

# WAREHOUSE RANGE



(RIDE-ON) PALLET TRUCKS • (RIDE-ON) PALLET STACKERS • STAND-ON TOW TRACTORS • LOW-LEVEL ORDER PICKERS



# VERSATILE WAREHOUSE SOLUTIONS

The Hyundai Material Handling Warehouse range enhances logistics by enabling faster and more efficient horizontal movement.

Powered by high-performance AC motors and Curtis controllers, the range offers a variety of models and options suited for nearly all horizontal handling scenarios, from short shuttles to long-distance operations.



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# PALLET TRUCKS

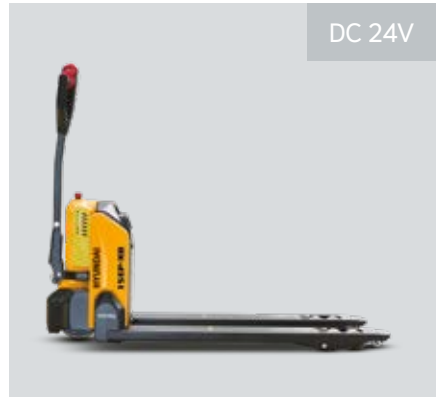
Hyundai Material Handling Pallet Trucks are engineered for efficiency and adaptability in any warehouse environment. Available in two widths and various fork lengths, these trucks offer the flexibility to choose between single or double load wheels. With keyless entry options such as RFID access or PIN code panels, they also deliver added convenience and security. The EP-XB range is ideal for light-duty applications, whilst the EP-X range is better suited to high-demand operations. Whichever you choose, Hyundai's pallet trucks are built to boost productivity and meet the diverse demands of modern warehouses.

**12EP-XB** **Li-ion**  
1.2T Capacity



- Perfect for light-duty applications
- Compact & skeleton design
- Fast-charging Li-ion batteries
- Ideal for occasional use
- Easy-battery replacement
- High manoeuvrability
- Castor wheels for extra stability **OPTION**

**15EP-XB** **Li-ion**  
1.5T Capacity



- Perfect for light-duty applications
- Compact & skeleton design
- Fast-charging Li-ion batteries
- Ideal for use in retail stores and on lorries
- Easy-battery replacement
- Light service weight
- Castor wheels for extra stability **OPTION**

**20EP-XB** **Li-ion**  
2.0T Capacity



- Perfect for light-duty applications
- Ultimate solution for moving heavy loads
- Compact & robust design
- Fast-charging Li-ion batteries
- Easy-battery replacement
- Great gradeability performance
- Powerful drive and pump system
- Castor wheels for extra stability

**16EP-X/20EP-X/25EP-X**  
1.6T, 2.0T, 2.5T Capacity

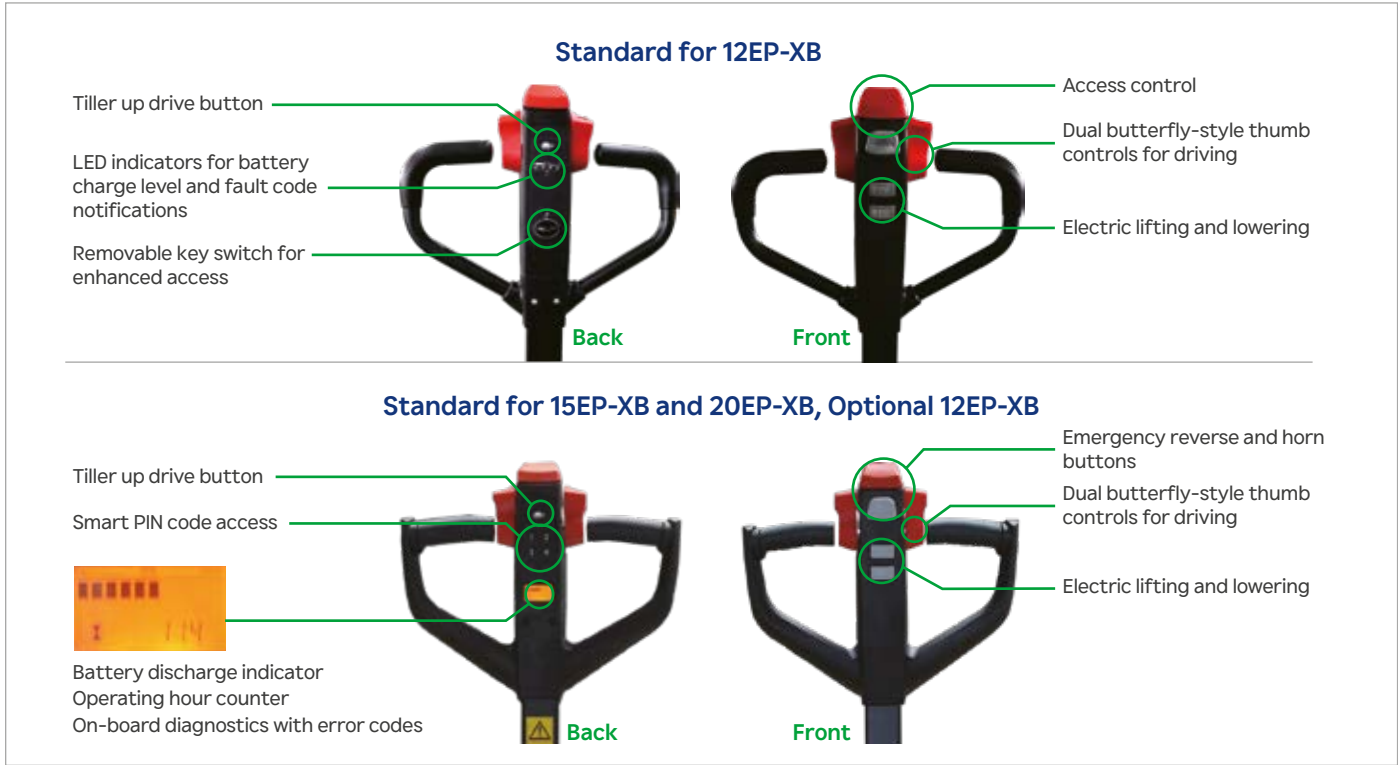


- Long-lasting performance
- Ergonomic, compact and safe long-tiller design
- Reliable and robust chassis
- Powerful, maintenance-free, German AC powertrain
- Core components from top-quality brands
- Designed for operation in confined areas
- Lead-acid battery
- Li-ion battery **OPTION**



# SMART AND ERGONOMIC TILLERS

The pallet trucks are equipped with control tillers, designed to meet application needs based on their designated performance.



## RFID card access

RFID card provides quicker access to equipment and is ideal for applications where a single truck needs to be used by multiple operators. **OPTION**



## Standard for 16EP-X, 20EP-X and 25EP-X

The Rema tiller offers exceptional ergonomics and a highly reliable control system. Additionally, its contactless rocker switches, designed for lifting and lowering functions, ensure long-lasting durability, making it a dependable choice for extended use.

## Speed limit control

The tiller bar is supported by an air spring, ensuring smooth return to its vertical position without sudden impact at the endpoint.

To enhance operating comfort and safety, the trucks are equipped with a speed reduction function when turning. (Optional for 12EP-XB and 15EP-XB, standard for 20EP-XB)

The speed reduction value can be adjusted to suit customers' preferences.





# SMART & REPLACEABLE BATTERIES FOR PALLET TRUCKS

The EP-XB pallet trucks are equipped with a maintenance-free Li-ion battery, while the EP-X trucks can be equipped with a Lead-acid battery, a Li-ion battery or can be delivered without battery. Optional capacities are available for various applications. With fast charging and opportunity charging features (charge whenever you want, for as long as time allows), operation time can be significantly extended.

Lightweight batteries in the EP-XB range (max. 8kg) are fully chargeable in 2.5 hours (24V), allowing for quick replacement in seconds. Optional battery capacities ranging from 20Ah to 36Ah are available for various applications.



## Safety

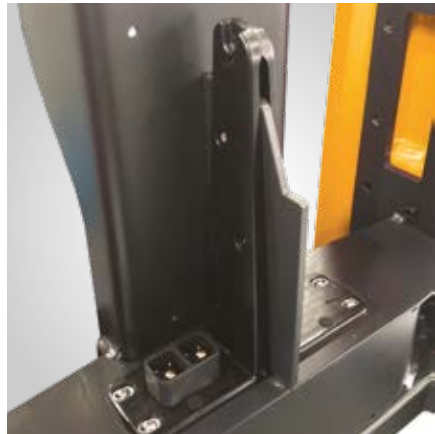
All Li-ion batteries are equipped with on-board Battery Management System (BMS), which continuously monitors key parameters during charging and operation. This system ensures the safety of the Li-ion battery throughout its entire life cycle.



## Easy battery and charging system (on EP-XB models)



The socket on the battery case allows for easy charging without the need to remove the battery.



The battery is quickly and easily positioned inside the compartment, thanks to the specially designed battery guiding system.



The battery cases for pallet trucks are made from ABS-PC material, reinforced with 15% glass fibre.

# PERFORMANCE & ROBUSTNESS

Hyundai Material Handling pallet trucks deliver excellent performance on ramps, even when fully loaded.

Model	12EP-XB	15EP-XB	20EP-XB	16EP-X 20EP-X 25EP-X
Max. gradeability loaded	4%	6%	7%	8%
Max. gradeability unloaded	16%	16%	16%	15%



The truck frame is surrounded by stamped steel elements, ensuring the protection of components on the 12EP-XB and 15EP-XB models.



The truck's forks are shaped for easy entry and exit from pallets. The robust C-shaped forks enhance the strength and rigidity of the frame.



The strong steel apron protects the operator's feet during operation and shields the truck's components from collisions with objects.





MAINTENANCE FRIENDLY

The hydraulic lifting circuit uses no hoses or pipes, significantly improving reliability and reducing potential issues related to seal leaks.

The trucks are equipped with Curtis controllers, and their CAN-bus technology simplifies diagnostics and troubleshooting.

Other high-quality core components from recognized brands such as Kordel gearboxes, Intorque brakes, and Wicke drive wheels mean reliability and performance are guaranteed.

Each Li-ion battery can be diagnosed via CAN connection with the help of a special software tool. The software provides detailed information about the battery condition, including cell balance, charging/discharging cycles, current, energy consumption, temperature,



charging/discharging parameters, voltage of each cell, faults and alarms, and settings for automatic turn-off timing.



STANDARD/OPTIONAL EQUIPMENT							
CATEGORY	OPTION	12EP-XB	15EP-XB	20EP-XB	16EP-X	20EP-X	25EP-X
Load backrest	Width 1070mm	-	<input type="checkbox"/>	<input type="checkbox"/>	-	-	-
	Width 1220mm	-	<input type="checkbox"/>	<input type="checkbox"/>	-	-	-
	Width 1520mm	-	-	<input type="checkbox"/>	-	-	-
Forks	540 x 800mm	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	540 x 900mm	-	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	540 x 1000mm	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	540 x 1150mm	●	●	●	●	●	●
	540 x 1220mm	-	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	540 x 1300mm	-	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	540 x 1500mm	-	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	540 x 1800mm	-	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	540 x 2000mm	-	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	540 x 2400mm	-	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	685 x 800mm	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	685 x 900mm	-	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	685 x 1000mm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	685 x 1150mm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	685 x 1220mm	-	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	685 x 1300mm	-	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	685 x 1500mm	-	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	685 x 1800mm	-	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	685 x 2000mm	-	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	685 x 2400mm	-	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	685 x 1150mm	-	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Pallet entry roller	●	●	●	●	●	●
	Tandem fork wheels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	●	●	●
Battery	Li-ion 24V / 20Ah	●	●	-	-	-	-
	Li-ion 24V / 36Ah	<input type="checkbox"/>	<input type="checkbox"/>	-	-	-	-
	Li-ion 48V / 20Ah	-	-	●	-	-	-
	Lead-acid 24V / 160Ah	-	-	-	<input type="checkbox"/>	-	-
	Li-ion 24V / 100Ah	-	-	-	<input type="checkbox"/>	-	-
	Lead-acid 24V / 210Ah	-	-	-	-	<input type="checkbox"/>	-
	Li-ion 24V / 150Ah	-	-	-	-	<input type="checkbox"/>	-
	Lead-acid 24V / 350Ah	-	-	-	-	-	<input type="checkbox"/>
	Li-ion 24V / 200Ah	-	-	-	-	-	<input type="checkbox"/>
	Extra Li-ion battery 24V / 20Ah	<input type="checkbox"/>	<input type="checkbox"/>	-	-	-	-
	Extra Li-ion battery 24V / 36Ah	<input type="checkbox"/>	<input type="checkbox"/>	-	-	-	-
	Extra Li-ion battery 48V / 20Ah	-	-	<input type="checkbox"/>	-	-	-
Frame	Side battery removal	-	-	-	-	<input type="checkbox"/>	●
External Charger	Li-ion 24V / 8A (≥20Ah battery only)	●	●	-	-	-	-
	Li-ion 24V / 12A (36Ah battery only)	<input type="checkbox"/>	<input type="checkbox"/>	-	-	-	-
	Li-ion 48V / 9A	-	-	●	-	-	-
	Lead-acid 24V / 25A	-	-	-	<input type="checkbox"/>	-	-
	Lead-acid 24V / 35A	-	-	-	-	<input type="checkbox"/>	-
	Lead-acid 24V / 45A	-	-	-	-	-	<input type="checkbox"/>
	Li-ion 24V / 60A	-	-	-	<input type="checkbox"/>	<input type="checkbox"/>	-
	Li-ion 24V / 80A	-	-	-	-	-	<input type="checkbox"/>
Convenience	Stability castor wheels	<input type="checkbox"/>	<input type="checkbox"/>	●	●	●	●
	Rema handle	-	-	-	●	●	●
	LCD display	<input type="checkbox"/>	●	●	●	●	●
	PIN code access	<input type="checkbox"/>	●	●	-	-	-
	RFID access	<input type="checkbox"/>	<input type="checkbox"/>	●	-	-	-
	Speed reduction at turning	<input type="checkbox"/>	<input type="checkbox"/>	●	-	-	-
	Tiller up drive	●	●	●	●	●	●

