








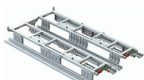


# Product Portfolio














# INDUSTRIAL LOGISTICS

Lean Logistics for Industrial Manufacturing

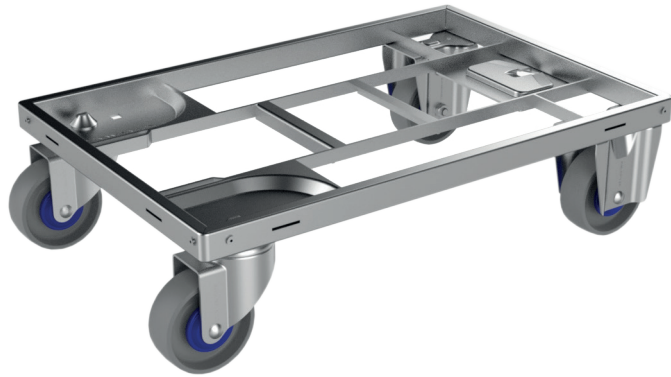
# Index

	Lean Dolly Type I	4
	Lean Dolly Type II, Lean Dolly Type V	5
	Lean Dolly Type VII	7
	Lean Dolly Type VIIC with Elevated Deck	8
	Lean Taxiliner	9
	Lean Dolly 600 x 800 mm	10
	Lean Dolly 1200 x 800 mm	11
	Lean Dolly 800 x 600 mm	12
	Lean Adaptor Pallet	13
	Lean Pallet Size Dolly	14
	Mini Lean Pallet Size Dolly	15

	Lean Pallet Size Dolly with Elevated Deck	16
	Lean Shelf Wagon	17
	Accessories – Wheel Overview	18
	Accessories – Safety and Ergonomics	19
	Accessories – Dirt Prevention	20
	Accessories – Connecting Devices	21
	elephantboard® and Daughter Cart for the LiftLiner®22	
	Daughter Cart Shelf Wagon	23
	LiftLiner®	24
	LiftLiner® RC	25
	A-MATE®	26



# Lean Dolly Type I



TECHNICAL SPECIFICATION	
External dimensions	24" x 15" or 24" x 22.5"
Tare weight with CPD wheels, no corners	14.5 lbs
Wheel size	4" wheels
Wheel configuration	2 fixed & 2 swivel
Wheel material	CPD, rubber or PU
Working capacity	
- CPD – standard and ESD	550 lbs
- Rubber – standard and ESD	550 lbs
- PU – standard and ESD	550 lbs
Surface treatment	Blue zinc plated acc. to EN-ISO2081
Safe stacking	up to 15 units (77")
Compatibility with Lean Adaptor Pallets	Next Generation (HADP10030, HADP10032, HADP10045)

## OPTIONS

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

## ALSO AVAILABLE IN ISO- AND US-DIMENSIONS

- 24" x 22.5"
- 24" x 15"
- 24" x 22.5"

## DESIGNED TO CARRY SLC'S AND TRAYS

- 24" x 22.5"
- 24" x 15"
- 12" x 15"

## ACCESSORIES

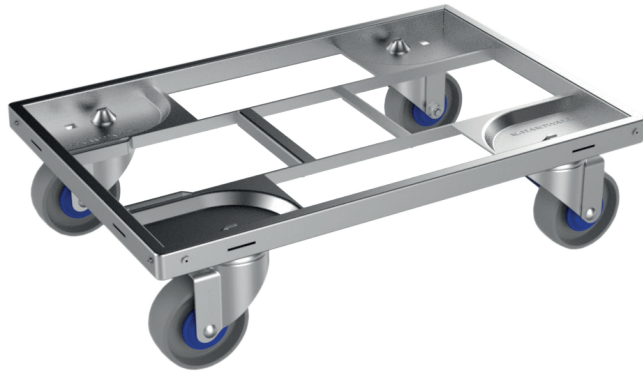
- Ergonomic handle
- Strapping device
- Oil dripping pan



