CPD, rubber or PU
Maximum Load Capacity:	
- CPD – standard and ESD	70 kg
- Rubber – standard and ESD	70 kg
- PU – standard and ESD	70 kg
Working capacity in tugger train	1000 kg
Max amount per tugger train	7–8 units
Surface treatment	Blue zinc plated acc. to EN-ISO2081
Safe stacking	up to 3 units (1955 mm)
Compatibility with Lean Adaptor Pallets	- Next Generation (HADP10030, HADP10032, HADP10045)
Recommended max speed	4 km/h

OPTIONS

- Total brake on 1 or 2 swivel wheels
- RFID & Tracking compatibility
- ESD compatibility

DESIGNED TO CARRY SLC'S AND TRAYS

- 1 stack of 600 x 400 mm
- 2 stacks of 300 x 400 mm
- 4 stacks of 300 x 200 mm

ACCESSORIES

- Ergonomic handle
- Oil dripping pan

Lean Dolly 600 x 800 mm



With 5 swivel wheels



With draw bar



TECHNICAL SPECIFICATION	
External dimensions	600 x 806 x 158 (495) mm
Tare weight with CPD wheels	12 kg
Wheel size	100 mm wheels
Wheel configuration	2 fixed & 3 swivel or 5 swivel
Wheel material	CPD, rubber or PU
Maximum Load Capacity:	
- CPD – standard and ESD	500 kg
- Rubber – standard and ESD	500 kg
- PU – standard and ESD	500 kg
Working capacity in tugger train	1600 kg
Max amount per tugger train	5–6 units
Surface treatment	Blue zinc plated acc. to EN-ISO2081
Safe stacking	up to 15 units (1955 mm) with towing arm 2,3 m
Compatibility with Lean Adaptor Pallets	- Next Generation (HADP10030, HADP10032, HADP10045)
Recommended max speed	6 km/h

OPTIONS

- Total brake on 1 or 2 swivel wheels
- RFID & Tracking compatibility
- Corner supports
- Draw bar
- ESD compatibility

ALSO AVAILABLE IN ISO-DIMENSIONS

- 600 x 1000 mm

DESIGNED TO CARRY SLC'S AND TRAYS

- 1 stack of 600 x 800 mm
- 2 stack of 600 x 400 mm
- 4 stacks of 300 x 400 mm
- pallets, foldable cages and stillages

ACCESSORIES

- Strapping device
- Multipurpose plywood deck

Lean Dolly 1200 x 800 mm



TECHNICAL SPECIFICATION

External dimensions	1212 x 800 x 162 (502) mm	
Tare weight with CPD wheels	19 kg	
Wheel size	100 mm wheels	
Wheel configuration	2 fixed & 4-5 swivel	
Wheel material	CPD, rubber or PU	
Maximum Load Capacity:		
- CPD – standard and ESD	4 swivel 300 kg	5 swivel 500 kg
- Rubber – standard and ESD	4 swivel 300 kg	5 swivel 500 kg
- PU – standard and ESD	4 swivel 300 kg	5 swivel 500 kg
Working capacity in tugger train	1600 kg	
Max amount per tugger train	5–6 units	
Surface treatment	Blue zinc plated acc. to EN-ISO2081	
Safe stacking	up to 15 units (1955 mm) with towing arm 2,3 m	
Compatibility with Lean Adaptor Pallets	- Next Generation (HADP10030, HADP10032, HADP10045)	
Recommended max speed	6 km/h	

OPTIONS

- Total brake on 1 or 2 swivel wheels
- RFID & Tracking compatibility
- Corner supports
- Draw bar
- ESD compatibility

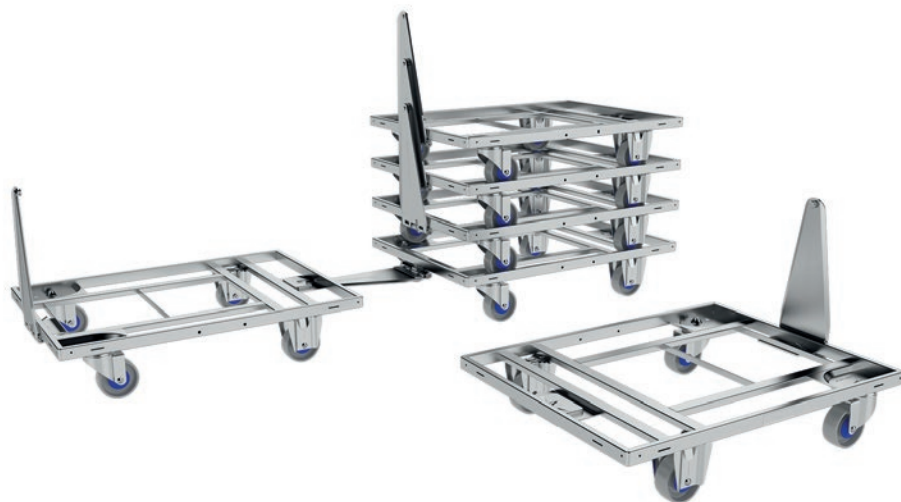
DESIGNED TO CARRY SLC'S AND TRAYS

- 3 stacks of 800 x 400 mm
- 4 stack of 600 x 400 mm
- 8 stacks of 300 x 400 mm
- pallets, foldable cages and stillages