● Standard    ☐ Optional    - Not available

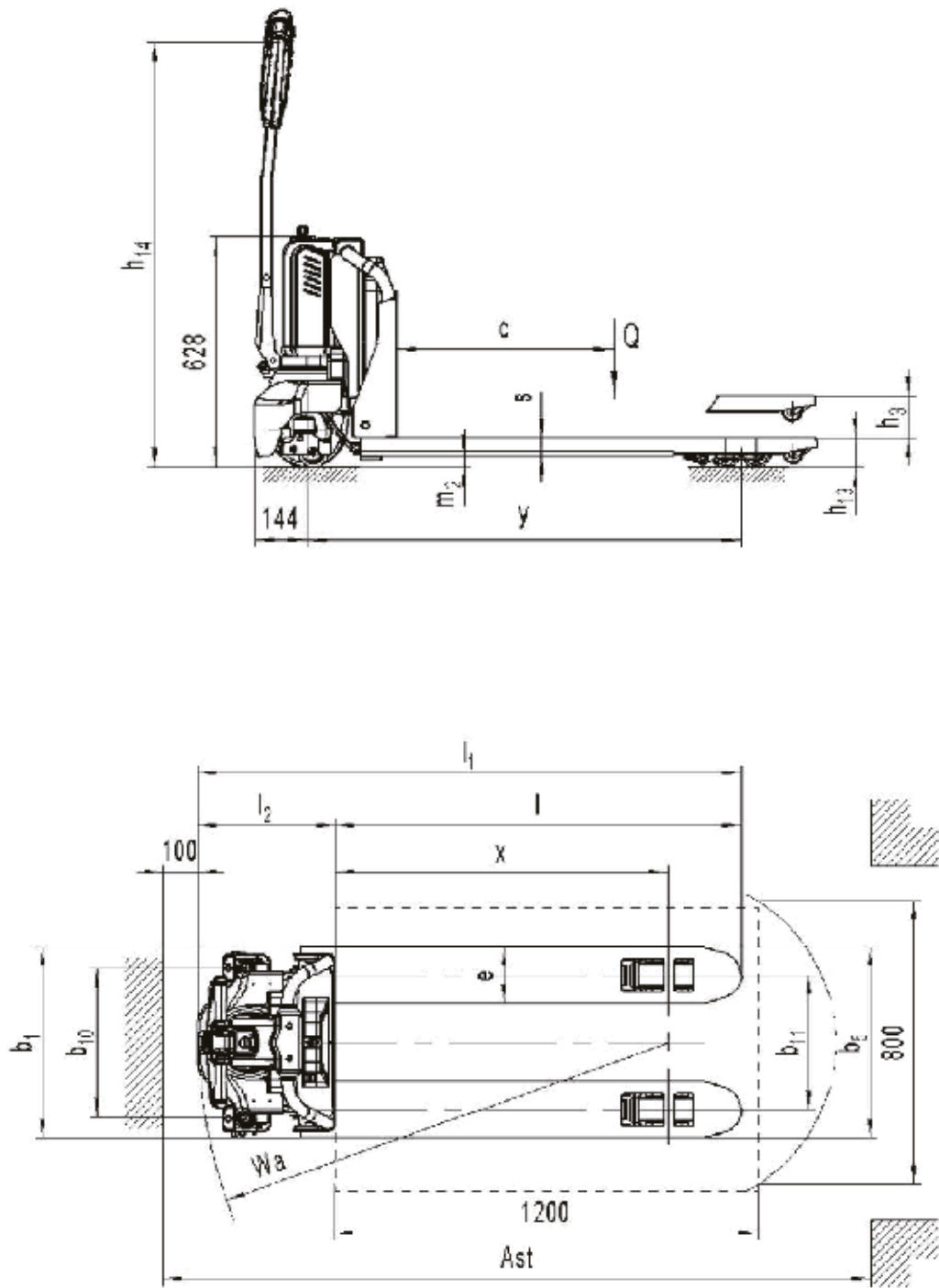
12EP-XB / 15EP-XB / 20EP-XB

# SPECIFICATIONS

TYPE SHEET FOR INDUSTRIAL TRUCK ACC. TO VDI 2198									
IDENTIFICATION									
1.1	Manufacturer (abbreviation)			Hyundai		Hyundai		Hyundai	
1.2	Manufacturer's type designation			12EP-XB		15EP-XB		20EP-XB	
1.3	Drive			Battery		Battery		Battery	
1.4	Operator type			Pedestrian		Pedestrian		Pedestrian	
1.5	Rated capacity / rated load	(Q)	kg	1200		1500		2000	
1.6	Rated centre distance	(c)	mm	600		600		600	
1.8	Load distance, centre of drive axle to fork	(x)	mm	942		947		951	
1.10	Wheelbase	(y)	mm	1185		1185		1189	
WEIGHTS									
2.1	Service weight		kg	124	129	123	126	149	153
2.2	Axle loading, loaded front / rear		kg	355 / 972	425 / 908	623 / 1000	626 / 1000	621 / 1528	625 / 1528
2.3	Axle loading, unloaded front / rear		kg	101 / 27	106 / 27	96 / 27	99 / 27	115 / 34	119 / 34
TYRES / CHASSIS									
3.1	Tyres			Polyurethane		Polyurethane		Polyurethane	
3.2	Tyre size, front		mm	Ø210 × 70		Ø210 × 70		Ø210 × 70	
3.3	Tyre size, rear		mm	Ø80 × 93 (Ø80 × 70)		Ø80 × 93 (Ø80 × 70)		Ø80 × 93 (Ø80 × 70)	
3.4	Additional wheels (dimensions)		mm	Ø- (Ø80 × 30)		Ø- (Ø80 × 30)		Ø- (Ø80 × 30)	
3.5	Wheels, number front / rear (x=driven wheels)			1x / 2 (1x / 4) (1x + 2 / 2) (1x + 2 / 4)		1x / 2 (1x / 4) (1x + 2 / 2) (1x + 2 / 4)		1x / 2 (1x / 4) (1x + 2 / 2) (1x + 2 / 4)	
3.6	Tread, front	(b10)	mm	- / 430		- / 430		- / 430	
3.7	Tread, rear	(b11)	mm	380 (525)		380 (525)		380 (525)	
DIMENSIONS									
4.4	Lift height	(h3)	mm	115		115		115	
4.9	Height of tiller in drive position min. / max.	(h14)	mm	700 / 1160		700 / 1160		700 / 1160	
4.15	Height of lowered forks	(h13)	mm	80		80		80	
4.19	Overall length	(l1)	mm	1537		1530		1536	
4.20	Length to face of forks	(l2)	mm	387		380		386	
4.21	Overall width	(b1)	mm	540	685	540	685	540	685
4.22	Fork dimensions	(l / e / s)	mm	1150 x 160 x 48		1150 x 160 x 47		1150 x 160 x 47	
4.25	Width across forks	(b5)	mm	540 (685)		540 (685)		540 (685)	
4.32	Ground clearance, center of wheelbase	(m2)	mm	32		33		33	
4.34.2	Aisle width for pallets 800 x 1200 lengthways	(Ast)	mm	2007		2000		2006	
4.35	Turning radius	(Wa)	mm	1337		1330		1336	
PERFORMANCE DATA									
5.1	Travel speed loaded / unloaded		km/h	4.6 / 4.8		4.6 / 4.8		4.8 / 5.2	
5.2	Lift speed loaded / unloaded		mm/s	31 / 37		20 / 25		17 / 22	
5.3	Lowering speed loaded / unloaded		mm/s	69 / 51		50 / 40		50 / 30	
5.8	Max. gradeability loaded / unloaded		%	4 / 16		6 / 16		7 / 16	
ELECTRIC MOTOR									
6.1	Drive motor rating s2 60 min		kW	0.65		0.65		0.75	
6.2	Lift motor rating at s3 15%		kW	0.50		0.50		0.80	
6.3	Battery acc. to DIN 43531 / 35 / 36 A, B, C, no			N/A		N/A		N/A	
6.4	Battery voltage, nominal capacity K5		V/Ah	24 / 20		24 / 20 (24 / 36)		48 / 20	
6.5	Battery weight		kg	4.4		4.6		7.5	
6.6	Energy consumption acc. to VDI cycle		kWh/h	0.14		0.22		0.18	
ADDITIONAL DATA									
8.1	Type of drive control			DC Speed Control		DC Speed Control		DC Speed Control	
10.1	Sound level at the driver's ear according to DIN 12053		dB(A)	<70		<70		<70	

12EP-XB / 15EP-XB / 20EP-XB

# DIMENSIONS





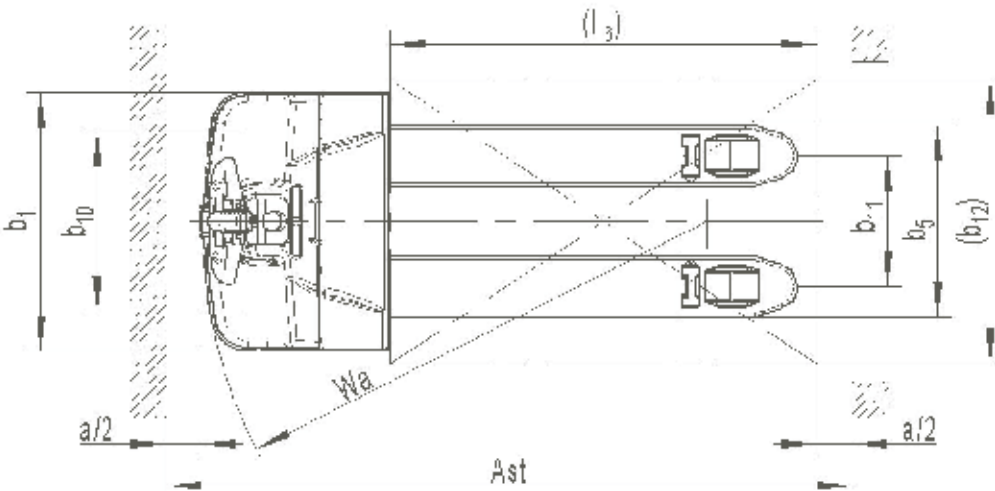
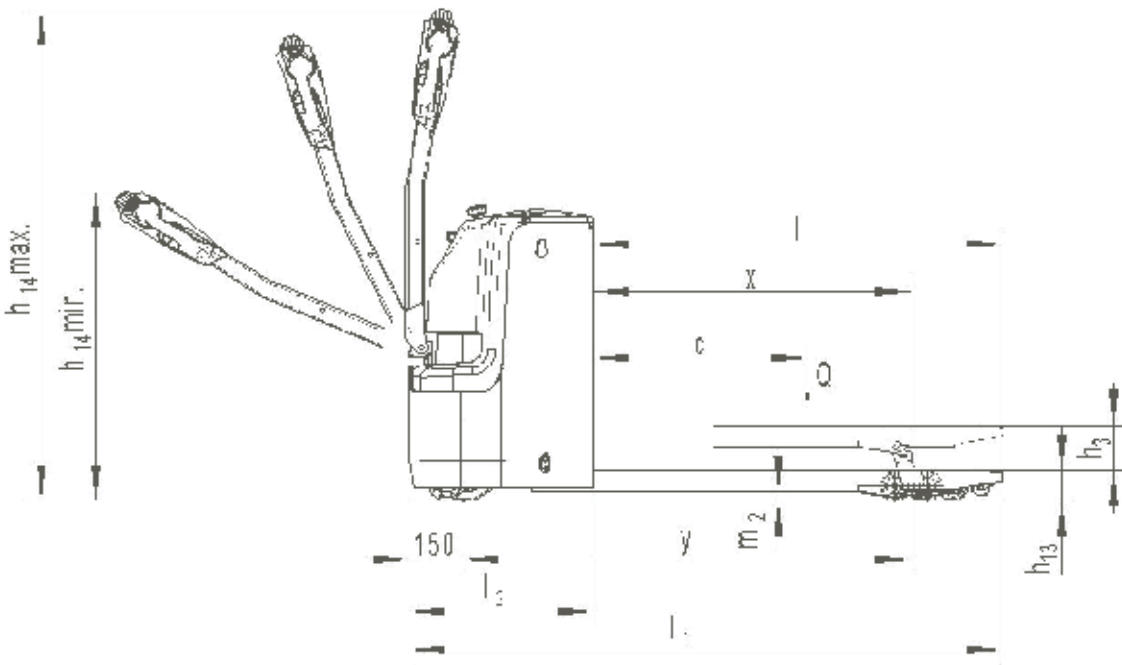
16EP-X / 20EP-X / 25EP-X