Watch the video

# Lean Dolly Type II

# Lean Dolly Type V



TECHNICAL SPECIFICATION	LEAN DOLLY TYPE II	LEAN DOLLY TYPE V
External dimensions	24" x 15" or 24" x 22.5"	24" x 15" or 24" x 22.5"
Tare weight with CPD wheels, no corners	15.5 lbs	16.5 lbs
Wheel size	4" wheels	4" wheels
Wheel configuration	4 swivel	4 swivel
Wheel material	CPD, rubber or PU	CPD, rubber or PU
Working capacity:		
- CPD – standard and ESD	550 lbs	550 lbs
- Rubber – standard and ESD	550 lbs	550 lbs
- PU – standard and ESD	550 lbs	550 lbs
Surface treatment	Blue zinc plated acc. to EN-ISO2081	Blue zinc plated acc. to EN-ISO2081
Safe stacking	up to 15 units (77")	up to 15 units (77")
Compatibility with Lean Adaptor Pallets	Next Generation (HADP10030, HADP10032, HADP10045)	Next Generation (HADP10030, HADP10032, HADP10045)

### OPTIONS

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

### ALSO AVAILABLE IN ISO- AND US-DIMENSIONS

- 24" x 22.5"
- 24" x 15"
- 24" x 22.5"

### DESIGNED TO CARRY SLC'S AND TRAYS

- 24" x 22.5"
- 24" x 15"
- 12" x 15"

### ACCESSORIES

- Ergonomic handle
- Strapping device
- Oil dripping pan



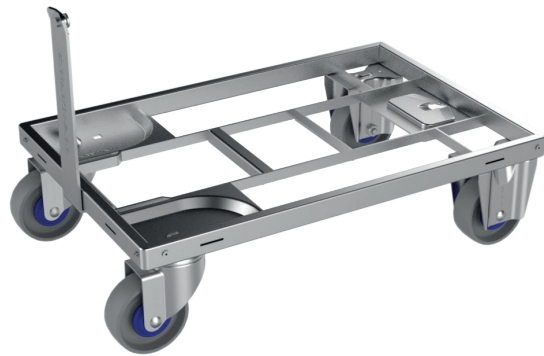
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## Benefits

- Improve work flow
- Reduce handling costs
- Enable reduction of stock level
- Reduce need for floor space
- Improve ergonomics
- Fast and safe truck loading

# Lean Dolly Type VII



With sliding draw bar system



TECHNICAL SPECIFICATION	
External dimensions	24" x 15" or 24" x 22.5"
Tare weight with CPD wheels, no corners	15.5 lbs
Wheel size	4" wheels
Wheel configuration	2 fixed & 2 swivel
Wheel material	CPD, rubber or PU
Maximum Load Capacity:	
- CPD – standard and ESD	550 lbs
- Rubber – standard and ESD	550 lbs
- PU – standard and ESD	550 lbs
Working capacity in tugger train	2200 lbs
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	4 mph

## 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

- 24" x 15", 24" x 22.5"

## DESIGNED TO CARRY SLC'S AND TRAYS

- 24" x 22.5"
- 24" x 15"
- 12" x 15"

## ACCESSORIES

- Ergonomic handle
- Strapping device
- Oil dripping pan



Watch the video

# Lean Dolly Type VIIC with Elevated Deck

**K.HARTWALL**



TECHNICAL SPECIFICATION	
External dimensions	24" x 15" or 24" x 22.5"
Tare weight with CPD wheels, no corners	39.5 lbs
Wheel size	4" wheels
Wheel configuration	2 fixed & 2 swivel
Wheel material	CPD, rubber or PU
Maximum Load Capacity:	
- CPD – standard and ESD	155 lbs
- Rubber – standard and ESD	155 lbs
- PU – standard and ESD	155 lbs
Working capacity in tugger train	2200 lbs
Max amount per tugger train	7–8 units
Surface treatment	Blue zinc plated acc. to EN-ISO2081
Safe stacking	up to 3 units (77")
Compatibility with Lean Adaptor Pallets	Next Generation (HADP10030, HADP10032, HADP10045)
Recommended max speed	3 mph

## OPTIONS

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

## ALSO AVAILABLE IN EURO-DIMENSIONS

- 600 x 400 mm

## DESIGNED TO CARRY SLC'S AND TRAYS

- 24" x 22.5"
- 24" x 15"
- 12" x 15"

