

Hyundai Warehouse Equipment

Electric Pallet truck, Electric Stacker and Manual Hand Pallet Truck

HYUNDAI MATERIAL HANDLING



■ photo may include optional equipment.



AIRINDO SAKTI
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HD HYUNDAI
XITESOLUTION

Electric Pallet truck

15/18/20EP



■ photo may include optional equipment.

Standard Configurations

15EP

- Lifting Capacity : 1,500kg
- DC Brushless Drive Motor 0.9kW
- Lifting Motor : 0.8kW
- Drive Wheel : ϕ 195x70mm
- Double Fork wheel : ϕ 80x70mm
- Hourmeter, Battery Discharge Indicator (BDI) & lift cut off
- Overall Fork Width x Length : 550mm x 1,150mm
- Turtle mode switch
- Built-in Charger
- Curtis Tiller with Convenient Control buttons
- Emergency switch
- Belly switch

18EP

- Lifting Capacity : 1,800kg
- AC Drive Motor 1.2kW
- Lift motor 1.2kW
- Curtis controller
- Drive wheel : ϕ 250x70mm
- Double Fork wheel : ϕ 80x70mm
- Hourmeter, Battery Discharge Indicator (BDI) & lift cut off
- Overall Fork Width x Length : 550mm x 1,150mm
- Turtle mode switch
- Curtis Tiller with Convenient Control buttons
- Side Battery Removal
- Emergency switch
- Belly switch

20EP

- Lifting Capacity : 2,000kg
- AC Drive Motor 1.2kW
- Lift motor 1.2kW
- Curtis controller
- Drive wheel : ϕ 250x70mm
- Double Fork wheel : ϕ 82x98mm
- Hourmeter, Battery Discharge Indicator (BDI) & lift cut off
- Overall Fork Width x Length : 550mm x 1,150mm
- Turtle mode switch
- Curtis Tiller with Convenient Control buttons
- Side Battery Removal
- Emergency switch
- Belly switch

Advantages

SAFETY AND PRODUCTIVITY

- Advanced AC control system eliminates directional contactors, which brings minimal maintenance requirements. (18/20EP Only)
- Intelligentized regenerative brake system: increase overall truck performance.
- Side-way battery with roll-out system. (18/20EP Only)
- Emergency switch.
- Turtle mode switch
- Proportional Travel speed control.
- Belly switch.

STRUCTURAL

- The motor structure is water-proof and dust-proof(IP 44)
- Spring-loaded castors improve lateral stability on uneven floors and enhance truck performance and service life.
- Welded type fork

SERVICEABILITY

- CANbus technology reduces wiring complexity.
- All pivot points have grease fitting and serviceable to reduce component-wearing

Tiller Head



Curtis Tiller with convenient control buttons (standard)

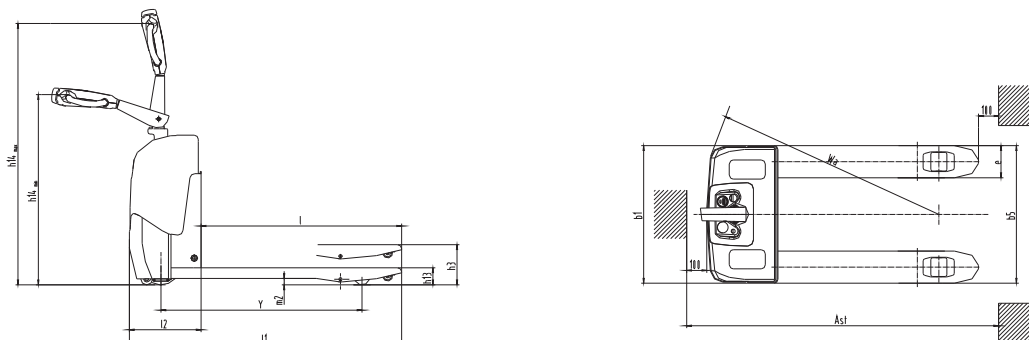


Germany Frei Tiller (option)