# SPECIFICATIONS

TYPE SHEET FOR INDUSTRIAL TRUCK ACC. TO VDI 2198						
IDENTIFICATION						
1.1	Manufacturer (abbreviation)			Hyundai	Hyundai	Hyundai
1.2	Manufacturer's type designation			16EP-X	20EP-X	25EP-X
1.3	Drive			Battery	Battery	Battery
1.4	Operator type			Pedestrian	Pedestrian	Pedestrian
1.5	Rated capacity / rated load	(Q)	kg	1600	2000	2500
1.6	Load centre distance	(c)	mm	600	600	600
1.8	Load distance, centre of drive axle to fork	(x)	mm	892	892	892
1.10	Wheelbase	(y)	mm	1261	1327	1541
WEIGHTS						
2.1	Service weight		kg	445	535	720
2.2	Axle loading, loaded front / rear		kg	715 / 1330	855 / 1680	1040 / 2200
2.3	Axle loading, unloaded front / rear		kg	345 / 100	415 / 120	540 / 200
TYRES / CHASSIS						
3.1	Tyres			Polyurethane	Polyurethane	Polyurethane
3.2	Tyre size, front		mm	Ø230 × 70	Ø230 × 70	Ø230 × 70
3.3	Tyre size, rear		mm	Ø84 × 84	Ø84 × 84	Ø84 × 84
3.4	Additional wheels (dimensions)		mm	Ø100 x 40	Ø100 x 40	Ø100 x 40
3.5	Wheels, number front / rear (x=driven wheels)			1x + 2 / 4	1x + 2 / 4	1x + 2 / 4
3.6	Tread, front	(b10)	mm	510	510	510
3.7	Tread, rear	(b11)	mm	367 (512)	367 (512)	367 (512)
DIMENSIONS						
4.4	Lift height	(h3)	mm	120	120	120
4.9	Height of tiller in drive position min. / max.	(h14)	mm	800 / 1335	800 / 1335	800 / 1335
4.15	Height of lowered forks	(h13)	mm	85	85	85
4.19	Overall length	(l1)	mm	1670	1735	1950
4.20	Length to face of forks	(l2)	mm	520	595	810
4.21	Overall width	(b1)	mm	729	729	729
4.22	Fork dimensions	(l / e / s)	mm	1150 x 173 x 60	1150 x 173 x 60	1150 x 173 x 60
4.25	Width across forks	(b5)	mm	540 (685)	540 (685)	540 (685)
4.32	Ground clearance, center of wheelbase	(m2)	mm	25	25	25
4.34.1	Aisle width for pallets 1000 x 1200 crossways	(Ast)	mm	1885	1955	2175
4.34.2	Aisle width for pallets 800 x 1200 lengthways	(Ast)	mm	1935	2005	2225
4.35	Turning radius	(Wa)	mm	1440	1490	1750
PERFORMANCE DATA						
5.1	Travel speed loaded / unloaded		km/h	5.7 / 6.0	5.7 / 6.0	5.5 / 6.0
5.2	Lift speed loaded / unloaded		mm/s	25 / 35	22 / 30	35 / 45
5.3	Lowering speed loaded / unloaded		mm/s	35 / 30	35 / 35	40 / 40
5.8	Max. gradeability loaded / unloaded		%	8 / 15	8 / 15	8 / 15
ELECTRIC MOTOR						
6.1	Drive motor rating s2 60 min		kW	1.3	1.3	1.7
6.2	Lift motor rating at s3 15%		kW	0.8	0.8	2.2
6.3	Battery acc. to DIN 43531 / 35 / 36 A, B, C, no			2VBS	2PzS	3PzS
6.4	Battery voltage, nominal capacity K5		V/Ah	24 / 160	24 / 210	24 / 350
6.5	Battery weight		kg	150	215	285
6.6	Energy consumption acc. to VDI cycle		kWh/h	0.44	0.39	0.92
ADDITIONAL DATA						
8.1	Type of drive control			AC Speed Control	AC Speed Control	AC Speed Control
10.1	Sound level at the driver's ear according to DIN 12053		dB(A)	67	69	65

16EP-X / 20EP-X / 25EP-X

# DIMENSIONS







# RIDE-ON PALLET TRUCKS

Introducing Hyundai Material Handling’s Ride-On Pallet Truck Range – Power, Speed, and Efficiency. Our powered pallet trucks, available in 2,000kg and 2,500kg capacities, are engineered for maximum efficiency, even in demanding multi-shift operations. Designed to boost productivity, these trucks offer powerful performance, increased speed, and customisable battery options, including advanced Li-ion solutions, to meet the diverse needs of modern logistics.

## 20/25EPR-X 2.0T, 2.5T Capacity



- Easy maintenance
- Premium brand components, including Curtis controllers
- PIN code access **OPTION**
- Power steering **OPTION**
- Li-ion battery **OPTION**



An 8mm thick apron provides protection against collisions, while the steel battery cover safeguards the battery.



The PIN code panel, compatible with both PIN codes and RFID cards, simplifies access control for fleets with multiple operators.



The 2-ton pallet truck can optionally be equipped with a battery under the 3VBS standard, reducing the overall length and making the truck more compact (the standard battery is 2PzS). A Li-ion battery is also available as an option.

### Battery options



The model range can be equipped with Li-ion batteries. Using Hyundai’s Li-ion solution offers the benefits of fast charging, opportunity charging, maintenance-free operation, environmental friendliness, smart battery status diagnostics, and lower total cost of ownership costs due to a longer service life.



The side battery replacement option allows customers to use the truck in multi-shift operations without wasting time on the complicated procedure of top battery replacement. With the help of a specially designed trolley, batteries can be replaced quickly and effortlessly.





The powerful AC-drive unit is composed of components from global industrial leaders. The AC driving motor, designed and produced by Schabmuller paired with the high-quality ZF gearbox and Intorq electromagnetic brake allows the truck to reach a maximum speed of 8 km/h.

Optionally, the truck can be equipped with Electric Power Steering (EPS), providing precise and responsive control.



The Rema tiller provides exceptional ergonomics and a highly reliable control system. Its contactless rocker switches, designed for lifting and lowering functions, ensure long-lasting durability, making it a dependable choice for extended use.

Additionally, the Curtis controller offers customers a reliable and flexible high-performance control system solution.

» Operator platform

The integrated design of the operator platform and protective arms, paired with a completely new internal structure, results in one of the shortest body lengths on the market, providing an exceptionally tight turning radius. Combined with a suspension system for the platform, it ensures superior comfort for operators, making it a standout choice compared to competitors.



STANDARD/OPTIONAL EQUIPMENT			
CATEGORY	OPTION	20EPR-X	25EPR-X
Load backrest	Load backrest	<input type="checkbox"/>	<input type="checkbox"/>
	540 x 1150mm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	540 x 1000mm	<input type="checkbox"/>	<input type="checkbox"/>
Forks	540 x 1220mm	<input type="checkbox"/>	<input type="checkbox"/>
	540 x 1300mm	<input type="checkbox"/>	<input type="checkbox"/>
	540 x 1500mm	<input type="checkbox"/>	<input type="checkbox"/>
	540 x 1800mm	<input type="checkbox"/>	<input type="checkbox"/>
	540 x 2000mm	<input type="checkbox"/>	<input type="checkbox"/>
	540 x 2400mm	<input type="checkbox"/>	<input type="checkbox"/>
	685 x 1150mm	<input type="checkbox"/>	<input type="checkbox"/>
	685 x 1000mm	<input type="checkbox"/>	<input type="checkbox"/>
	685 x 1220mm	<input type="checkbox"/>	<input type="checkbox"/>
	685 x 1300mm	<input type="checkbox"/>	<input type="checkbox"/>
	685 x 1500mm	<input type="checkbox"/>	<input type="checkbox"/>
	685 x 1800mm	<input type="checkbox"/>	<input type="checkbox"/>
	685 x 2000mm	<input type="checkbox"/>	<input type="checkbox"/>
	685 x 2400mm	<input type="checkbox"/>	<input type="checkbox"/>
	Pallet entry roller	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Tandem fork wheels	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Battery	Lead-acid 24V / 160Ah	<input type="checkbox"/>	-
	Lead-acid 24V / 270Ah	-	<input type="checkbox"/>
	Lead-acid 24V / 210Ah	<input type="checkbox"/>	-
	Lead-acid 24V / 350Ah	-	<input type="checkbox"/>
	Li-ion 24V / 150Ah	<input type="checkbox"/>	-
	Li-ion 24V / 200Ah	-	<input type="checkbox"/>
Frame	Side battery removal	<input type="checkbox"/>	<input checked="" type="checkbox"/>
External charger	Lead-acid 24V / 30A	<input type="checkbox"/>	-
	Lead-acid 24V / 35A	<input type="checkbox"/>	<input type="checkbox"/>
	Li-ion 24V / 60A	<input type="checkbox"/>	-
	Li-ion 24V / 80A	-	<input type="checkbox"/>
Battery accessory	Aquamatic system	<input type="checkbox"/>	<input type="checkbox"/>
Convenience	Electronic power steering	<input type="checkbox"/>	<input type="checkbox"/>
	Stability castor wheels	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Rema handle	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	LCD display	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	PIN code panel with RFID cards	<input type="checkbox"/>	<input type="checkbox"/>
	Speed reduction at turning	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Double USB charging port	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