## ACCESSORIES

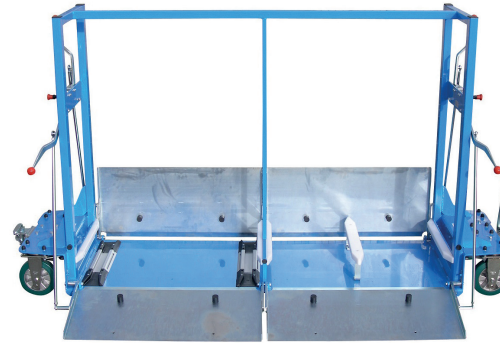
- Ergonomic handle
- Oil dripping pan



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**3 Bay Version**



**4 Bay Version**



TECHNICAL SPECIFICATION	3 Bay Version	4 Bay version
External dimensions	80" x 56" x 28.5"	98" x 56" x 28.5"
Length including the draw bar	100"	118"
Space between dividers	16"	16"
Working capacity	1650"	1650"
Tare weight	474 lbs	622 lbs
Maximum towing load	4960 lbs	4960 lbs
Maximum speed	9 mph	7.5 mph
Min. turning circle	150"	171"
Ramp elevation for dollies	2.8"	3"
Ground clearance	1.5"	1.5"
Steering system SpurTrak™	All wheel Steer	All wheel Steer
Surface treatment	Powder coating	Powder coating

**DESIGNED TO CARRY**

- 600 x 400 mm and 600 x 800 mm dollies
- Also ISO and US sized dollies

**BENEFITS**

- Ideal for logistic flows where the sequence cannot be controlled
- Reduce handling costs
- Enables the delivery of multiple article numbers in one delivery sequence
- Improve ergonomics
- Fast and safe internal transport
- Excellent tracking and steering stability

**OPTIONS**

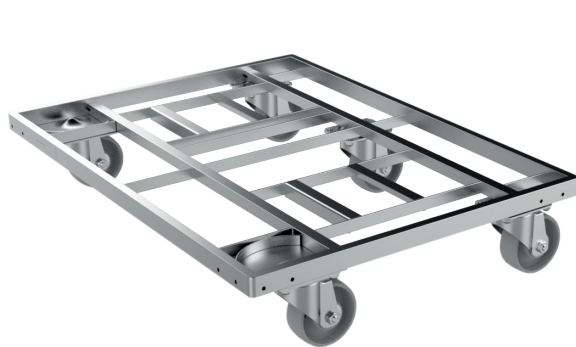
- Non-slip feature for the ramps
- Double locking device
- Additional floor guidance
- ESD compatibility
- RFID & Tracking compatibility

**COMPATIBLE WITH ALL LEAN PALLET SIZE DOLLIES AND LEAN SHELF WAGON.**

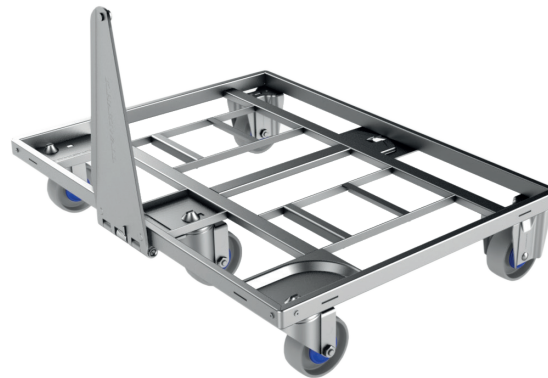


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# Lean Dolly 600 x 800 mm



**With 5 swivel wheels**



**With draw bar**



**With draw bar and plywood deck**



TECHNICAL SPECIFICATION	
External dimensions	600 x 806 x 158 (495) mm
Tare weight with CPD wheels	26.5 lbs
Wheel size	4" wheels
Wheel configuration	2 fixed & 3 swivel or 5 swivel
Wheel material	CPD, rubber or PU
Maximum Load Capacity:	
- CPD – standard and ESD	1100 lbs
- Rubber – standard and ESD	1100 lbs
- PU – standard and ESD	1100 lbs
Working capacity in tugger train	3530 lbs
Max amount per tugger train	5–6 units
Surface treatment	Blue zinc plated acc. to EN-ISO2081
Safe stacking	up to 15 units (77") with towing arm 91"
Compatibility with Lean Adaptor Pallets	Next Generation (HADP10030, HADP10032, HADP10045)
Recommended max speed	4 mph