ACCESSORIES

- Strapping device
- Multipurpose plywood deck

Lean Dolly 800 x 600 mm



TECHNICAL SPECIFICATION	
External dimensions	800 x 600 x 162 (499) mm
Tare weight with CPD wheels	10,5 kg
Wheel size	100 mm wheels
Wheel configuration	2 fixed and 2 swivel
Wheel material	CPD, rubber or PU
Maximum Load Capacity:	
- CPD – standard and ESD	500 kg
- Rubber – standard and ESD	500 kg
- PU – standard and ESD	500 kg
Working capacity in tugger train	1600 kg
Max amount per tugger train	5–6 units
Surface treatment	Blue zinc plated acc. to EN-ISO2081
Safe stacking	up to 15 units (1955 mm) with towing arm 2,3 m
Recommended max speed	6 km/h

OPTIONS

- Total brake on 1 or 2 swivel wheels
- RFID & Tracking compatibility
- Corner supports
- Draw bar
- ESD compatibility

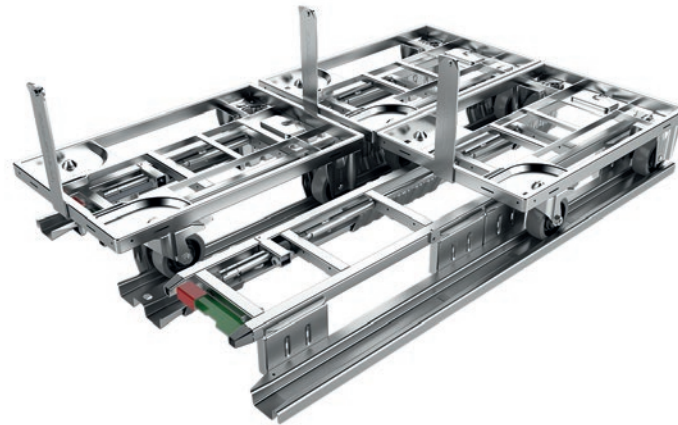
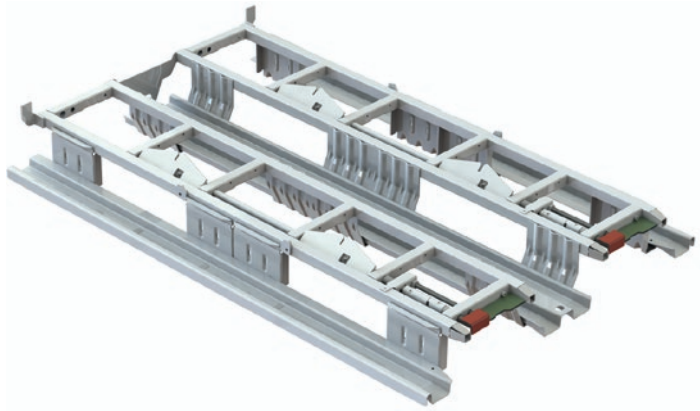
DESIGNED TO CARRY SLC'S AND TRAYS

- 2 stack of 600 x 400 mm
- 4 stacks of 300 x 400 mm
- pallets, foldable cages and stillages

ACCESSORIES

- Strapping device
- Multipurpose plywood deck

Lean Adaptor Pallet



TECHNICAL SPECIFICATION

External dimensions	1210 x 800 x 149 mm
Tare weight	32 kg
Working capacity	1000 kg
Surface treatment	Blue zinc plated acc. to EN-ISO2081
Safe stacking	
- loaded in transport	2 units
- loaded at warehouse	3 units
- empty	15 units