● Standard    □ Optional    – Not available

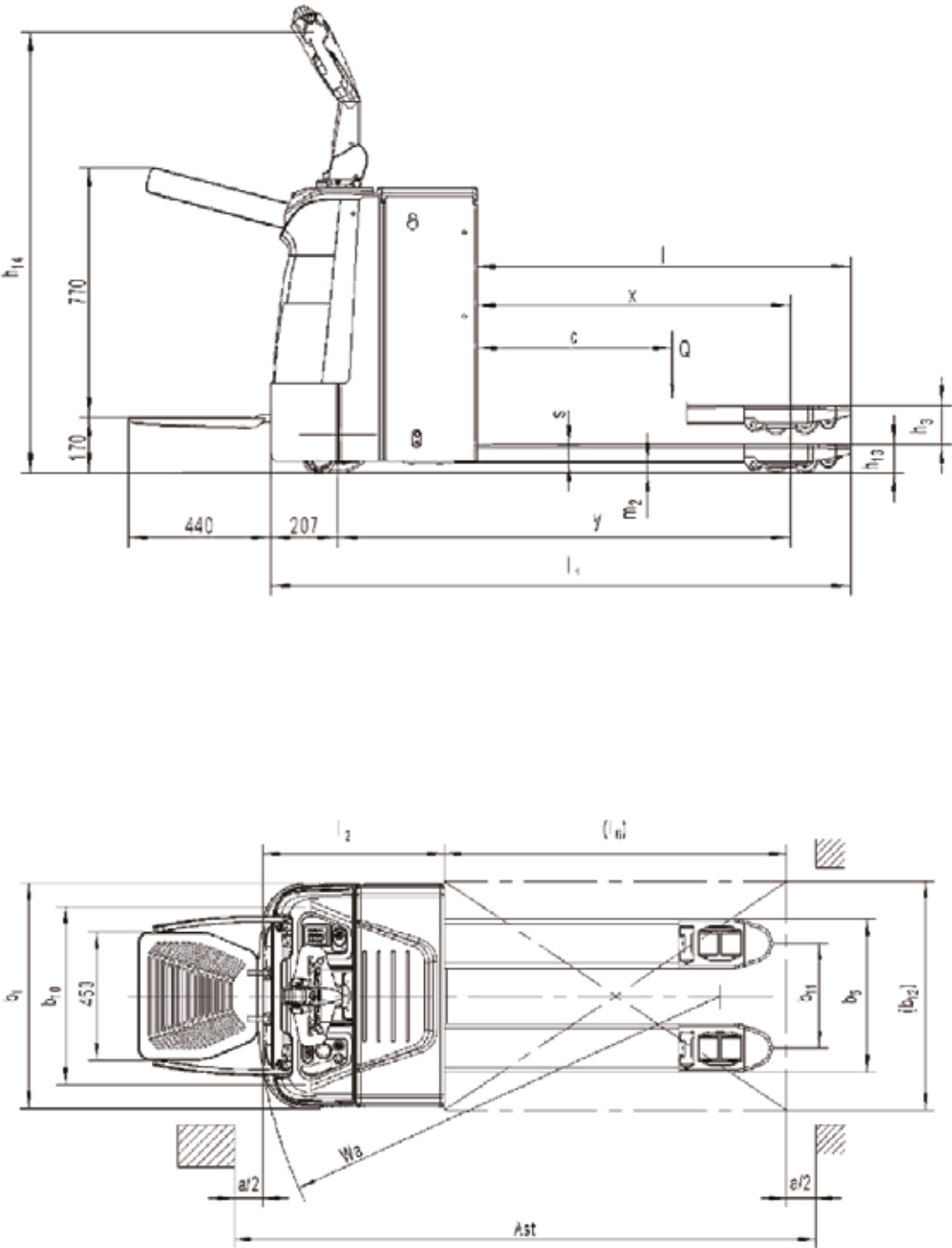
20EPR-X / 25EPR-X  
SPECIFICATIONS

TYPE SHEET FOR INDUSTRIAL TRUCK ACC. TO VDI 2198					
IDENTIFICATION					
1.1	Manufacturer (abbreviation)			Hyundai	Hyundai
1.2	Manufacturer's type designation			20EPR-X	25EPR-X
1.3	Drive			Battery	Battery
1.4	Operator type			Pedestrian / Standing	Pedestrian / Standing
1.5	Rated capacity / rated load	(Q)	kg	2000	2500
1.6	Load centre distance	(c)	mm	600	600
1.8	Load distance, centre of drive axle to fork	(x)	mm	892 (*1)	892 (*1)
1.10	Wheelbase	(y)	mm	1330 (*1&*2)	1435 (*1&*2)
WEIGHTS					
2.1	Service weight		kg	620	770
2.2	Axle loading, loaded front / rear		kg	1110 / 1510	1370 / 1900
2.3	Axle loading, unloaded front / rear		kg	500 / 120	610 / 160
TYRES / CHASSIS					
3.1	Tyres			Polyurethane	Polyurethane
3.2	Tyre size, front		mm	Ø230 × 70	Ø230 × 70
3.3	Tyre size, rear		mm	Ø84 × 84	Ø84 × 84
3.4	Additional wheels (dimensions)		mm	Ø100 x 40	Ø100 x 40
3.5	Wheels, number front / rear (x=driven wheels)			1x + 2 / 4	1x + 2 / 4
3.6	Tread, front	(b10)	mm	540	540
3.7	Tread, rear	(b11)	mm	367 (512)	367 (512)
DIMENSIONS					
4.4	Lift height	(h3)	mm	120	120
4.8	Seat height / stand height rel. to SIP	(h7)	mm	- (170)	- (170)
4.9	Height of tiller in drive position min. / max.	(h14)	mm	950 / 1350	950 / 1350
4.15	Height of lowered forks	(h13)	mm	85	85
4.19	Overall length	(l1)	mm	1790 (*2&*3)	1895 (*3)
4.20	Length to face of forks	(l2)	mm	640 (*2&*3)	745 (*3)
4.21	Overall width	(b1)	mm	790	790
4.22	Fork dimensions	(l / e / s)	mm	1150 x 173 x 55	1150 x 173 x 55
4.25	Width across forks	(b5)	mm	540 (685)	540 (685)
4.32	Ground clearance, center of wheelbase	(m2)	mm	30	-
4.34.1	Aisle width for pallets 1000 x 1200 crossways	(Ast)	mm	2400 (*2&*3)	2505 (*2&*3)
4.34.2	Aisle width for pallets 800 x 1200 lengthways	(Ast)	mm	2290 (*2&*3)	2395 (*3)
4.35	Turning radius	(Wa)	mm	1585 (*2&*3)	1690 (*3)
PERFORMANCE DATA					
5.1	Travel speed, loaded / unloaded		km/h	7.5 / 8.0	6.0 / 7.0
5.2	Lift speed, loaded / unloaded		mm/s	25 / 30	35 / 45
5.3	Lowering speed, loaded / unloaded		mm/s	30 / 25	45 / 50
5.8	Max. gradeability, loaded / unloaded		%	8 / 15	8 / 15
ELECTRIC MOTOR					
6.1	Drive motor rating s2 60 min		kW	1.4	1.4
6.2	Lift motor rating at s3 15%		kW	0.8	2.2
6.4	Battery voltage, nominal capacity K5		V/Ah	24 / 160-210	24 / 270-350
6.5	Battery weight		kg	155-200	235-285
6.6	Energy consumption acc. to VDI cycle		kWh/h	0.36	0.9
ADDITIONAL DATA					
8.1	Type of drive control			AC Speed Control	AC Speed Control
10.1	Sound level at the driver's ear according to DIN 12053		dB(A)	69	69

\*1= Load section lowered = +65mm  
\*2=With side battery removal=+30mm  
\*3=With unfolded platform=+440mm



20EPR-X / 25EPR-X  
DIMENSIONS



PALLET STACKERS **ES-XB/XN**

Hyundai Material Handling Pallet Stackers are expertly engineered to excel in light-duty applications. Their compact, lightweight design ensures exceptional manoeuvrability, making them perfect for tight spaces and mezzanines. Powered by fast-charging batteries and featuring an integrated on-board charger, these pallet stackers maximize uptime and convenience. For businesses seeking a reliable and efficient solution for light-duty operations, Hyundai pallet stackers are the ideal choice.

**12ES-XB** AGM  
1.2T Capacity



- Perfect for light-duty applications
- Compact and lightweight
- High manoeuvrability
- Maintenance-free Lead-acid battery 85Ah (105Ah - optional)
- Integrated 12A on-board charger
- Ideal for use on mezzanines

**12ES-XN** Li-ion  
1.2T Capacity



- Perfect for light-duty applications
- Compact and lightweight
- High manoeuvrability
- Fast-charging Li-ion battery 60Ah
- Integrated 25A on-board charger
- Ideal for use on mezzanines

**15ES-XB** AGM  
1.5T Capacity



- Perfect for light-duty applications
- Long tiller design
- High manoeuvrability
- Maintenance-free Lead-acid battery 60Ah
- Integrated 8A on-board charger
- Ideal for use on mezzanines

**15ES-XN** Li-ion  
1.5T Capacity



- Perfect for light-duty applications
- Long tiller design
- High manoeuvrability
- Fast-charging Li-ion battery 50Ah
- Integrated 20A on-board charger
- Ideal for use on mezzanines





# SMART AND ERGONOMIC TILLERS

BACK

FRONT

Tiller up drive button\*

Smart PIN code access\*

Battery discharge indicator\*  
Operating hour counter  
On-board diagnostics via error codes.

Emergency reverse and horn buttons

Dual butterfly-style thumb driving controls

Electric lifting and lowering

RFID card access\*

**RFID card\* access is optional for 12ES-XB and standard for 12ES-XN**

The RFID card provides faster access to equipment and is ideal for applications when one truck needs to be used by multiple operators.

\* Not available on the 15ES-XB and 15ES-XN



Battery deep discharge protection device, low voltage automatic cut off, and lifting function for extended battery life.\*\*

Proofed emergency switch and voltage discharge indicator enhance durability and reliability. The indicator displays faults via CAN-bus, simplifying diagnostics.\*\*

\*\* Not available on the 12ES-XB and 12ES-XN

## VERTICAL DRIVING IN CONFINED SPACE



The ability to drive with the tiller in the vertical position helps manoeuvre in confined areas without compromising safety.\*



The tiller bar is supported by an air spring, which helps to return the tiller to its vertical position without striking the end point.

To enhance operational comfort and safety, the trucks are equipped with a speed reduction function during turns.\*

\* Not available on the 15ES-XB and 15ES-XN



GRADEABILITY PERFORMANCE

Model	12ES-XB / 12ES-XN	15ES-XB / 15ES-XN
Max. gradeability loaded	5%	5%
Max. gradeability unloaded	10%	10%

SMART DESIGN WITH COMPACT SIZE AND PERFECT VISION

Our engineers have focused on achieving compactness in these trucks, compared to traditionally used manual and semi-electric products, without compromising stability, robustness, safety, or operational comfort.

Model	Length (L2)	Turning Radius
12ES-XB/XN	560mm	1350mm
15ES-XB/XN	681mm	1474mm

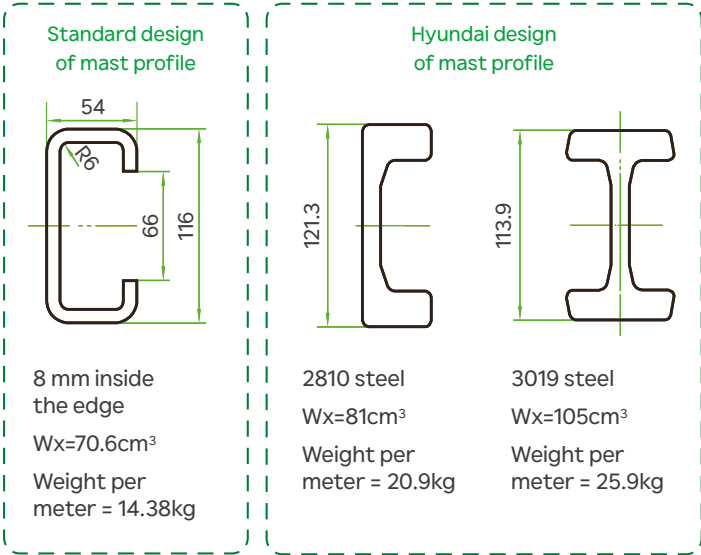


STABILITY TEST RECORD



Genuine mast profiles are used for greater stability and a long lifetime, unlike standard bent solutions.

The mast has a capacity of 1200/1500 kg with high residual capacity at maximum height (load center distance 600mm).



Solid steel channel for improved stability and extended lifetime. High stability, safety standards (GB/T10827.1: ISO1691.1), and high load capacity at maximum lifting height.

ROBUSTNESS



The operator can always clearly see the forks, which significantly increases safety when working.



Welded forks are used to ensure robustness.



The tiller of the 12ES-XB/XN is constructed from high-strength fiberglass, while the tiller of the 15ES-XB/XN is made of steel.



Wide mast profiles, along with the lift chain positioned over the lift cylinder, ensure optimal forks visibility and a clear, unobstructed field of view.

MAINTENANCE FRIENDLY

All components are designed to maintain the truck's performance throughout its lifecycle.



A 48V brushless motor on 15ES-XB/XN offers low energy consumption and maintenance cost thanks to the absence of carbon brushes and sparks, ensuring faultless, smooth operation.



Convenient stability caster adjustment means no lifting of the stacker is required.

Battery solutions

The 12ES-XN / 15ES-XN are equipped with maintenance-free LiFePO4 type Li-ion batteries offering fast charging and an ultra-high number of charging / discharging cycles throughout their lifespan. The opportunity charging feature ensures that your operation time is virtually unlimited. The integrated BMS provides the same features as the BMS for pallet stacker batteries (refer to the pallet truck section). The on-board charger can fully charge the battery in less than 2.5 hours with excellent efficiency.

12ES-XB is equipped with two 12V 85Ah VRLA-AGM batteries and come with a 12A/24V on-board charger. The 15ES-XB is equipped with a 48V 60Ah VRLA-AGM battery and come with an 8A/48V on-board charger. Charging time is approximately 7-8 hours.







STANDARD/OPTIONAL EQUIPMENT					
CATEGORY	OPTION	12ES-XB	12ES-XN	15ES-XB	15ES-XN
Duplex mast - no free lift	1600mm	●	●	●	●
	2000mm	□	□	□	□
Duplex - free lift - 1 central cylinder	2600mm	□	□	-	-
	2900mm	□	□	□	□
	3200mm	□	□	□	□
	3600mm	□	□	□	□
Forks	570 x 1150mm	●	●	●	●
	685 x 1150mm	□	□	□	□
	Tandem fork wheels	-	●	-	●
	Single fork wheel	●	-	●	-
Battery	Lead-acid 2x 12V / 85Ah	●	-	-	-
	Lead-acid 2x 12V / 105Ah	□	-	-	-
	Li-ion 24V 60Ah	-	●	-	-
	Lead-acid 48V / 60Ah	-	-	●	-
	Li-ion 48V / 50Ah	-	-	-	●
Onboard Charger	Lead-acid 24V / 12A	●	-	-	-
	Li-ion 24V / 25A	-	●	-	-
	Lead-acid 48V / 8A	-	-	●	-
	Li-ion 48V / 20A	-	-	-	●
Convenience	Stability castor wheel	●	●	●	●
	Rema handle	-	-	-	-
	LCD display	●	●	●	●
	PIN code access	●	●	-	-
	RFID access	□	□	-	-
	Speed reduction at turning	●	●	-	-
	Tiller up drive	●	●	-	-