## 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

- 24" x 22.5"
- 24" x 15"
- 12" x 15"

## ACCESSORIES

- Strapping device
- Multipurpose plywood deck



**Watch the video**

# Lean Dolly 1200 x 800 mm



TECHNICAL SPECIFICATION		
External dimensions	1212 x 800 x 162 (502) mm	
Tare weight with CPD wheels	42 lbs	
Wheel size	4" wheels	
Wheel configuration	2 fixed & 4-5 swivel	
Wheel material	CPD, rubber or PU	
Maximum Load Capacity:		
- CPD – standard and ESD	4 swivel 661 lbs	5 swivel 1102 lbs
- Rubber – standard and ESD	4 swivel 661 lbs	5 swivel 1102 lbs
- PU – standard and ESD	4 swivel 661 lbs	5 swivel 1102 lbs
Working capacity in tugger train	3527 lbs	
Max amount per tugger train	5–6 units	
Surface treatment	Blue zinc plated acc. to EN-ISO2081	
Safe stacking	up to 15 units (77") with towing arm 7.5 ft	
Compatibility with Lean Adaptor Pallets	Next Generation (HADP10030, HADP10032, HADP10045)	
Recommended max speed	3.7 mph	

## 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

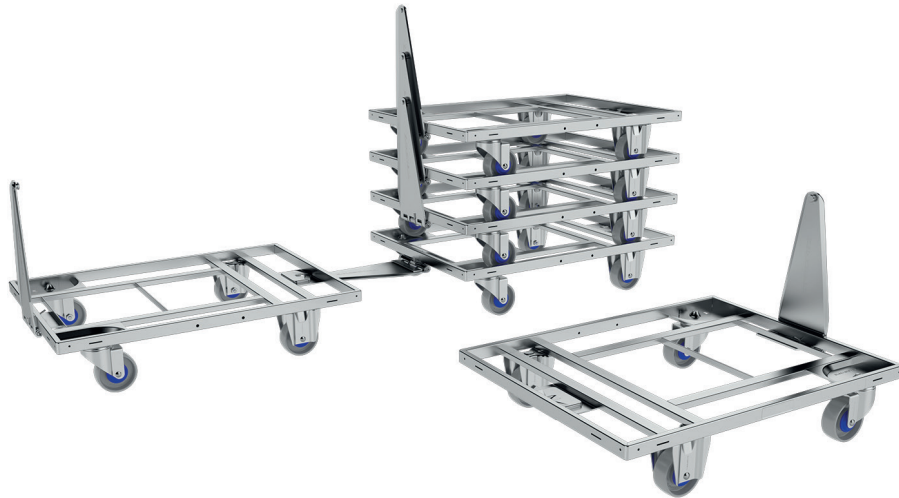
- Strapping device
- Multipurpose plywood deck



**Watch  
the video**

# Lean Dolly 800 x 600 mm

**K.HARTWALL**



TECHNICAL SPECIFICATION	
External dimensions	800 x 600 x 162 (499) mm
Tare weight with CPD wheels	23 lbs
Wheel size	4" wheels
Wheel configuration	2 fixed and 2 swivel
Wheel material	CPD, rubber or PU
Maximum Load Capacity:	
- CPD – standard and ESD	1102 lbs
- Rubber – standard and ESD	1102 lbs
- PU – standard and ESD	1102 lbs
Working capacity in tugger train	3527 lbs
Max amount per tugger train	5–6 units
Surface treatment	Blue zinc plated acc. to EN-ISO2081
Safe stacking	up to 15 units (77") with towing arm 7.5 fl
Recommended max speed	3.7 mph