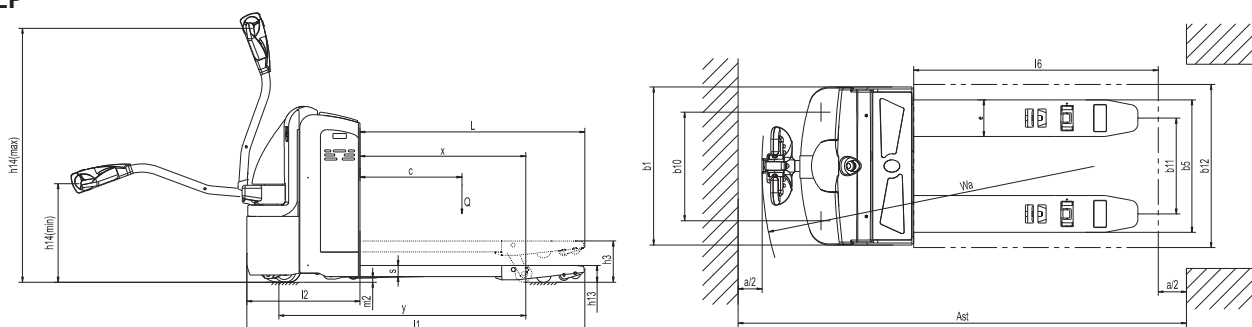
Electric Pallet truck

Dimension

15EP



18/20EP



Option

15EP

- Load backrest 1220mm
- Fork length (mm)
900,1000,1150
- German Frei Tiller
- Single Fork Wheel ($\varnothing 80 \times 93$ mm)
- Overall Fork width x length : 520x1,150mm

18EP

- Single Fork Wheel ($\varnothing 82 \times 98$ mm)
- Cold Storage Specifications -18°C
- Battery (24V/160Ah)
- Integrated Charger (24V/15A)
- Separate Charger (24V/15A)
- Foot protection strip
- Key pad ignition
- Load backrest 1220mm
- Fork length(mm)
800, 900, 1000, 1150, 1220, 1600, 1800, 2400mm
(1800, 2400 : rated load capacity 1.5t)
- German Frei Tiller

20EP

- Single Fork Wheel ($\varnothing 82 \times 126$ mm)
- Battery (24V/210Ah)
- Battery (24V/240Ah)
- Integrated Charger (24V/20A)
- Separate Charger (24V/30A)
- Battery trolley
- Cold Storage Specifications -18°C
- Foot protection strip
- Key pad ignition
- Load backrest 1220mm
- Fork length(mm)
800, 900, 1000, 1600, 1800, 2400mm
(1,800, 2,400 : rated load capacity 1.5t)
- German Frei Tiller
- Overall Fork width x length : 550X1150mm

Specifications (according to VDI 2198)