DESIGNED FOR ALL STANDARD LEAN DOLLIES

OPTIONS

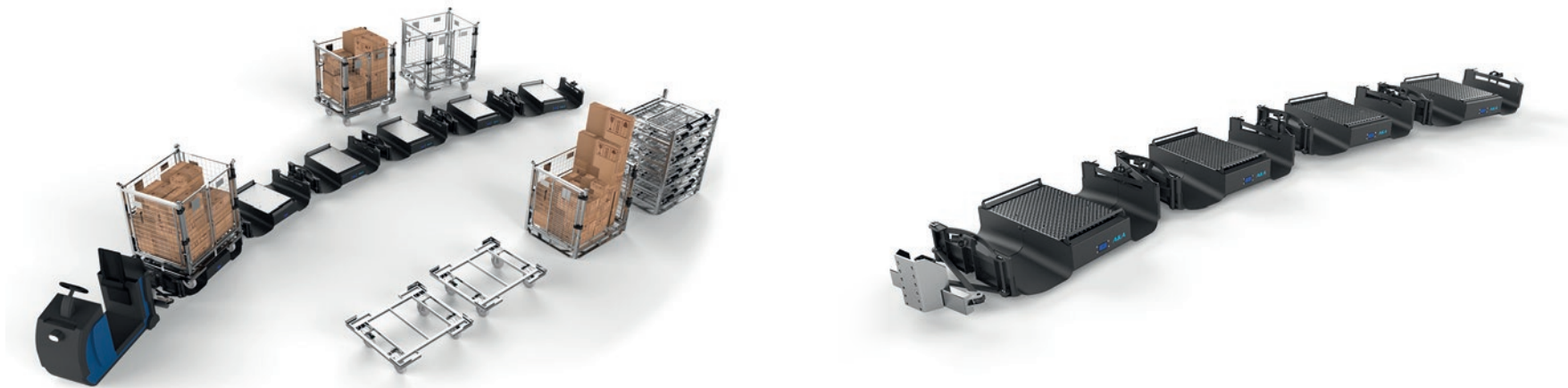
- Non-slip features
- RFID & Tracking compatibility
- ESD compatibility

ALSO AVAILABLE IN ISO AND US-DIMENSIONS

- 1200 x 1000 mm
- 48" x 30"
- 48" x 45"

ACCESSORIES

- EasyStrap
- Compatible with industry standard lids

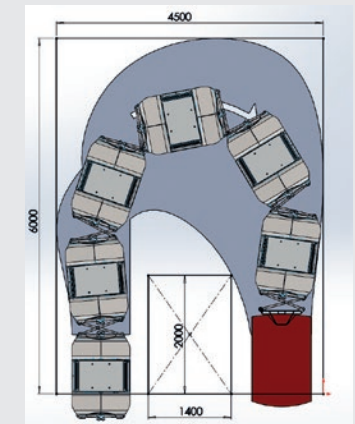
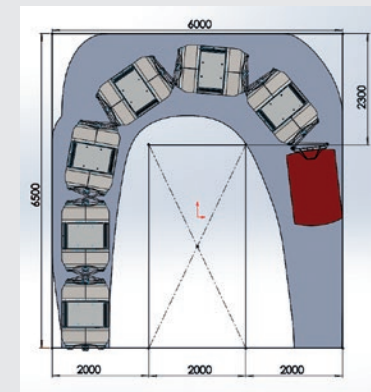


TECHNICAL SPECIFICATION

External dimensions	820 x 620 mm, height when down/up 290/350 mm 1220 x 820 mm, height when down/up 290/350 mm 1220 x 1010 mm, height when down/up 290/350 mm
Ground clearance when down/up	0/60 mm
Tare weight with CPD wheels, no corners	18 kg
Wheel size	200 mm wheels
Wheel configuration	2 per wagon
Wheel material	PU
Maximum Load Capacity	1000 kg
Tare weight	approx. 180 kg
Coupling:	
- Length	200 mm
- Type	A&A crossbar coupling system
Maximum speed	16 km/h
Surface treatment	Powder coating
Time to lift	Less than 3 seconds

BENEFITS

- Easy one man operation
- No turnaround needed
- Extremely manoeuvrable
- No additional routing needed
- Safe and high track stability
- Loading/unloading from both sides



elephantboard® and Daughter Cart for the LiftLiner



TECHNICAL SPECIFICATION ELEPHANTBOARD (4 SHELVES)	
External dimensions	820 x 1450 x 1810 mm
Maximum working capacity	500–1000 kg
Shelf material	Rotomoulding plastic
Number of shelves	1–4
Distance between shelves	365 mm
Tare weight	65 kg
Wheel type	2 swivel and 2 fixed
Wheel material	Heavy-duty polyurethane wheels
Wheel size	200 mm
Surface treatment	Blue Zinc Plated
Amount per LiftLiner	1 unit

TECHNICAL SPECIFICATION DAUGHTER CART	
External dimensions	840 x 1240 x 318 mm
Maximum working capacity	1000 kg
Tare weight	29 kg
Wheel type	2 fixed and 2 swivel or 4 swivel
Wheel material	Polyamide wheels
Wheel size	200 mm
Surface treatment	Blue Zinc Plated
Amount per LiftLiner	1 unit

Also available in ISO size.