● Standard □ Optional – Not available

## 12ES-XB / 12ES-XN

# SPECIFICATIONS

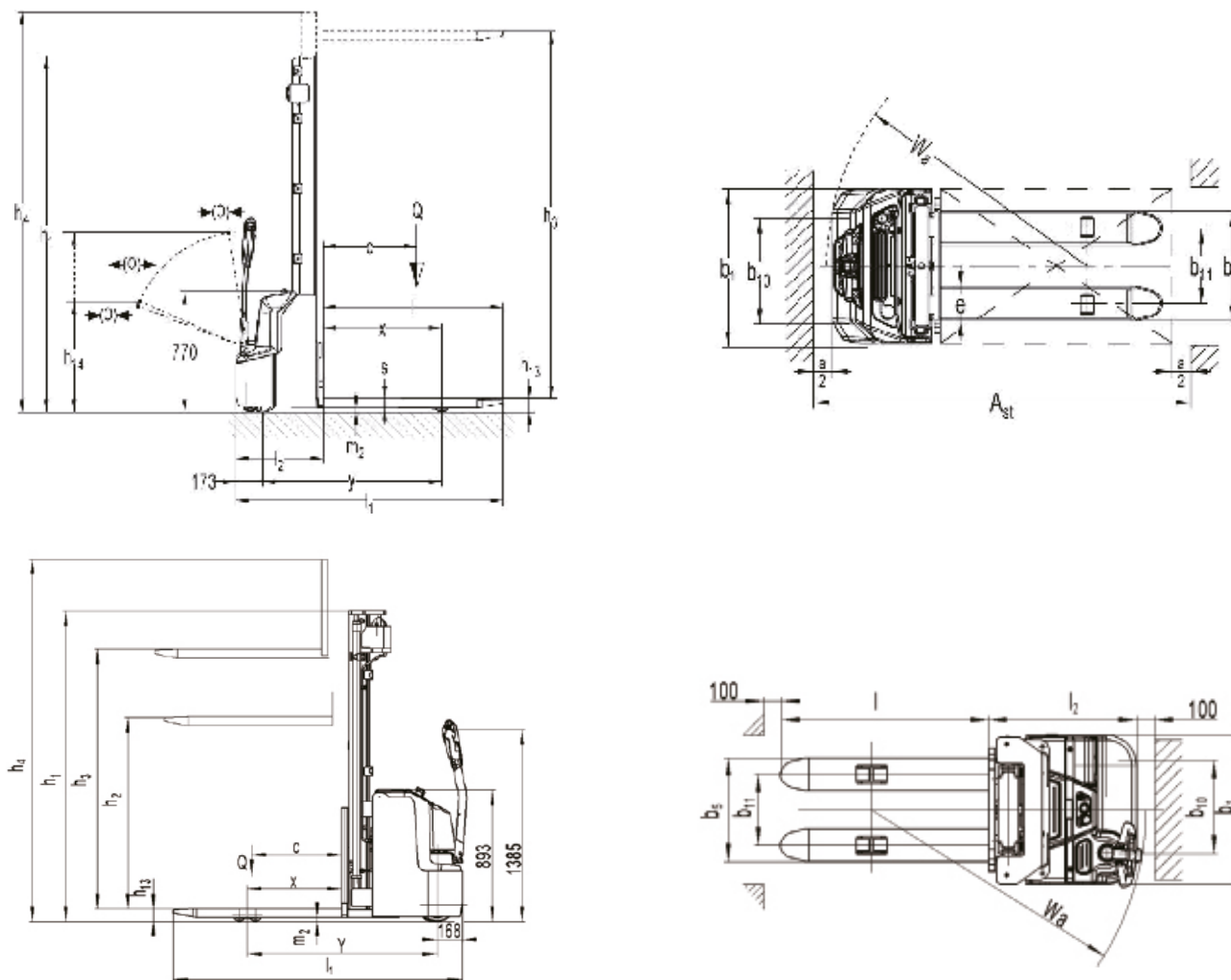
TYPE SHEET FOR INDUSTRIAL TRUCK ACC. TO VDI 2198					
IDENTIFICATION					
1.1	Manufacturer (abbreviation)			Hyundai	Hyundai
1.2	Manufacturer's type designation			12ES-XB	12ES-XN
1.3	Drive			Battery	Battery
1.4	Operator type			Pedestrian	Pedestrian
1.5	Rated capacity / rated load	(Q)	kg	1200	1200
1.6	Load centre distance	(c)	mm	600	600
1.8	Load distance, centre of drive axle to fork	(x)	mm	760	760
1.10	Wheelbase	(y)	mm	1147	1147
WEIGHTS					
2.1	Service weight		kg	620	585
2.2	Axle loading, loaded front / rear		kg	580 / 1240	560 / 1225
2.3	Axle loading, unloaded front / rear		kg	450 / 170	440 / 145
TYRES / CHASSIS					
3.1	Tyres			Polyurethane	Polyurethane
3.2	Tyre size, front		mm	Ø210 × 75	Ø210 × 75
3.3	Tyre size, rear		mm	Ø80 × 93	Ø80 × 93
3.4	Additional wheels (dimensions)		mm	Ø100 × 50	Ø100 × 50
3.5	Wheels, number front / rear (x=driven wheels)			1x + 1 / 2	1x + 1 / 2
3.6	Tread, front	(b10)	mm	550	550
3.7	Tread, rear	(b11)	mm	400 (515)	400 (515)
DIMENSIONS					
4.2	Height, mast lowered	(h1)	mm	2280	2280
4.3	Free lift	(h2)	mm	- (1914)	- (1914)
4.4	Lift height	(h3)	mm	3514	3514
4.5	Height, mast extended	(h4)	mm	4037	4037
4.9	Height of tiller in drive position min. / max.	(h14)	mm	710 / 1150	710 / 1150
4.15	Height of lowered forks	(h13)	mm	86	86
4.19	Overall length	(l1)	mm	1710	1710
4.20	Length to face of forks	(l2)	mm	560	560
4.21	Overall width	(b1)	mm	800	800
4.22	Fork dimensions	(l / e / s)	mm	1150 x 180 x 60	1150 x 180 x 60
4.25	Width across forks	(b5)	mm	570 (685)	570 (685)
4.32	Ground clearance, center of wheelbase	(m2)	mm	26	26
4.34.1	Aisle width for pallets 1000 x 1200 crossways	(Ast)	mm	2197	2197
4.34.2	Aisle width for pallets 800 x 1200 lengthways	(Ast)	mm	2145	2145
4.35	Turning radius	(Wa)	mm	1350	1350
PERFORMANCE DATA					
5.1	Travel speed loaded / unloaded		km/h	4.5 / 4.7	4.5 / 4.7
5.2	Lift speed loaded / unloaded		mm/s	10 / 14	10 / 14
5.3	Lowering speed loaded / unloaded		mm/s	13 / 12.6	13 / 12.6
5.8	Max. gradeability loaded / unloaded		%	5 / 10	5 / 10
ELECTRIC MOTOR					
6.1	Drive motor rating s2 60 min		kW	0.65	0.65
6.2	Lift motor rating at s3 15%		kW	2.2	2.2
6.4	Battery voltage, nominal capacity K5		V/Ah	2* 12V / 85	24 / 60
6.5	Battery weight		kg	2* 27	17
6.6	Energy consumption acc. to VDI cycle		kWh/h	0.8	0.8
ADDITIONAL DATA					
8.1	Type of drive control			DC Speed Control	DC Speed Control
10.1	Sound level at the driver's ear according to DIN 12053		dB(A)	<70	<70



## 15ES-XB / 15ES-XN SPECIFICATIONS

TYPE SHEET FOR INDUSTRIAL TRUCK ACC. TO VDI 2198					
IDENTIFICATION					
1.1	Manufacturer (abbreviation)			Hyundai	Hyundai
1.2	Manufacturer's type designation			15ES-XB	15ES-XN
1.3	Drive			Battery	Battery
1.4	Operator type			Pedestrian	Pedestrian
1.5	Rated capacity / rated load	(Q)	kg	1500	1500
1.6	Load centre distance	(c)	mm	600	600
1.8	Load distance, centre of drive axle to fork	(x)	mm	770	770
1.10	Wheelbase	(y)	mm	1283	1283
WEIGHTS					
2.1	Service weight		kg	782	730
2.2	Axle loading, loaded front / rear		kg	722 / 1560	706 / 1524
2.3	Axle loading, unloaded front / rear		kg	554 / 238	507 / 223
TYRES / CHASSIS					
3.1	Tyres			Polyurethane	Polyurethane
3.2	Tyre size, front		mm	Ø210 × 70	Ø210 × 70
3.3	Tyre size, rear		mm	Ø80 × 70	Ø80 × 70
3.4	Additional wheels (dimensions)		mm	Ø100 × 50	Ø100 × 50
3.5	Wheels, number front / rear (x=driven wheels)			1x + 1 / 4	1x +1 / 4
3.6	Tread, front	(b10)	mm	557	557
3.7	Tread, rear	(b11)	mm	410 (525)	410 (525)
DIMENSIONS					
4.2	Height, mast lowered	(h1)	mm	2280	2280
4.3	Free lift	(h2)	mm	78 (1910)	78 (1910)
4.4	Lift height	(h3)	mm	3515	3515
4.5	Height, mast extended	(h4)	mm	4005	4005
4.9	Height of tiller in drive position min. / max.	(h14)	mm	710 / 1245	710 / 1245
4.15	Height of lowered forks	(h13)	mm	85	85
4.19	Overall length	(l1)	mm	1830	1830
4.20	Length to face of forks	(l2)	mm	681	681
4.21	Overall width	(b1)	mm	820	820
4.22	Fork dimensions	(l / e / s)	mm	1150 x 180 x 60	1150 x 180 x 60
4.25	Width across forks	(b5)	mm	570 (685)	570 (685)
4.32	Ground clearance, center of wheelbase	(m2)	mm	25	25
4.34.1	Aisle width for pallets 1000 x 1200 crossways	(Ast)	mm	2317	2317
4.34.2	Aisle width for pallets 800 x 1200 lengthways	(Ast)	mm	2261	2261
4.35	Turning radius	(Wa)	mm	1474	1474
PERFORMANCE DATA					
5.1	Travel speed loaded / unloaded		km/h	4.4 / 4.7	4.4 / 4.7
5.2	Lift speed loaded / unloaded		mm/s	9 / 14	9 / 14
5.3	Lowering speed loaded / unloaded		mm/s	13 / 12.6	13 / 12.6
5.8	Max. gradeability loaded / unloaded		%	6 / 10	6 / 10
ELECTRIC MOTOR					
6.1	Drive motor rating s2 60 min		kW	0.75	0.75
6.2	Lift motor rating at s3 15%		kW	2.2	2.2
6.4	Battery voltage, nominal capacity K5		V/Ah	48 / 60	48 / 50
6.5	Battery weight		kg	4* 20	4* 28
6.6	Energy consumption acc. to VDI cycle		kWh/h	0.5	0.74
ADDITIONAL DATA					
8.1	Type of drive control			DC Speed Control	DC Speed Control
10.1	Sound level at the driver's ear according to DIN 12053		dB(A)	<70	<70

## 12ES-XB / 12ES-XN / 15ES-XB / 15ES-XN



## 12ES-XB / 12ES-XN / 15ES-XB / 15ES-XN MAST SPECIFICATION

12ES-XB/12ES-XN					
Mast type	Lowered height h1 (mm)	Free lift height h2 (mm)	Lift height h3 (mm)	Extended mast height h4 (mm)	Lift+fork height h3+h13 (mm)
Single-stage mast	1930	1514	1514	1930	1600
	2330	1914	1914	2330	2000
Two-stage mast	1930	–	2814	3337	2900
	2080	–	3114	3637	3200
	2280	–	3514	4037	3600

15ES-XB/15ES-XN					
Mast type	Lowered height h1 (mm)	Free lift height h2 (mm)	Lift height h3 (mm)	Extended mast height h4 (mm)	Lift+fork height h3+h13 (mm)
Single-stage mast	1978	1510	1515	1985	1600
	2378	1910	1915	2385	2000
Two-stage mast	1930	78	2815	3305	2900
	2080	78	3115	3605	3200
	2280	78	3515	4005	3600





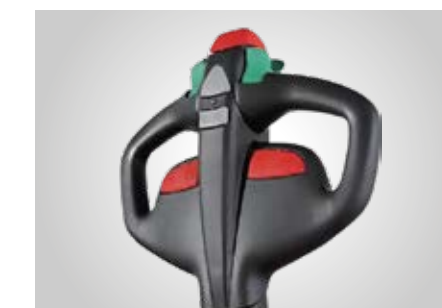
# PALLET STACKERS **ES-X**

The 12/16/20ES-X series is designed for pedestrian-controlled stacking operations, with capacities ranging from 1,200kg to 2,000kg. The long tiller allows the operator to maintain a safe distance when working, while the smooth, fully proportional lift system ensures that stacking operations are both safer and more efficient. Built with high-quality, state-of-the-art components and technology, these pallet stackers are some of the top products in the market.

## 12/16/20ES-X 1.2T, 1.6T, 2.0T Capacity



- Safe, compact and ergonomic long tiller design
- Precise lifting and lowering with fully proportional hydraulic system
- Powerful, maintenance-free German AC powertrain
- Core components from top-quality brands
- 4-wheel structure for enhanced stability
- Lead-acid battery
- Li-ion battery **OPTION**
- Offset tiller arm position for enhanced visibility during driving and lifting



### ▲ Electric proportional lifting and lowering

The electronically controlled proportional lifting system ensures accurate positioning and efficient stacking at every lifting height.

With high masts, the system delivers optimal performance.



### ◀ Long tiller ergonomic design for efficiency and safety

The ergonomic long tiller design allows the operator to maintain a safe distance from the stacker and requires less operational force compared to stackers with a shorter tiller. Stacking operations also become faster, due to the safe distance and improved visibility.

The 4-wheel design, combined with the sideways mounted long tiller provides precise and unobstructed visibility of the forks.





### Premium brand quality components

Installed high-quality components reduce maintenance costs and ensure the performance and reliability required for intensive stacking operations.

- Reliable, multifunctional Rema tiller with ergonomic, contactless rocker switches
- Top-quality Schabmüller AC drive motor
- Kordel gearbox

- HPI hydraulic power pack
- Curtis controller
- Intorque brake
- Wicke drive wheel



### Maintenance friendly

The design and components are optimized for easy service and maintenance.

All components are easily accessible after removing the main cover with just two screws.

The drive wheel and castor wheel can be exchanged without the need to crane the equipment.



### Robust and reliable design

The robust chassis, with a strong 8mm thick apron, protects the equipment and its components from mechanical impacts in the environment. Combined with the metal battery cover, the stacker is well-equipped to minimise maintenance and reduce damage.

Dirty floor environments have less impact on the vertical AC motor design, as the components and brakes are protected from direct contact with debris.

The IP 54 protected controller also ensures against dust and water splashes.



STANDARD/OPTIONAL EQUIPMENT				
CATEGORY	OPTION	12ES-X	16ES-X	20ES-X
Duplex mast - no free lift	2900mm	●	●	●
	3200mm	□	□	□
	3600mm	□	□	□
Duplex - free lift - 1 central cylinder	2700mm	-	-	□
	2900mm	□	□	□
	3200mm	□	□	□
Triplex - free lift - 1 central cylinder	3600mm	□	□	□
	3400mm	-	□	-
	4000mm	-	□	□
	4300mm	□	□	□
	4600mm	□	□	□
	5300mm	-	□	-
Load backrest	5500mm	-	□	-
	Load backrest	□	□	□
Forks	Tandem fork wheel	●	●	●
	Pallet entry roller	-	-	-
Battery	Lead-acid 24V / 180AH	□	-	-
	Lead-acid 24V / 270AH	-	□	-
	Lead-acid 24V / 350AH	-	-	□
	Li-ion 24V / 150Ah	□	□	-
	Li-ion 24V / 200Ah	-	□	□
Frame	Side battery removal	-	□	□
External charger	Lead-acid 24V / 25A	□	-	-
	Lead-acid 24V / 35A	-	□	-
	Lead-acid 24V / 45A	-	-	□
	Li-ion 24V / 60A	□	□	-
	Li-ion 24V / 80A	-	□	□
Convenience	Stability castor wheels	●	●	●
	Rema handle	●	●	●
	LCD display	●	●	●
	PIN code panel with RFID cards	-	-	-
	Speed reduction at turning	-	-	-
	Proportional lowering & lifting	●	●	●
	Tiller up drive	●	●	●

● Standard □ Optional - Not available



### The right battery capacity for every application

With the 12/16/20ES-X series, each stacker is equipped with the appropriate battery for its application.