## 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 and totes

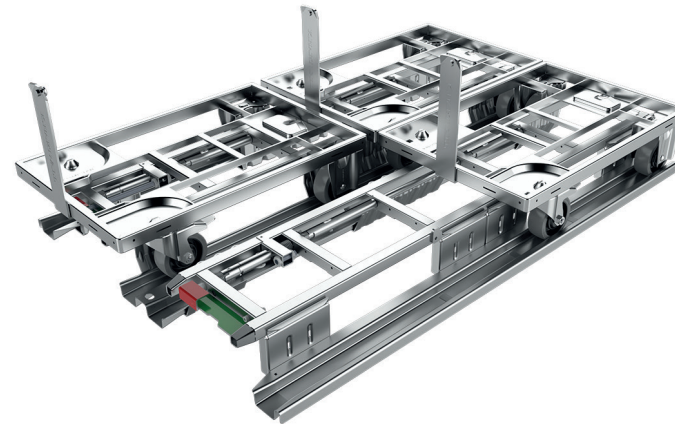
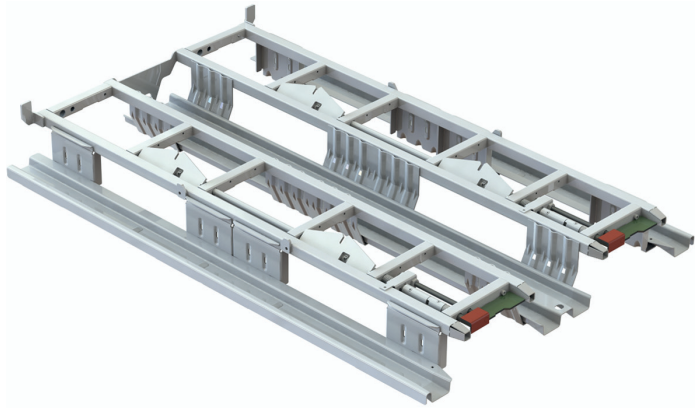
## ACCESSORIES

- Strapping device
- Multipurpose plywood deck



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# Lean Adaptor Pallet



www.tuv.com  
ID 0000040591



TECHNICAL SPECIFICATION	
External dimensions	48" x 30" or 48" x 45"
Tare weight	81.5 lbs
Working capacity	2200 lbs
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



# Lean Pallet Size Dolly



**With 6 wheels  
for 360° spinning**



TECHNICAL SPECIFICATION	
External dimensions	48" x 45" or 32" x 30"
Tare weight	170 or 117 lbs
Wheel size	6.5" wheels
Wheel configuration	2 fixed & 2 swivel 4 swivel 2 fixed & 4 swivel
Wheel material	PU and CPD
Working capacity	2200 lbs
Working capacity in tugger train	7500 lbs
Max amount per tugger train	6 units
Surface treatment	Blue zinc plated acc. to EN-ISO2081
Safe stacking	up to 6 units (66") with "draw bar" (94")
Recommended max speed	4 mph

## OPTIONS

- Available with anti slip material or plywood deck
- Integrated strapping device
- ESD compatibility
- Total brake on 1 or 2 swivel wheels
- RFID & Tracking compatibility
- Corner supports
- 360° spinning on 6 wheels
- Catch for towing one or two lines of Lean dollies
- Wheel spacer
- Forklift guide

## ALSO AVAILABLE IN ISO- AND US-DIMENSIONS

- 1200 x 1000 mm (72 kg)
- 48" x 45" (170 lbs)
- 32" x 30" (117 lbs)

## DESIGNED TO CARRY SLC'S, PALLETS AND BOXES

- Pallet sizes: Euro, ISO & 48" x 45"
- SLC's in Euro, ISO or US boxes
- Pallets and totes

**COMPATIBLE WITH ALL LEAN DOLLIES, LEAN SHELF WAGON AND TAXILINER.**



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the video**

# Mini Lean Pallet Size Dolly



TECHNICAL SPECIFICATION	
External dimensions	32" x 30"
Tare weight	121 lbs
Wheel size	6.5" mm wheels
Wheel configuration	2 fixed & 2 swivel or 4 swivel
Wheel material	PU and CPD
Working capacity	2200 lbs
Working capacity in tugger train	7500 lbs
Max amount per tugger train	6 units
Surface treatment	Blue zinc plated acc. to EN-ISO2081
Safe stacking	up to 6 units (66") with draw bar (94")
Recommended max speed	4 mph