Characteristics						
1.1	Manufacturer(abbreviation)			Hyundai	Hyundai	Hyundai
1.2	Model			15EP	18EP	20EP
1.3	Drive type			electric	electric	electric
1.4	Operator type			pedestrian	pedestrian	pedestrian
1.5	Load capacity/rated load	Q	kg	1500	1800	2000
1.6	Load center distance	c	mm	600	600	600
1.8	Load distance	x	mm	886	856	865
1.9	Wheelbase	y	mm	1152	1200	1261
Weight						
2.1	Service weight(with battery)		kg	230	520	620
2.2	Axle load, front/rear, laden		kg	442/1288	720/1600	1170/1450
2.3	Axle load, front/rear, unladen		kg	200/30	420/100	470/150
Wheels/Chassis						
3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane			polyurethane	polyurethane	polyurethane
3.2	Tyre size, front			Φ 195x70	Φ 250x70	Φ 250x70
3.3	Tyre size, rear			Φ 80x 70	Φ 80x70	Φ 82x98
3.4	Additional wheels(dimensions)			Φ 60x35	Φ 114x60	Φ 127x57
3.5	Wheels number, front/rear (x = driven wheels)			1x2/4	1x+2/4	1x+2/4
3.6	Tread, front	b10	mm	195	476	510
3.7	Tread, rear	b11	mm	390	400	370
Dimension						
4.4	Lift height	h3	mm	105/115	120	120
4.9	Min. /Max. height of operation handle, in driving position	h14	mm	950/1310	780/1230	780/1230
4.15	Height, lowered	h13	mm	85/75	84	82
4.19	Overall length	l1	mm	1525	1651	1705
4.20	Length to fork face	l2	mm	373	500	555
4.21	Overall width of truck body	b1	mm	685	682	775
4.22	Fork dimension	s/e/l	mm	53/160/1150	54/150/1150	54/180/1150
4.25	Overall width of fork	b5	mm	550	550	550
4.32	Wheelbase ground distance	m2	mm	32/22	28	28
4.33	Aisle width, with pallet 1000x1200 crosswise	Ast	mm	1725	1863	2065
4.34	Aisle width, with pallet 800x1200 lengthwise	Ast	mm	1775	1913	2115
4.35	Turning radius	Wa	mm	1347	1367	1450
Performance Data						
5.1	Traveling speed, laden/unladen		km/h	5.8/6.0	5.8/6.0	5.8/6.0
5.2	Lifting speed, laden/unladen		m/s	0.035/0.045	0.06/0.11	0.039/0.056
5.3	Lowering speed, laden/unladen		m/s	0.08/0.037	0.12/0.13	0.064/0.050
5.7	Gradeability, laden/unladen		%	5/15	8/20	6/12
5.10	Traveling brake			electromagnetic brake	electromagnetic brake	electromagnetic brake
Motor						
6.1	Driving motor power		kW	0.9	1.2	1.2
6.2	Lifting motor power		kW	0.8	1.2	1.2
6.4	Battery voltage/rated capacity		V/Ah	24/80	24/160	24/210
6.5	Battery weight		kg	49	160	196

Electric Pallet truck(Rider Type)

20/25EPR



■ photo may include optional equipment.

Standard Configurations

20EPR

- Lifting Capacity : 2,000kg
- AC Drive Motor : 1.5kW
- Lift motor 1.2kW
- Curtis controller
- Drive wheel : 250x80mm
- Double Fork wheel : $\phi 82 \times 98 \text{mm}$
- Hourmeter, battery discharge indicator (BDI) & lift cut off
- Overall Fork Width x Length : 550mm x 1,150mm
- Turtle mode switch
- Curtis Tiller with Convenient Control Buttons
- EPS(Electric Power Steering)
- With Platform
- Side Battery Removal

25EPR

- Lifting Capacity : 2,500kg
- AC Drive Motor : 1.5kW
- Lift motor 1.2kW
- Curtis controller
- Drive wheel : 250x80mm
- Double Fork wheel : $\phi 82 \times 98 \text{mm}$
- Hourmeter, battery discharge indicator (BDI) & lift cut off
- Overall Fork Width x Length : 550mm x 1,150mm
- Turtle mode switch
- Curtis Tiller with Convenient Control Buttons
- EPS(Electric Power Steering)
- With Platform
- Side Battery Removal

Advantages

SAFETY AND PRODUCTIVITY

- Advanced AC control system eliminates directional contactors, which makes the minimal maintenance requirements.
- Intelligentized regenerative brake system: increase overall truck performance.
- Side-way battery with roll-out system.
- Belly switch.
- Emergency switch.
- Turtle mode switch
- Proportional Travel speed control.

STRUCTURAL

- The motor structure is water-proof and dust-proof(IP 44)
- Spring-loaded castors improve lateral stability on uneven floors and enhance truck performance and service life.
- Welded type fork.