Lead-acid battery:

- 12ES-X with 180Ah 2VBS battery for light-duty models
- 16ES-X with 270Ah 3VBS battery.
- 20ES-X with 350Ah DIN 3PzS battery for long operations and multi- shifts.

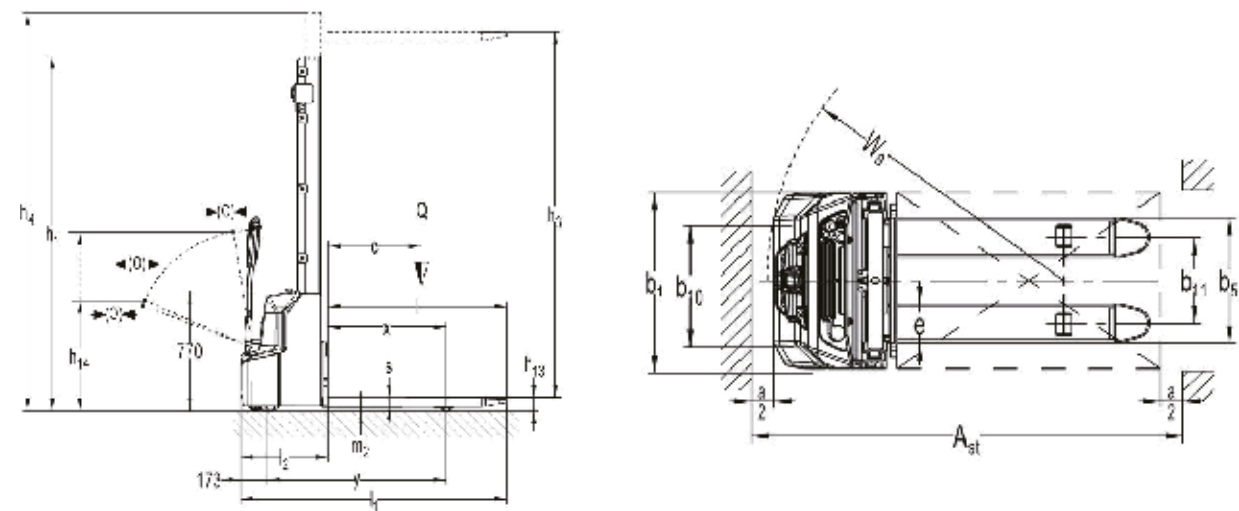
Li-ion battery:

- 12ES-X with 150Ah
- 16ES-X with 150Ah. 200Ah (optional)
- 20ES-X with 200Ah



12ES-X / 16ES-X / 20ES-X

# DIMENSIONS



12ES-X / 16ES-X / 20ES-X

# MAST SPECIFICATION

MAST TABLE 12ES-X/16ES-X/20ES-X					
Mast type	Lowered height h1 (mm)	Free lift height h2 (mm)	Lift height h3 (mm)	Extended mast height h4 (mm)	Lift+fork height h3+h13 (mm)
12ES-X					
Two stage mast	1958	/	2810	3380	2900
	2108	/	3110	3680	3200
	2308	/	3510	4080	3600
Two stage mast FFL (Full-Free-Lift)	1958	1410	2810	3380	2900
	2108	1560	3110	3680	3200
	2308	1760	3510	4080	3600
Three stage mast FFL (Full-Free-Lift)	2008	1420	4210	4780	4300
	2108	1520	4510	5080	4600
16ES-X					
Two stage mast	1958	/	2810	3380	2900
	2108	/	3110	3680	3200
	2308	/	3510	4080	3600
Two stage mast FFL (Full-Free-Lift)	1958	1410	2810	3380	2900
	2108	1560	3110	3680	3200
	2308	1760	3510	4080	3600
Three stage mast FFL (Full-Free-Lift)	1708	1120	3310	3880	3400
	1908	1320	3910	4480	4000
	2008	1420	4210	4780	4300
	2108	1520	4510	5080	4600
	2343	1756	5210	5780	5300
20ES-X	2408	1820	5410	5980	5500
20ES-X					
Two stage mast	2078	/	2810	3500	2900
	2228	/	3110	3800	3200
	2428	/	3510	4200	3600
Two stage mast FFL (Full-Free-Lift)	1978	1310	2610	3300	2700
	2078	1410	2810	3500	2900
	2228	1560	3110	3800	3200
Three stage mast FFL (Full-Free-Lift)	2428	1760	3510	4200	3600
	1978	1310	3910	4600	4000
	2128	1420	4210	4900	4300
20ES-X	2228	1520	4510	5200	4600

12ES-X / 16ES-X / 20ES-X

# SPECIFICATIONS

TYPE SHEET FOR INDUSTRIAL TRUCK ACC. TO VDI 2198					
IDENTIFICATION					
1.1	Manufacturer (abbreviation)			Hyundai	Hyundai
1.2	Manufacturer's type designation			12ES-X	16ES-X
1.3	Drive			Battery	Battery
1.4	Operator type			Pedestrian	Pedestrian
1.5	Rated capacity / rated load	(Q)	kg	1200	1600
1.6	Load centre distance	(c)	mm	600	600
1.8	Load distance, centre of drive axle to fork	(x)	mm	637	647
1.10	Wheelbase	(y)	mm	1248	1293
WEIGHTS					
2.1	Service weight		kg	1150	1340
2.2	Axle loading, loaded front / rear		kg	735 / 1610	930 / 2010
2.3	Axle loading, unloaded front / rear		kg	720 / 430	850 / 490
TYRES / CHASSIS					
3.1	Tyres			Polyurethane	Polyurethane
3.2	Tyre size, front		mm	Ø230 × 70	Ø230 × 70
3.3	Tyre size, rear		mm	Ø84 × 71	Ø84 × 71
3.4	Additional wheels (dimensions)		mm	Ø150 × 54	Ø150 × 54
3.5	Wheels, number front / rear (x=driven wheels)			1x +1 / 4	1x +1 / 4
3.6	Tread, front	(b10)	mm	522	522
3.7	Tread, rear	(b11)	mm	410 (525)	410 (525)
DIMENSIONS					
4.2	Height, mast lowered	(h1)	mm	2108	2228
4.3	Free lift	(h2)	mm	1520	1520
4.4	Lift height	(h3)	mm	4530	4530
4.5	Height, mast extended	(h4)	mm	5088	5208
4.9	Height of tiller in drive position min. / max.	(h14)	mm	850 / 1385	850 / 1385
4.15	Height of lowered forks	(h13)	mm	90	90
4.19	Overall length	(l1)	mm	1929	2100
4.20	Length to face of forks	(l2)	mm	779	950
4.21	Overall width	(b1)	mm	820	820
4.22	Fork dimensions	(l / e / s)	mm	1150 x 180 x 60	1150 x 180 x 60
4.25	Width across forks	(b5)	mm	570 (685)	570 (685)
4.32	Ground clearance, center of wheelbase	(m2)	mm	28	23
4.34.1	Aisle width for pallets 1000 x 1200 crossways	(Ast)	mm	2336	2536
4.34.2	Aisle width for pallets 800 x 1200 lengthways	(Ast)	mm	2323	2523
4.35	Turning radius	(Wa)	mm	1400	1640
PERFORMANCE DATA					
5.1	Travel speed loaded / unloaded		km/h	6.0 / 6.0	5.4 / 6.0
5.2	Lift speed loaded / unloaded		mm/s	11 / 23	11 / 23
5.3	Lowering speed loaded / unloaded		mm/s	21 / 22.5	21 / 22.5
5.8	Max. gradeability loaded / unloaded		%	6 / 12	6 / 10
ELECTRIC MOTOR					
6.1	Drive motor rating s2 60 min		kW	1.3	1.7
6.2	Lift motor rating at s3 15%		kW	3.2	3.2
6.3	Battery acc. to DIN 43531 / 35 / 36 A, B, C, no			2VBS	3PzS
6.4	Battery voltage, nominal capacity K5		V/Ah	24 / 180	24 / 350
6.5	Battery weight		kg	175	228
6.6	Energy consumption acc. to VDI cycle		kWh/h	0.95	1.70
ADDITIONAL DATA					
8.1	Type of drive control			AC Speed Control	AC Speed Control
10.1	Sound level at the driver's ear according to DIN 12053		dB(A)	<70	<70



# RIDE-ON PALLET STACKERS

Equipped with driving wheel floating technology, the 16/20ESR-X is better suited for complex surfaces and is less prone to slipping. The fixed balance wheels on both sides enhance stability and passability, while the driving wheel features an adjustable pressure structure, making it more versatile for different applications and vehicle weights. The combination of driving wheel floating technology and the foldable platform floating structure provides superior shock absorption and a more comfortable operation.

## 16/20ESR-X

1.6T, 2.0T Capacity



- Safe, compact and ergonomic long tiller design
- Precise lifting and lowering with fully proportional hydraulic system **OPTION**
- Powerful, maintenance-free German AC powertrain
- Core components from top-quality brands
- 4-Wheel structure for enhanced stability
- Floating, foldable platform
- Lead-acid battery
- Li-ion battery **OPTION**

Integrated functional area, equipped with a key switch, emergency switch, battery indicator and USB charging port.



Optional PIN Panel Access, allowing manual password input or swipe to start using RFID cards.



Optional French HPI hydraulic system for proportional lift ensures accurate positioning of the forks during lifting and lowering. The acceleration and deceleration of the forks are smoother, making it suitable for handling fragile items.



### LiFePO4 battery

All Li-ion batteries are equipped with an on-board Battery Management System (BMS), which ensures the control of all important parameters during charging and operation. This system guarantees the safety of the Li-ion battery throughout its entire life cycle. The Li-ion batteries are certified according to international safety transportation standards (for both sea and air) and operation standards. The BMS communicates with the stacker's control system via CAN, enabling the monitoring of the battery's condition and allowing for diagnostics with special software available to our partners.

The high efficiency of the stacker is guaranteed even under multi-shift operations. The Li-ion battery offers fast charging, is maintenance-free, environmentally friendly, and features intelligent display functions. Additionally, from a long-term ownership and maintenance perspective, the cost is very low, leading to improved work efficiency.



Optional side battery extraction, facilitated by a special trailer, making battery replacement highly efficient and convenient for multi-shift operations.

The robust chassis with an 8mm thick apron, protects the stacker and its components from damage.



German Rema handle with a reliable and ergonomic control system. Additionally, the non-contact lifting and lowering rocker switch extends the handle's lifespan.

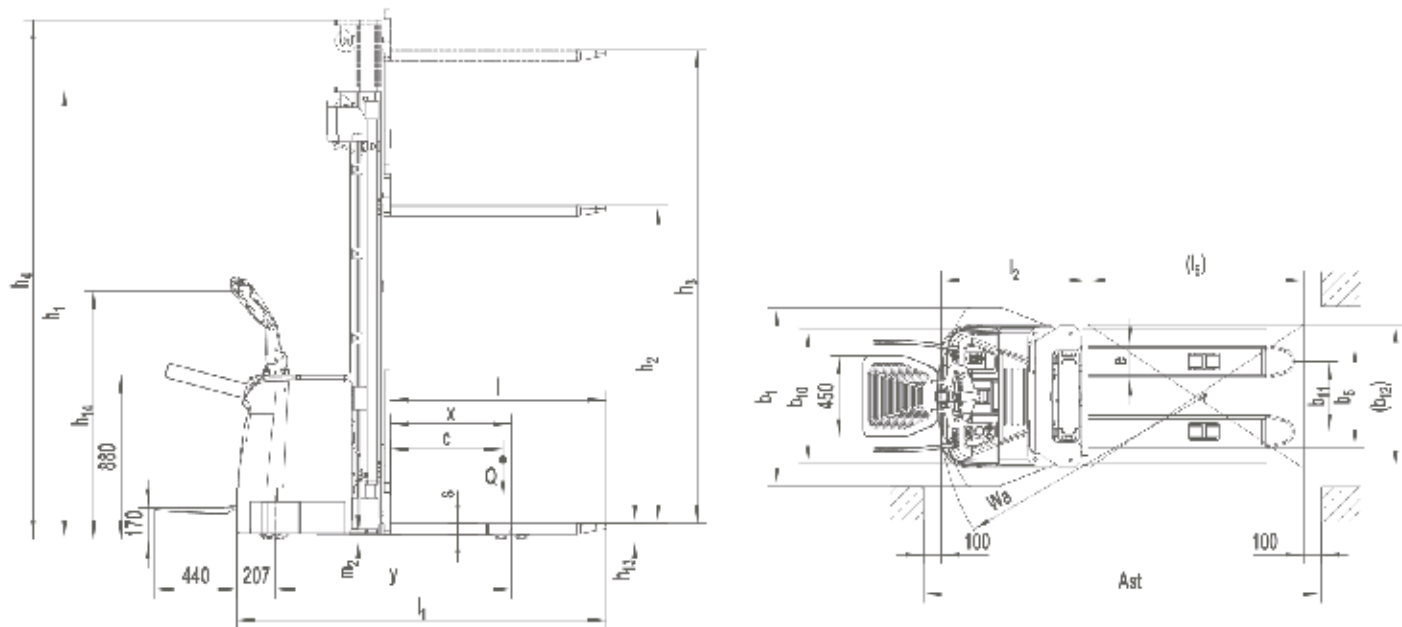
STANDARD/OPTIONAL EQUIPMENT			
CATEGORY	OPTION	16ESR-X	20ESR-X
Duplex mast - no free lift	2900mm	●	●
	3200mm	□	□
	3600mm	□	□
Duplex - free lift - 1 central cylinder	2700mm	-	□
	2900mm	□	□
	3200mm	□	□
	3600mm	□	□
Triplex - free lift - 1 central cylinder	3400mm	□	-
	4000mm	-	□
	4300mm	□	□
	4600mm	□	□
	5300mm	□	-
	5500mm	□	-
Load backrest	Load backrest	□	□
Forks	570 x 1150	●	●
	685 x 1150	□	-
	Tandem fork wheels	□	-
	Pallet entry roller	-	-
Battery	Lead-acid 24V / 210Ah (mast 3600mm or below)	□	□
	Lead-acid 24V / 240Ah (mast 4000mm or above)	□	-
	Lead-acid 24V / 270Ah	-	□
	Lead-acid 24V / 350Ah	-	□
	Li-ion 24V / 150Ah	□	-
	Li-ion 24V / 200Ah	-	□
Frame	Side battery removal	-	□
External Charger	Lead-acid 24V / 30A	□	-
	Lead-acid 24V / 35A	□	□
	Lead-acid 24V / 45A	●	-
	Li-ion 24V / 60A	-	-
	Li-ion 24V / 80A	-	-
Convenience	Electronic power steering	□	●
	Stability castor wheels	●	●
	Rema handle	●	●
	LCD display	●	●
	PIN code panel with RFID cards	□	□
	Speed reduction at turning	●	●
	Tiller up drive	●	●
	Proportional lowering	●	●
	Proportional lifting	□	□
	Double USB charging port	●	●