## OPTIONS

- Available with anti slip material or plywood deck
- Integrated strapping device
- ESD compatibility
- Total brake on 1 or 2 swivel wheels
- RFID & Tracking compatibility
- Corner supports
- Catch for towing one or two lines of Lean dollies
- Wheel spacer

## ALSO AVAILABLE IN US-DIMENSIONS

- 32" x 30"

## DESIGNED TO CARRY SLC'S, PALLETS AND BOXES

- Pallet sizes:  
800 x 600 mm or 32" x 30"
- Pallets and totes

**COMPATIBLE WITH ALL LEAN DOLLIES, LEAN SHELF WAGON AND TAXILINER.**



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the video**

# Lean Pallet Size Dolly with Elevated Deck

**K.HARTWALL**



TECHNICAL SPECIFICATION	
External dimensions	47" x 31" x 24"
Tare weight	196 lbs
Wheel size	6.5" wheels
Wheel configuration	2 fixed & 2 swivel 4 swivel 2 fixed & 4 swivel
Wheel material	PU and PA
Working capacity	2200 lbs
Working capacity in tugger train	4000 kg
Max amount per tugger train	6 units
Surface treatment	Blue zinc plated acc. to EN-ISO2081
Safe stacking	up to 66" with "handlag" (94")
Recommended max speed	4 mph

## OPTIONS

- Available with anti-slip material or plywood deck
- Integrated strapping device
- ESD compatibility
- Total brake on 1 or 2 swivel wheels
- RFID & Tracking compatibility
- Corner supports
- 360° spinning on 6 wheels
- Catch for towing one or two lines of Lean dollies
- Wheel spacer
- Forklift guide

## ALSO AVAILABLE IN ISO- AND US-DIMENSIONS

- 1200 x 1000 mm (97 kg)
- 48" x 45" (198 lbs)

## DESIGNED TO CARRY SLC'S, PALLETS AND BOXES

- Pallet sizes: Euro, ISO & 48" x 45"
- SLC's in Euro, ISO or US boxes
- Pallets and totes

**COMPATIBLE WITH ALL LEAN DOLLIES, LEAN SHELF WAGON AND TAXILINER.**



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the video**

# Lean Shelf Wagon



TECHNICAL SPECIFICATION	
External dimensions	50" x 32" x 66"
Tare weight (2 shelves + floor)	250 lbs
Wheel size	6.5" wheels
Wheel configuration	2 fixed and 2 swivel
Wheel material	PU and CPD
Surface treatment	Blue zinc plated acc. to EN-ISO2081
Working capacity	Per Shelf: 330 or 550 lbs ( heavy-duty) Per Unit: 990 or 1765 lbs (heavy-duty)
Max amount in tugger trains	6 units
Recommended max speed	4 mph

## OPTIONS

- ESD compatibility
- Total brake on 1 or 2 swivel wheels
- RFID & Tracking compatibility
- 6 wheel option for 360° spinning
- Catch for towing one or two lines of Lean dollies
- Wheel spacer
- Forklift guide

## DESIGNED TO CARRY SLC'S AND TRAYS AND OTHER BOXES

## ACCESSORIES

- Transport & non-contamination cover

**COMPATIBLE WITH ALL LEAN DOLLIES, LEAN SHELF WAGON AND TAXILINER.**

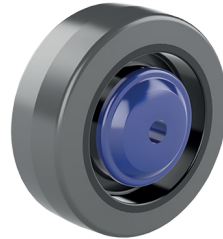


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## Ø 4" WHEELS



**CPD WHEEL**



**RUBBER WHEEL**



**POLYURETHANE WHEEL**



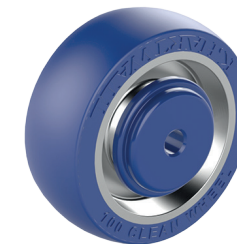
**ESD RUBBER WHEEL**



**ESD HYBRID WHEEL  
NON-MARKING**



**ESD POLYURETHANE  
WHEEL**



**CLEAN WHEEL**

## Ø 6.5 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





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

TECHNICAL SPECIFICATION	
External dimensions	23.5" x 31.5"
Material	Coated plywood
Max. load	1100 lbs
Supplied	Ready to use