OPTIONS

- Eliminate the need for forklifts and reduce the risk of accidents at manufacturing and assembly lines
- Lower maintenance costs
- Reduce overall operator costs
- Require only one operator making multiple deliveries on one route trip
- Enable to carry smaller and kitted loads in addition to pallet units in the same train
- Faster delivery rates - takes seconds to unload

Accessories – Wheel overview

Ø 100 MM WHEELS



CPD WHEEL



RUBBER WHEEL



POLYURETHANE WHEEL



ESD RUBBER WHEEL



ESD HYBRID WHEEL
NON-MARKING



ESD POLYURETHANE
WHEEL

Ø 160 MM WHEELS



POLYURETHANE WHEEL



SOLID WHEEL PA

- All our wheels are equipped with ball bearings to ensure
 - lower rolling resistance
 - lower noise
 - long life span
- Very high load capacity and quality
- The wheels are designed to be used also in a tugger train



CLEAN WHEEL



Accessories – Safety and ergonomics



**MULTIPURPOSE DECK
FOR 600 X 800 MM LEAN DOLLIES**

TECHNICAL SPECIFICATION

External dimensions	598 x 798 mm
Material	Coated plywood
Max. load	500 kg
Supplied	Ready to use

DESIGN

- Compatible with 600 x 800 Lean Dollies

BENEFITS

- Provides a close deck for smaller packages
- Easy to use
- Equipped with two ergonomic handles



**ERGONOMIC HANDLE
FOR TOWING OF DOLLIES**

TECHNICAL SPECIFICATION

External dimensions	470 (L) x 405 (W) x 900 (H) mm
Surface treatment	Blue zinc plating
Weight	5 kg
Wheel type and size	CPD 100 mm
Supplied	Ready to use

DESIGN

- Both for 600 x 400 and 600 x 800 Lean Dollies

BENEFITS

- Ergonomic and safe way to move the dollies



**EASY STRAP
FOR LEAN ADAPTOR PALLET**

TECHNICAL SPECIFICATION

Modular length	2300 – 3800 mm
Material	Textile with metal hook
Max. load to be tripped	1000 kg = max. load to be distributed on one or more Adaptor Pallets
Max. load by stacking	1000 kg in total
Supplied	Ready to use and to be attached to the Adaptor Pallet.

DESIGN

- Adjustable length
- Directly attached to the Lean Adaptor Pallet

BENEFITS

- Safer transportation
- Easy to attach
- Reusable

To be used in connection with the Lean Adaptor Pallet and secure the transported boxes.

Accessories – Dirt prevention



**COVER
FOR LEAN SHELF WAGON**

TECHNICAL SPECIFICATION

External dimensions	806 x 1260 x 1680 mm
Material	PVC (polyvinyl chloride)
Packing	Delivered as complete kit for 1 unit
Supplied	Delivered ready for use and to be attached to the Adaptor Pallet

Designed for closed transportation of the Lean Shelf Wagon between warehouses or from for example unloading areas outside to inside. The cover is very easy to flip over and open as well as closing.

DESIGN

- Access from both long and short sides if needed
- Easy manual handling due to Velcro-closing
- Flip-up and attach sides for less space consuming handling

BENEFITS

- Weather protection
- Protection against contamination
- Transport safety under truck transportation
- Internal transport safety
- Easy manual handling
- Space friendly solution



**DRIPPING PAN
FOR 600 X 400 MM LEAN DOLLIES**

TECHNICAL SPECIFICATION

External dimensions	604 x 404 mm
Material	PVC (Polyvinyl chloride)
Supplied	Ready to use

Designed to be placed between the Dolly and the packages transported.

BENEFITS

- Prevents liquid dripping from boxes on the floor
- Prevents accidents
- The solution stays stackable while being attached with the dripping pan

Accessories – Connecting devices



**TOW TRACTOR
DRAW BAR**

TECHNICAL SPECIFICATION	
Max. load on the draw bar	6000 kg
Max. load on the pin	2000 kg
Compatible with	Lean Dolly 600 x 500 mm Lean Dolly 600 x 400 mm Lean Dolly 600 x 800 mm Lean Dolly 600 x 1000 mm Lean Pallet Size Dolly Lean Shelf Wagon
Surface treatment	Blue zinc plated
Supplied	Assembled ready to mount on the tugger

DESIGN

For the tractor types:
Jungheinrich EZS350 and Linde P30/P50.
It can also be adjusted for other tractor types.

BENEFITS

- Enable towing of all Lean Dollies in various combinations.



MAKE THE NEXT
SMART MOVE
IN LOGISTICS

COST SAVINGS
UP TO 40 %

PRODUCTIVITY
INCREASED BY
UP TO 55%

3-4 TIMES LESS
MANUAL HANDLING
OPERATIONS
PER TOTE

BETTER
SAFETY AND
ERGONOMICS



DAIMLER
MAHLE



BOSCH

SCHAEFFLER



brose
Technik für Automobile

Continental 