SERVICEABILITY

- CANbus technology reduces wiring complexity.
- All pivot points have grease fitting and serviceable bushing, to reduce component-wearing.

Tiller Head



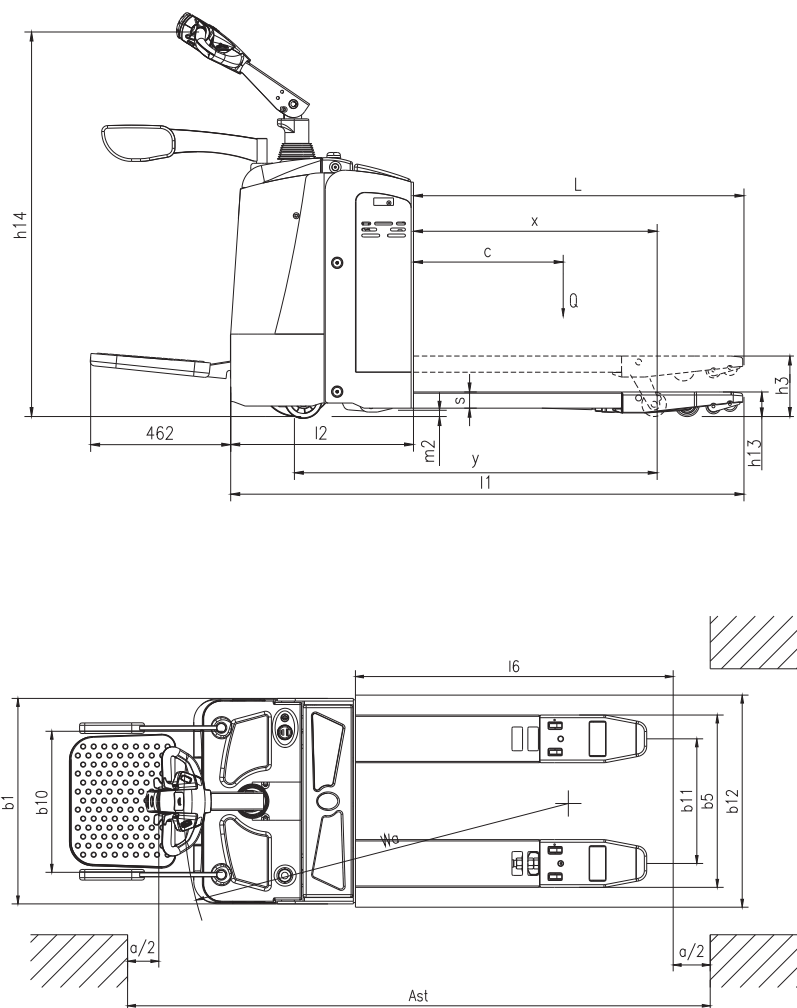
Curtis Tiller with convenient control buttons
(standard)



Germany Frei Tiller (option)

Electric Pallet truck(Rider Type)

Dimension



Option

- 7km/h of Drive Speed (1.2kW Drive motor)
- Single Fork Wheel : $\phi 82 \times 126\text{mm}$
- Battery (24V/210Ah - 20EPR)
- Battery (24V/240Ah - 20EPR, 25EPR)
- Battery (24V/400Ah - 20EPR, 25EPR)
- Enlarged Battery Compartment for 400Ah Battery
- Integrated charger (24V/20A)
- Separate charger (24V/30A)
- Separate charger (24V/50A for 400Ah Battery)
- Cold storage Specifications -18°C
- Key pad ignition
- German Frei Tiller
- Load backrest 1,220mm
- Without EPS
- Battery trolley
- Fork length(mm)
800, 900, 1000, 1220(25EPR ONLY), 1600, 1800, 2400
(1800, 2400 : rated load capacity 1.5t)
- Overall Fork width $\times$ length : 550mm $\times$ 1150mm