**DESIGN**

- Compatible with 600 x 800 mm 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	18.5" (L) x 16" (W) x 35.5" (H)
Surface treatment	Blue zinc plating
Weight	11 lbs
Wheel type and size	CPD 4"
Supplied	Ready to use

**DESIGN**

- Both for 600 x 400 mm and 600 x 800 mm Lean dollies

**BENEFITS**

- Ergonomic and safe way to move the dollies



**EASY STRAP  
FOR LEAN ADAPTOR PALLET**

TECHNICAL SPECIFICATION	
Modular length	90" – 150"
Material	Textile with metal hook
Max. load to be tripped	2200 lbs = max. load to be distributed on one or more Adaptor Pallets
Max. load by stacking	2200 lbs 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 totes.



**COVER  
FOR LEAN SHELF WAGON**

TECHNICAL SPECIFICATION	
External dimensions	32" x 49.5" x 66"
Material	PVC (polyvinyl chloride)
Packing	Delivered as complete kit for 1 unit
Supplied	Delivered ready for use and to be attached to the Lean Shelf Wagon

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 transported boxes.



**TOW TRACTOR  
DRAW BAR**

TECHNICAL SPECIFICATION	
Max. load on the draw bar	13230 lbs
Max. load on the pin	4400 lbs
Compatible with	24" x 15" 24" x 22.5" 32" x 30" 48" x 45" 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 tugger types.

### BENEFITS

- Enable towing of all Lean dollies in various combinations

### BENEFITS

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



# elephantboard® and Daughter Cart for the LiftLiner®

**K.HARTWALL**



TECHNICAL SPECIFICATION ELEPHANTBOARD (4 SHELVES)	
External dimensions	32" x 57" x 71"
Maximum working capacity	1100–2200 lbs
Shelf material	Rotomoulding plastic
Number of shelves	1–4
Distance between shelves	14"
Tare weight	143 lbs
Wheel type	2 swivel and 2 fixed
Wheel material	Heavy-duty polyurethane
Wheel size	8"
Surface treatment	Blue Zinc Plated
Amount per LiftLiner	2 units

TECHNICAL SPECIFICATION DAUGHTER CART	
External dimensions	48" x 40" or 48" x 45"
Maximum working capacity	2200 lbs
Wheel type	2 fixed and 2 swivel or 4 swivel
Wheel material	Polyamide
Wheel size	8"
Surface treatment	Blue Zinc Plated
Amount per LiftLiner	2 units

Available in ISO size.

## BENEFITS

- Designed to work seamlessly with the LiftLiner®
- Lower maintenance costs
- Reduce overall operator costs
- Improve workflow efficiency
- Increase ergonomics
- Faster delivery rates – takes seconds to unload



**Watch the video**

# Daughter Cart Shelf Wagon



TECHNICAL SPECIFICATION	
External dimensions	813 x 1280 x 1712 mm
Maximum working capacity	750 kg
Tare weight (3 or 4 shelves)	87–99 kg
Wheel type	2 swivel brake + 2 swivel
Wheel material	Polyamide
Wheel size	200 mm
Surface treatment	Blue Zink Plated
Amount per LiftLiner	2 units

Available with 1 to 4 shelves and in ISO size.

## BENEFITS

- Improve workflow
- Reduce handling costs
- Enable reduction of stock level
- Reduce need for floor space
- Improve ergonomics
- Fast and safe truck loading
- Optimize vehicle fill

## DESIGNED TO CARRY SLC'S

- 4 crates of 600 x 400 mm per level
- 8 crates of 300 x 400 mm per level

## ACCESSORIES

- Number of shelves (2-5)
- PVC cover
- Self-aligning castors
- Plywood or steel shelves
- Fixed or Removable handle on long side