● Standard □ Optional - Not available



16/20ESR-X

# DIMENSIONS



16/20 ESR-X

# MAST SPECIFICATION

MAST TABLE 16/20ESR-X					
Mast type	Height lowered h1 (mm)	Free lift h2 (mm)	Lift h3 (mm)	Height mast extended h4 (mm)	Lift+fork height h3+h13 (mm)
16ESR-X					
Two stage mast	1958	-	2810	3380	2900
	2108	-	3110	3680	3200
	2308	-	3510	4080	3600
Two stage mast FFL (Full-Free-Lift)	1958	1410	2810	3380	2900
	2108	1560	3110	3680	3200
	2308	1760	3510	4080	3600
Three stage mast FFL (Full-Free-Lift)	1708	1120	3310	3880	3400
	1908	1320	3910	4480	4000
	2008	1420	4210	4780	4300
	2108	1520	4510	5080	4600
	2343	1576	5210	5780	5300
	2410	1820	5410	5980	5500
20ESR-X					
Two stage mast	2078	-	2810	3500	2900
	2228	-	3110	3800	3200
	2428	-	3510	4200	3600
Two stage mast FFL (Full-Free-Lift)	1978	1310	2610	3300	2700
	2078	1410	2810	3500	2900
	2228	1560	3110	3800	3200
	2428	1760	3510	4200	3600
Three stage mast FFL (Full-Free-Lift)	1978	1310	3910	4600	4000
	2128	1420	4210	4900	4300
	2228	1520	4510	5200	4600

16/20 ESR-X

# SPECIFICATIONS

TYPE SHEET FOR INDUSTRIAL TRUCK ACC. TO VDI 2198				
IDENTIFICATION				
1.1	Manufacturer (abbreviation)			Hyundai
1.2	Manufacturer's type designation			16ESR-X
1.3	Drive			Battery
1.4	Operator type			Pedestrian / Standing
1.5	Rated capacity / rated load	(Q)	kg	1600
1.6	Load centre distance	(c)	mm	600
1.8	Load distance, centre of drive axle to fork	(x)	mm	647
1.10	Wheelbase	(y)	mm	1256
1392				
WEIGHTS				
2.1	Service weight		kg	1365
2.2	Axle loading, loaded front / rear		kg	1000 / 1965
2.3	Axle loading, unloaded front / rear		kg	943 / 422
1067 / 563				
TYRES / CHASSIS				
3.1	Tyres			Polyurethane
3.2	Tyre size, front		mm	Ø230 × 70
3.3	Tyre size, rear		mm	Ø84 × 70
3.4	Additional wheels (dimensions)		mm	Ø124 × 60
3.5	Wheels, number front / rear (x=driven wheels)			1x +2 / 4
3.6	Tread, front	(b10)	mm	750
3.7	Tread, rear	(b11)	mm	390 (505)
390 (505)				
DIMENSIONS				
4.2	Height, mast lowered	(h1)	mm	2410
4.3	Free lift	(h2)	mm	1820
4.4	Lift height	(h3)	mm	5430
4.5	Height, mast extended	(h4)	mm	6110
5200				
4.8	Seat height / stand height rel. to SIP	(h7)	mm	- (170)
4.9	Height of tiller in drive position min. / max.	(h14)	mm	950 / 1350
4.15	Height of lowered forks	(h13)	mm	90
4.19	Overall length	(l1)	mm	1968 (*1)
2101 (*1)				
4.20	Length to face of forks	(l2)	mm	818 (*1)
951 (*1)				
4.21	Overall width	(b1)	mm	990
4.22	Fork dimensions	(l / e / s)	mm	1150 x 180 x 60
1150 x 180 x 60				
4.25	Width across forks	(b5)	mm	570 (685)
570 (685)				
4.32	Ground clearance, center of wheelbase	(m2)	mm	28
4.34.1	Aisle width for pallets 1000 x 1200 crossways	(A <sub>st</sub> )	mm	2396 (*1)
2530 (*1)				
4.34.2	Aisle width for pallets 800 x 1200 lengthways	(A <sub>st</sub> )	mm	2382 (*1)
2516 (*1)				
4.35	Turning radius	(W <sub>a</sub> )	mm	1500 (*1)
1634 (*1)				
PERFORMANCE DATA				
5.1	Travel speed loaded / unloaded		km/h	70 / 8.0
70 / 8.0				
5.2	Lift speed loaded / unloaded		mm/s	12.5 / 23
12.5 / 23				
5.3	Lowering speed loaded / unloaded		mm/s	26 / 22.5
26 / 22.5				
5.8	Max. gradeability loaded / unloaded		%	6 / 12
6 / 12				
ELECTRIC MOTOR				
6.1	Drive motor rating s2 60 min		kW	1.4
1.4				
6.2	Lift motor rating at s3 15%		kW	3.0
3.0				
6.3	Battery acc. to DIN 43531 / 35 / 36 A, B, C, no			3VBS
3PzS				
6.4	Battery voltage, nominal capacity K5		V/Ah	24 / 270
24 / 350				
6.5	Battery weight		kg	230
288				
6.6	Energy consumption acc. to VDI cycle		kWh/h	1.34
0.74				
ADDITIONAL DATA				
8.1	Type of drive control			AC Speed Control
AC Speed Control				
10.1	Sound level at the driver's ear according to DIN 12053		dB(A)	<70
<70				

\*1 : platform unfolded= +440mm



# STAND-ON TOW TRACTORS

The 30/50ET-X Stand-on Tow Tractor is equipped with a German AC drive motor and Curtis controller, ensuring powerful performance with smooth acceleration and deceleration. The Electric Power Steering (EPS) and German Rema handle enhance efficiency and deliver an excellent driving experience.

## 30ET-X 3.0T Capacity



- Rated capacity: 3T
- Rated pulling capacity: 800N
- Travel speed (loaded/unloaded): 6/9km/h
- Drive unit: 1.9kW
- Lead-acid battery
- Li-ion battery **OPTION**
- Rubber front bumper

## 50ET-X 5.0T Capacity



- Rated capacity: 5T
- Rated pulling capacity: 1,000N
- Travel speed (loaded/unloaded): 7/12 km/h
- Drive unit: 2.6kW
- Lead-acid battery
- Li-ion-battery **OPTION**
- Rubber front bumper



### 📌 All information via control instrument and multifunctional handle

The multi-functional control instrument displays tow tractor conditions, battery capacity, working time, travel speed and steering angle. If an issue occurs, the fault code will be shown.

The PIN code switch allows for multiple start passwords and an RFID card can also be used to start the machine.



The double USB charging port powers up more equipment.



The reliable and ergonomically designed Rema handle ensures that each button is easily reachable and controllable, making driving more comfortable.

## SAFE AND COMFORTABLE



The standard front blue light is automatically activated when the tractor is driving forward and also turns simultaneously with the handle while steering, enhancing operational safety.



Safety flanks and non-slip surface materials on both sides of the backrest help secure the operator during high-speed turns, significantly enhancing driving safety.

Additionally, the handle above the backrest offers a secure grasp for the operator when getting on or off the stacker, providing superior comfort.

The AC drive system performs perfectly, thanks to the powerful Schabmüller maintenance-free AC motor and German Kordel gearbox, ensuring smooth and fast acceleration.

A 4-point structure with a floating platform and rubber pads help minimize vibration, while the automotive-grade curved backrest greatly reduces operator fatigue.

Side extraction enables quick battery replacement, making it ideal for multi-shift operations.

Other standard features include a beacon light, front blue spot light, a large front storage tray, double internal storage trays, and dual USB charging ports, all contributing to easier and more efficient work.



The turning light, brake light, and parking light enhance driving safety, while the warning light further increases visibility and safety during operation.



Suspension castors on both sides ensure that the tractor runs smoother and safer.



Well-designed and easy to operate



The coasting button on both sides of the stacker enables the operator to move it forward or backward while walking alongside. This eliminates the need for frequent entry and exit, significantly improving picking efficiency and operational safety.



The reinforced couplers can be set at three different heights to ensure a reliable connection to various trailers.



The standard mounting bracket allows for the installation of local equipment, such as a barcode scanner, folder board, and WMS unit, among others.



Storage

The large front storage tray can be used to store stretch film, art knives, marker pens, or other tools.

The double storage tray allows for separation of storage tools or garbage, making work more efficient.

STANDARD/ OPTIONAL EQUIPMENT			
CATEGORY	OPTION	30ET-X	50ET-X
Battery	Lead-acid 24 V / 375Ah	<input type="checkbox"/>	-
	Lead-acid 24 V / 465Ah	<input type="checkbox"/>	<input type="checkbox"/>
	Li-ion 24V / 300Ah	<input type="checkbox"/>	<input type="checkbox"/>
Frame	Side battery removal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
External charger	Lead-acid 24V / 45A	<input type="checkbox"/>	<input type="checkbox"/>
	Li-ion 24V / 150A	<input type="checkbox"/>	<input type="checkbox"/>
Convenience	Electronic power steering	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Stability castor wheels	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Rema handle	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	LCD display	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	PIN code panel with RFID cards	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Speed reduction at turning	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Coasting control button	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Front storage compartment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Double internal storage compartment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Safety	Double USB charging port	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Beacon light	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Blue-light front	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Rear led lights	<input type="checkbox"/>	<input type="checkbox"/>
	Rubber front bumper	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

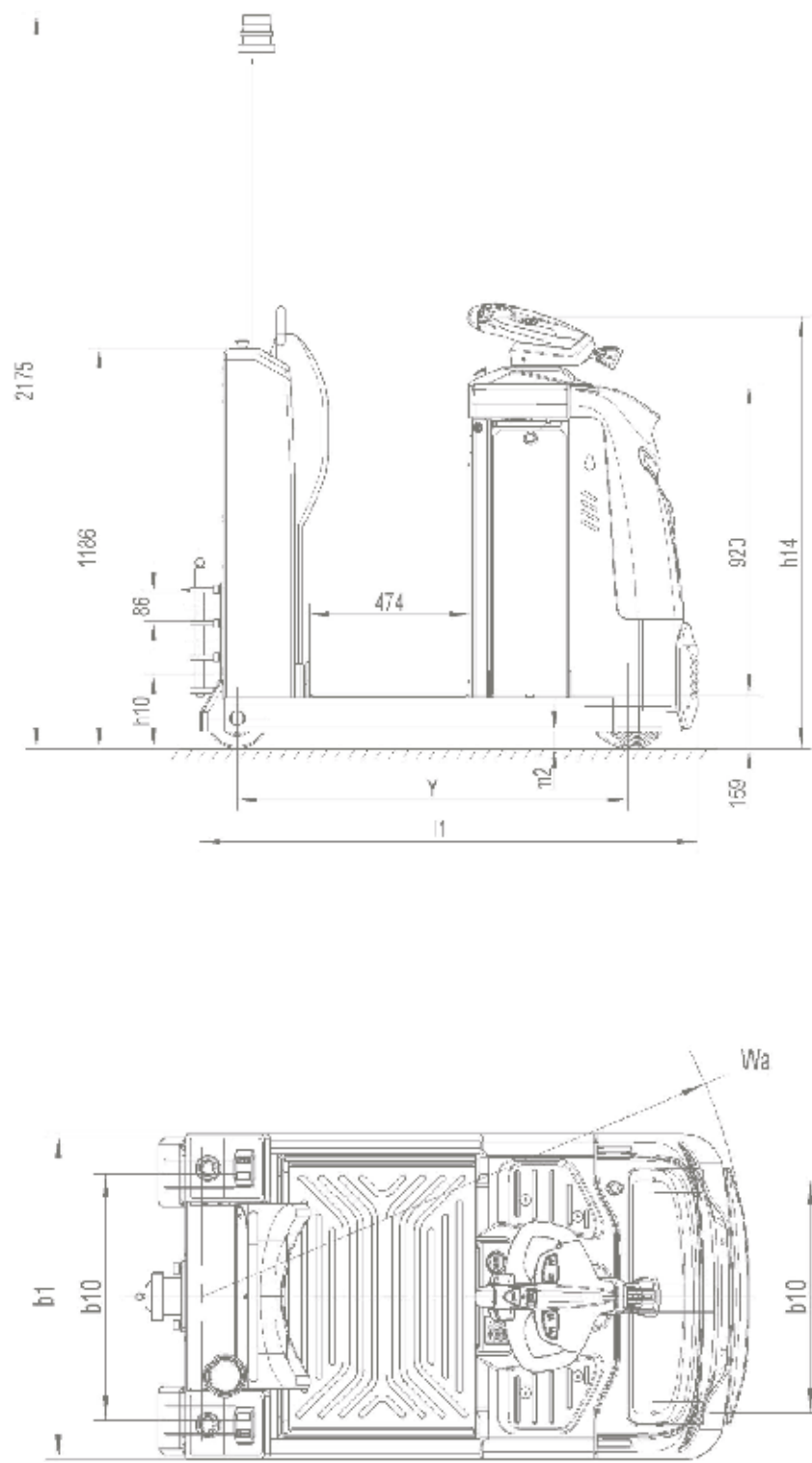
● Standard    □ Optional    – Not available