Specifications (according to VDI 2198)

Characteristics					
1.1	Manufacturer(abbreviation)			Hyundai	Hyundai
1.2	Model			20EPR	25EPR
1.3	Drive type			Electric	Electric
1.4	Operator type			standing	standing
1.5	Load capacity/rated load	Q	kg	2000	2500
1.6	Load center distance	c	mm	600	600
1.8	Load distance	x	mm	865	865
1.9	Wheelbase	y	mm	1261	1261
Weight					
2.1	Service weight(with battery)		kg	710	750
2.2	Axle load, front/rear, laden		kg	1300/1410	1300/1410
2.3	Axle load, front/rear, unladen		kg	600/110	600/110
Wheels/Chassis					
3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane			polyurethane	polyurethane
3.2	Tyre size, front			Φ 250×80	Φ 250×80
3.3	Tyre size, rear			Φ 82×98	Φ 82×98
3.4	Additional wheels(dimensions)			Φ 127×57	Φ 127×57
3.5	Wheels number, front/rear (x = driven wheels)			1X+2/4	1X+2/4
3.6	Tread, front	b10	mm	490	490
3.7	Tread, rear	b11	mm	370	370
Dimension					
4.4	Lift height	h3	mm	120	120
4.9	Min. /Max. height of operation handle, in driving position	h14	mm	1150/1430	1150/1430
4.15	Height, lowered	h13	mm	82	82
4.19	Overall length	l1	mm	1760	1760
4.20	Length to fork face	l2	mm	723	723
4.21	Overall width of truck body	b1	mm	733	733
4.22	Fork dimension	s/e/l	mm	1150	1150
4.25	Overall width of fork	b5	mm	550	550
4.32	Wheelbase ground distance	m2	mm	30	30
4.33	Aisle width, with pallet 1000x1200 crosswise	Ast	mm	2135/2185/2255	2135/2185/2255
4.34	Aisle width, with pallet 800x1200 lengthwise	Ast	mm	2235/2235/2255	2235/2235/2255
4.35	Turning radius	Wa	mm	1700/1750/1820	1700/1750/1820
Performance Data					
5.1	Traveling speed, laden/unladen		km/h	6.1/9.0	6.1/9.0
5.2	Lifting speed, laden/unladen		m/s	0.03/0.032	0.03/0.032
5.3	Lowering speed, laden/unladen		m/s	0.032/0.03	0.032/0.03
5.7	Gradeability, laden/unladen		%	4/8	3/8
5.8	Max. gradeability, laden/unladen		%	8/20	6/20
5.10	Traveling brake			electromagnetic brake	electromagnetic brake
Motor					
6.1	Driving motor power		kW	1.5	1.5
6.2	Lifting motor power		kW	1.5	1.5
6.4	Battery voltage/rated capacity		kg	24/210	24/240
6.5	Battery weight		kg	210	240

Electric Pallet truck(Rider Type)

30EPCR



■ photo may include optional equipment.

Standard Configurations

30EPCR

- Lifting Capacity : 3,000kg
- AC Drive Motor 2.2KW
- Lifting Motor 1.5kW
- Curtis controller 1234
- With DC steering controller CURTIS 1220
- Drive wheel : 250x80mm (With EPS)
- Front wheel size 82x173mm
- Hourmeter, battery discharge indicator (BDI) & Limiter with lift cut off
- Fork Length 1220mm
- German Frei tiller(Normal)
- Side Battery Removal
- Without Battery / Charger
- With EPS(Electric Power Steering, Curtis steering controller)