## OPTIONS

- ESD
- Fixed castors
- Polyurethane wheels



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the video**



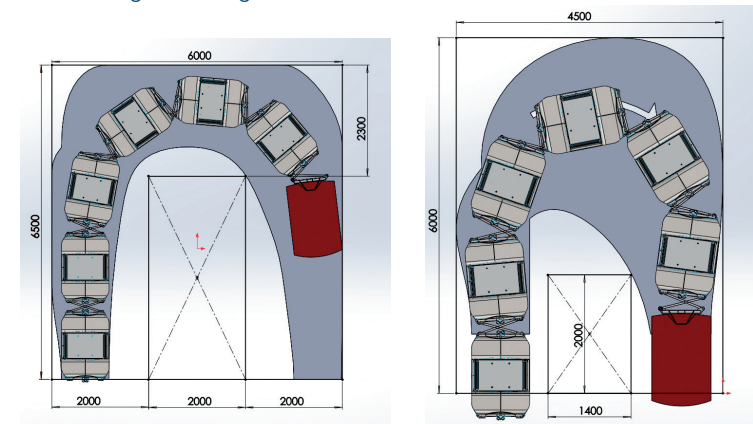
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## TECHNICAL SPECIFICATION

Standard Daughter Cart Sizes Available	32" x 24" 32" x 30" 48" x 32" 48" x 40" 48" x 45" 50" x 50"
*Custom daughter cart sizes available by request	
Ground clearance when down/up	2.4"
Tare weight with CPD wheels, no corners	39.7 lbs
Wheel size	8" wheels
Wheel configuration	2 per mother cart
Wheel material	PU
Maximum load capacity per mother cart	2200 lbs
Tare weight per pair of LiftLiners	880 lbs
Coupling:	
- Length	7.9"
- Type	Crossbar system
Maximum speed	6 mph
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





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TECHNICAL SPECIFICATION	
Payload per loading bay	500 kg
Max. train length	2 LiftLiner® RC, (8 loading bays)
Length (1 LiftLiner® RC)	4655 mm
Dimensions	height 551 mm, width 1024 mm
Tare weight (1 LiftLiner® RC)	760 kg
Tare weight (1 cart)	380 kg
Ground clearance	40/60 mm
Wheel material	Radthane® 75 Shore A / , Conducthane® 92 Shore
Wheel size	160/200 mm
Maximum train speed	1 LiftLiner® RC: 10 km/h, 2 LiftLiner® RC: 8 km/h
Aisle width	2500 mm
U-turn 1 pair/2 pairs	4500/6000 mm
Shelf circumnavigation	6000 mm
S-Curve	3250 mm
90°-curve	2300 mm
Coupling system	Crossbar system
Load dimensions	Min. width/length: 600/700 mm Max. width/length: 800/860 mm

## BENEFITS

- Transports a wide range of roll carts and dollies
- Very compact and agile design
- Fast and safe loading/unloading from both sides eliminates sequencing
- Carries up to 8 roll carts thus minimizing manual handling
- Enables a forklift free production environment
- Ergonomic, safe and user-friendly
- Accurate tracking
- Innovative rooftop shape, tilting technology and individual programs for easy loading and unloading
- Low maintenance costs
- Streamlines Parcel and Retail operations
- Reduces overall operating costs

## MODULAR MOBILE ROBOT SOLUTIONS FOR TRANSPORTING LARGE AND SMALL LOAD CARRIERS

### BENEFITS

- Compact design
- Electric free lift
- 360° safety
- Natural Feature Based Navigation via LiDAR
- Long lasting Li-ion battery
- 3D cameras for machine safety



TECHNICAL SPECIFICATION	A-MATE® FreeLift	A-MATE® Counter	A-MATE® Lite
Height	72"	75.3"	75.4"
Width	31.2"	32.4"	31.5"
Length	64"	83.8"	49.2"– 53.3" (with 23.6" fork)
Drive concept	omnidirectional	bidirectional	omnidirectional
Max. driving speed	3.35 mph	3.35 mph	3.35 mph
Lifting height	43.3" (max shelf height 29.3")	43.3" (max shelf height 29.3")	11.8"
Load capacity	2200 lbs	2200 lbs	272 lbs
Fork dimensions DIN ISO 2331	22"/180"/47.2"	22"/180"/48.4 "	2" / 3.7"/23.6" (Dolly DOS 1535)
Length including back of fork	16.8"	35.5"	/
Fork carriage width	24.2"	24.2"	adjustable (15.4"– 23.6")
Turning radius	86.6"	118"	68.9"
Ground clearance	0.47"	0.98"	0.98"
Unit tare weight (incl. battery)	1763.7 lbs	4409 lbs	2866 lbs



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MOVES**  
LOGISTIC SOLUTIONS

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