30/50 ET-X  
SPECIFICATIONS

TYPE SHEET FOR INDUSTRIAL TRUCK ACC. TO VDI 2198					
IDENTIFICATION					
1.1	Manufacturer (abbreviation)			Hyundai	Hyundai
1.2	Manufacturer's type designation			30ET-X	50ET-X
1.3	Drive : electric (battery or mains), diesel, petrol, LPG			Battery	Battery
1.4	Type of operation: hand, pedestrian, standing, seated, order-picker			Standing	Standing
1.5	Rated capacity / rated load	(Q)	kg	3000	5000
1.8	Rated drawbar pull	(F)	N	800	1000
1.10	Wheelbase	(x)	mm	1155	1155
WEIGHTS					
2.1	Service weight		kg	950	1020
2.3	Axle loading, unloaded front / rear		kg	550 / 400	610 / 410
TYRES / CHASSIS					
3.1	Tyres : solid rubber, superelastic, pneumatic, polyurethane			Polyurethane	Polyurethane
3.2	Tyre size, front		mm	Ø230×70	Ø250×80
3.3	Tyre size, rear		mm	Ø180×76	Ø180×76
3.4	Additional wheels		mm	Ø124×60	Ø124×60
3.5	Wheels, number front / rear (x = driven wheels)			1x / 2	1x +2 / 2
3.6	Tread, front	(b10)	mm	580	580
3.7	Tread, rear	(b11)	mm	614	614
DIMENSIONS					
4.8	Seat height / stand height rel. to SIP	(h7)	mm	159	159
4.9	Height of tiller in drive position min. / max.	(h14)	mm	1280	1280
4.10	Coupling height	(h8)	mm	230 / 330 / 430	230 / 330 / 430
4.19	Overall length	(l1)	mm	1469	1469
4.21	Overall width	(b1)	mm	810	810
4.32	Ground clearance, center of wheelbase	(m2)	mm	50	50
4.35	Turning radius	(Wa)	mm	1359	1359
4.44	Clear width driver compartment entrance	(l24)	mm	474	474
PERFORMANCE DATA					
5.1	Travel speed loaded / unloaded		km/h	6.0 / 9.0	7.0 / 12.0
5.5	Drawbar pull loaded / unloaded		N	800	1000
5.6	Max. drawbar pull loaded / unloaded		N	2000	3000
5.8	Max. gradeability loaded / unloaded		%	3 / 10	3 / 10
ELECTRIC MOTOR					
6.1	Drive motor rating s2 60 min		kW	1.9	2.6
6.3	Battery acc. to din 43531 / 35 / 36 A, B, C, no			-	-
6.4	Battery voltage, nominal capacity K5		V/Ah	24 / 375	24 / 465
6.5	Battery weight		kg	292	352
6.6	Energy consumption acc. to VDI cycle		kWh/h	1.08	2.36
ADDITIONAL DATA					
8.1	Type of drive control			AC Speed Control	AC Speed Control
10.1	Sound level at the driver's ear according to DIN 12053		dB(A)	<70	<70



# 30/50 ET-X DIMENSIONS



# LOW-LEVEL ORDER PICKERS

The 25EO-X Low-level Order Picker offers strong power and excellent stability when increasing or decreasing speed, thanks to the German AC drive and Curtis controller. Its electric steering system and Rema multi-functional handle also ensure high working efficiency and driving comfort. The 4-point structure with a floating shock absorption platform and rubber pads minimizes vibration, while the ergonomically curved backrest effectively reduces driver fatigue.



## 25EO-X 2.5T Capacity



- Rated capacity: 2.5t
- Travel speed (loaded/unloaded): 9 / 12km/h
- Drive unit: 2.6kW
- Standard 24V/465Ah Lead-acid battery
- Li-ion battery 300Ah **OPTION**
- Man-up function with liftable platform **OPTION**



### German Rema Multifunctional Handle

The Rema handle is ergonomically designed for reliability, with easily accessible and responsive buttons that enhance operating comfort.



The multifunctional control instrument displays order picker conditions, battery capacity, working time, travel speed and steering angle.

The standard PIN code switch allows the setting of multiple start passwords and the RFID card can also be used to start the truck.



Double USB charging ports help power up more devices simultaneously.



# ROBUST AND DURABLE DESIGN, HIGH PERFORMANCE AND EFFICIENT DRIVING TECHNOLOGY



The AC drive system performs perfectly thanks to its high-power, maintenance-free German Schabmüller AC drive motor and Kordel gearbox, ensuring smooth acceleration and deceleration.



Make lifting easier and more efficient with a high-performance pump.



The reinforced welded fork is more robust and durable, while the adjustable trolley design enables easier height adjustment and more convenient maintenance.

# WELL-DESIGNED AND EASY TO MAINTAIN

A variety of extension supports are available to meet the installation requirements of different equipment, such as a WMS display, barcode scanner, storage tray, file plywood, etc.



The sideways battery exchange compartment, combined with an adjustable handling bracket, makes battery replacement easier and quicker.



The coasting button on both sides of the order picker enables the operator to move the order picker forward or backward and lift the forks while walking alongside. This eliminates the need for frequent entry and exit, significantly improving picking efficiency and operational safety.

# SAFE AND COMFORTABLE, LARGE STORAGE TRAY



The standard front blue light is automatically activated when the order picker is driving forward and also turns simultaneously with the handle during steering, thereby enhancing operational safety.



Safety flanks and non-slip surface materials on both sides of the backrest help secure the operator during high-speed turns, significantly enhancing driving safety. Additionally, the handle above the backrest provides a secure grip for the operator when getting on or off the order picker, offering superior comfort.



The large front storage tray offers convenient space for storing stretch film, utility knives, marker pens and other essential tools.





STANDARD/OPTIONAL EQUIPMENT		
CATEGORY	OPTION	25EO-X
Forks	1150 x 540mm	●
	1220 x 540mm	□
	2400 x 540mm	□
	1150 x 685mm	□
	1220 x 685mm	□
	2400 x 685mm	□
	Tandem fork wheels	●
	Pallet entry rollers	●
	Pallet exit rollers	●
Battery	Lead-acid 24 V / 465Ah	□
	Li-ion 24V / 300Ah	□
Battery accessory	Carrier for battery	□
Frame	Side battery removal	●
	Man-up function	□
	Man-up function with storage platform	□
External charge	Lead-acid 24V / 60A	□
	Li-ion 24V / 150A	□
Convenience	Electronic power steering	●
	Stability castor wheels	●
	Rema handle	●
	LCD display	●
	PIN code panel with RFID cards	●
	Coasting control button	●
	Speed reduction at turning	●
	Front storage compartment	●
	Double USB charging port	●
Safety	Beacon light	□
	Blue-light front	●
	Rubber front bumper	●

● Standard   □ Optional   – Not available

## MAN-UP FUNCTION WITH LIFTABLE PLATFORM

**A:** The liftable storage platform enables more efficient placement and retrieval of lightweight cargo, enhancing workflow.

**B:** The operation platform can be lifted up to 850mm, allowing for more efficient picking and retrieval.

**C:** The operating platform lowers using a foot switch, freeing the operator's hands for improved efficiency.



# 25 EO-X SPECIFICATIONS

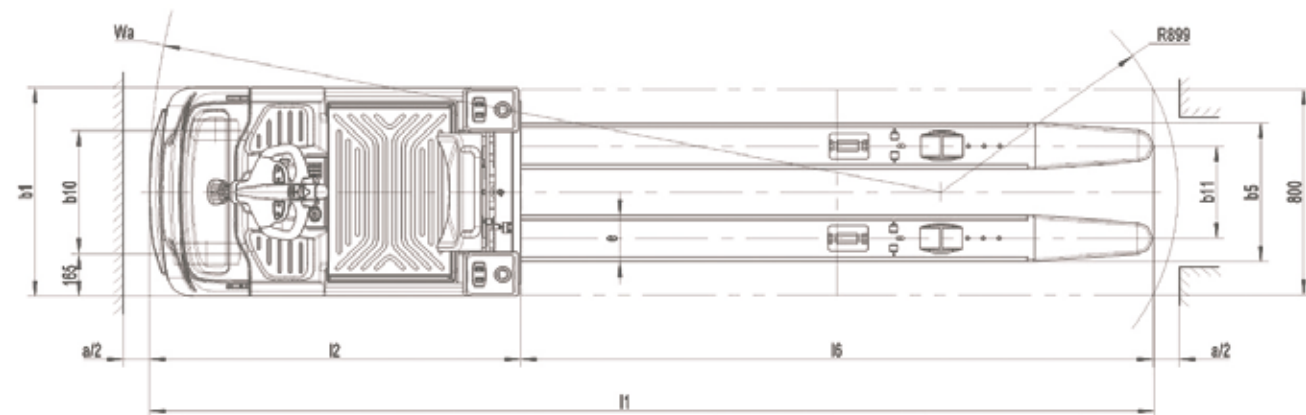
### TYPE SHEET FOR INDUSTRIAL TRUCK ACC. TO VDI 2198

IDENTIFICATION			
1.1	Manufacturer (abbreviation)		Hyundai
1.2	Manufacturer's type designation		25EO-X
1.3	Drive : electric (battery or mains), diesel, petrol, LPG		Battery
1.4	Type of operation: hand, pedestrian, standing, seated, order-picker		Order-picker
1.5	Rated capacity / rated load	(Q)	kg 2500
1.6	Load center distance	(c)	mm 1200
1.8	Load distance, center of drive axle to fork	(x)	mm 1535 (*1)
1.10	Wheelbase	(y)	mm 2723 (*1)
WEIGHTS			
2.1	Service weight		kg 968
2.2	Axle loading, loaded front / rear		kg 1290 / 2530
2.3	Axle loading, unloaded front / rear		kg 980 / 340
TYRES / CHASSIS			
3.1	Tyres : solid rubber, superelastic, pneumatic, polyurethane		Polyurethane
3.2	Tyre size, front		mm Ø250 × 80
3.3	Tyre size, rear		mm Ø82 × 82
3.4	Additional wheels		mm Ø180 × 80
3.5	Wheels, number front / rear (x = driven wheels)		1x +1 / 4
3.6	Tread, front	(b10)	mm 480
3.7	Tread, rear	(b11)	mm 360
DIMENSIONS			
4.4	Lift height	(h3)	mm 115
4.8	Seat height / stand height rel. to SIP	(h7)	mm 158 (850)
4.9	Height of tiller in drive position min. / max.	(h14)	mm 1280
4.15	Height of lowered forks	(h13)	mm 85
4.19	Overall length	(l1)	mm 3810
4.20	Length to face of forks	(l2)	mm 1409
4.21	Overall width	(b1)	mm 810
4.22	Fork dimensions	(l / e / s)	mm 2400 x 180 x 60
4.25	Width across forks	(b5)	mm 540
4.32	Ground clearance center of wheelbase	(m2)	mm 25
4.34.2	Aisle width for pallets 800 x 1200 lengthways	(Ast)	mm 4010
4.35	Turning radius	(Wa)	mm 3005 (*2)
4.44	Clear width driver compartment entrance	(l24)	mm 474
PERFORMANCE DATA			
5.1	Travel speed loaded / unloaded		km/h 9.0 / 12.0
5.2	Lift speed loaded / unloaded		mm/s 40 / 64
5.3	Lowering speed loaded / unloaded		mm/s 60 / 40
5.8	Max. gradeability loaded / unloaded		% 6 / 12
ELECTRIC MOTOR			
6.1	Drive motor rating s2 60 min		kW 2.6
6.2	Lift motor rating at s3 15%		kW 2.2
6.3	Battery acc. to DIN 4353 1/ 35 / 36 A, B, C, no		3PzS
6.4	Battery voltage, nominal capacity K5		V/Ah 24 / 465
6.5	Battery weight		kg 352
6.6	Energy consumption acc. to VDI cycle		kWh/h 0.7
ADDITIONAL DATA			
8.1	Type of drive control		AC Speed Control
10.1	Sound level at the driver's ear according to DIN 12053		dB(A) <70

\*1 : Fork descent x=1600 ; y= 2788  
\*2 : Accord. VDI diagonal Algorith Ast = original measurement +94



## DIMENSIONS







Contact your Hyundai Material Handling dealer:  
[hyundai-mh.eu/en/dealer-locator](https://hyundai-mh.eu/en/dealer-locator)

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