Advantages

SAFETY AND PRODUCTIVITY

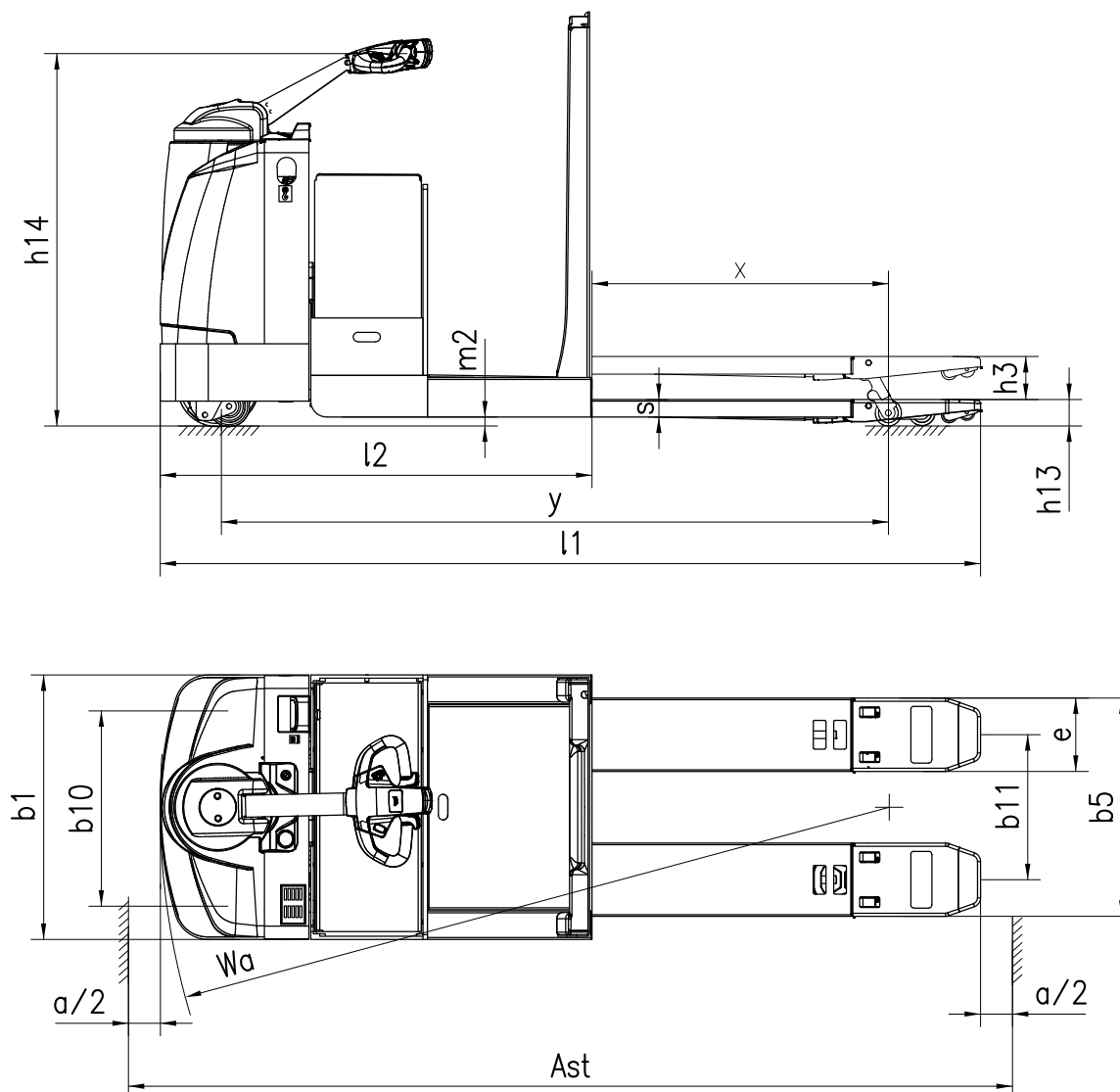
- Warning lights with buzz to increase the safety of operations (Option)
- Advanced electric power steering (EPS), with flexible and comfortable steering, automatic speed reduction function when turning. Comfortable for driving and controlling.
- Buffered stand on platform is with ergonomic backrest and anti-shock function to avoid operator fatigue.
- Easy & simple to operate, making handling operations more easier and efficient.
- Lifting/Lowering buttons are mounted on the backrest, easy for handling operation.
- Has a sliding control function, when the switch is turned on, releasing the accelerator and leave the driving position, the truck can keep driving straight for a distance slowly, easy for picking up goods. This feature can also be turned off by the switch.
- Powerful drive motor and control system making the truck with strong momentum. Fully laden with 9Km/h maximum speed, fully laden with 10% climbing ability.

SERVICEABILITY

- With large capacity battery, side way battery ensure the battery quick replacement, to meet the high intensity of the handling operations.

Electric Pallet truck(Rider Type)

Dimension



Option

- Battery (24V/560Ah) (Chinese)
- Battery Trolley
- Separate Charger (Outside, 24V/70A)
- Fork length : 1,220(STD)/1,500/2,440/3,660
- Non-Marking Rubber Drive Tire
- Cold Storage specification -18°C
- Without EPS
- Storage Tray for Tools (Battery Compartment Mounted)
- With Beacon Lamp
- With Electronic Travel Alarm (Forward and Reverse "bee")
- Lifting and Lowering Switch on the back side
- With On-Off Sliding Switch
- With Load backrest(mm) : 1,525/1,830

Specifications (according to VDI 2198)

Characteristics				
1.1	Manufacturer(abbreviation)			Hyundai
1.2	Model			30EPCR
1.3	Drive type			Electric
1.4	Operator type			Standing
1.5	Load capacity/rated load	Q	kg	3000
1.6	Load center distance	c	mm	600
1.8	Load distance	x	mm	1036/933
1.9	Wheelbase	y	mm	2115
Weight				
2.1	Service weight(with battery)		kg	1150
2.2	Axle load, front/rear, laden		kg	1390/2760
2.3	Axle load, front/rear, unladen		kg	860/290
Wheels/Chassis				
3.1	Tires			PU
3.2	Tire size, Front			φ 250×80
3.3	Tire size, Rear			φ 82×173
3.4	Additional wheel(dimension)			φ 127×57
3.5	Wheels, number front/rear (x=driving wheel)			1X+2/2
3.6	Tread, front	b10	mm	620
3.7	Tread, rear	b11	mm	455
Dimension				
4.4	Lift height	h3	mm	135
4.9	Height of operation handle, in driving position min./max.	h14	mm	1070/1370
4.15	Height, lowered	h13	mm	82
4.19	Overall length	l1	mm	2570
4.20	Length to fork face	l2	mm	1350
4.21	Overall width of truck body	b1	mm	823
4.22	Fork dimension	s/e/l	mm	55x230x1220
4.25	Overall width of fork	b5	mm	685
4.32	Ground clearance, center of wheelbase	m2	mm	27
4.33	Aisle width, with pallet 1000x1200 crosswise	Ast	mm	3093
4.34	Aisle width, with pallet 800x1200 lengthwise	Ast	mm	2970
4.35	Turning radius	Wa	mm	2290
Performance Data				
5.1	Traveling speed, laden/unladen		km/h	8/9
5.2	Lifting speed, laden/unladen		m/s	0.025/0.035
5.3	Lowering speed, laden/unladen		m/s	0.03/0.03
5.7	Gradeability, laden/unladen		%	6/8
5.8	Max. gradeability, laden/unladen		%	8/20
5.10	Traveling brake			Regenerative brake
Motor				
6.1	Driving motor power		kW	2.2
6.2	Lifting motor power		kW	1.5
6.4	Battery voltage/rated capacity		kg	24/560
6.5	Battery weight		kg	559
6.7	Battery dimension (L x W x H)		kg	780x335x625
Other details				
8.4	Noise level at operator's ear, according to DIN12053	dB	A	70

Electric Pallet Truck with Double Pallet(Rider Type)

20EDPR



■ photo may include optional equipment.

Standard Configurations

20EDPR

- Lifting Capacity : 2,000kg
- AC Drive Motor 1.5kW
- Lift motor 2.2kW
- Curtis controller
- Drive wheel : $\Phi 250 \times 80 \text{mm}$
- Double Fork wheel : $\Phi 80 \times 70 \text{mm}$
- Triplex 2.5 m MFH Mast
- Turtle mode switch
- With Platform
- Hourmeter, battery discharge indicator (BDI) with lift cut off
- Overall Fork Width x Length : 570 x 1,150mm
- German Frei tiller
- Side Battery Removal
- EPS (Electric Power Steering)
- German Frei tiller with Convenient control Buttons
- Initial Lift (120mm)

Advantages

SAFETY AND PRODUCTIVITY

- Advanced AC control system eliminates directional contactors, which makes the minimal maintenance requirements.
- Intelligentized regenerative brake system.
- Platform with sensor + suspension system.
- Emergency switch.
- Belly Switch.
- Multi function display with BDI (battery discharge indicator) and working hours.
- 20% max gradeability.
- Electric Power Steering system (EPS), makes truck steering very smoothly and light.

STRUCTURAL

- Hard steel rear cover, anti-collision, easy disassembly, provides convenient access to all component.
- Only 90mm lowered fork height.
- The motor structure is water-proof and dust-proof (IP 44).
- Side-way battery with roll-out system.

SERVICEABILITY

- Easy replacement and maintenance for the traction wheel.

Tiller Head



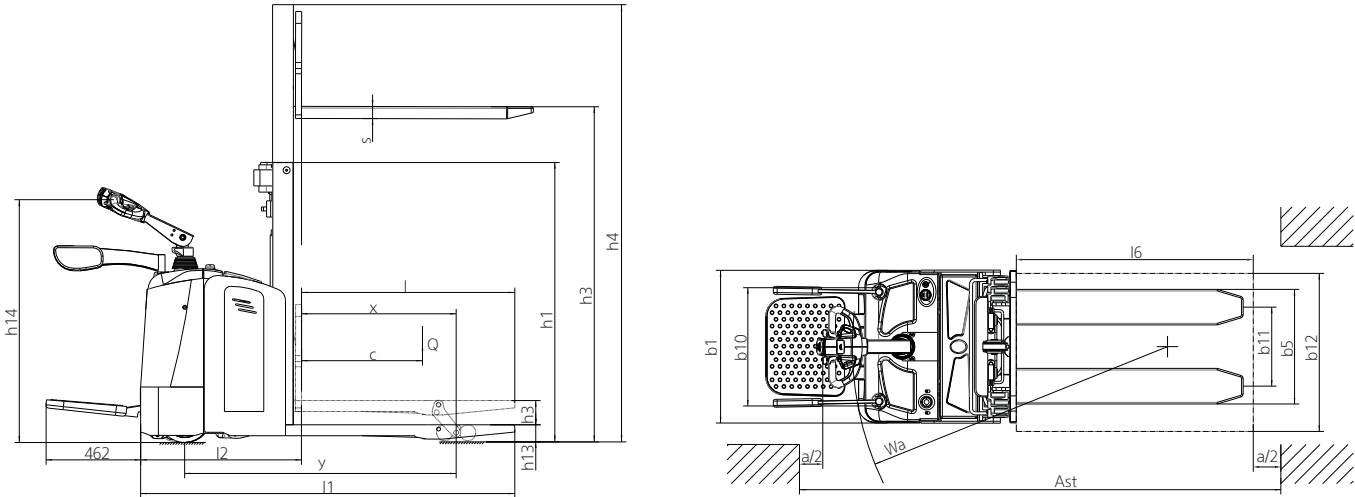
Germany Frei Tiller (Standard)
with convenient control buttons



Germany Frei Tiller (Option)

Electric Pallet Truck with Double Pallet(Rider Type)

Dimension



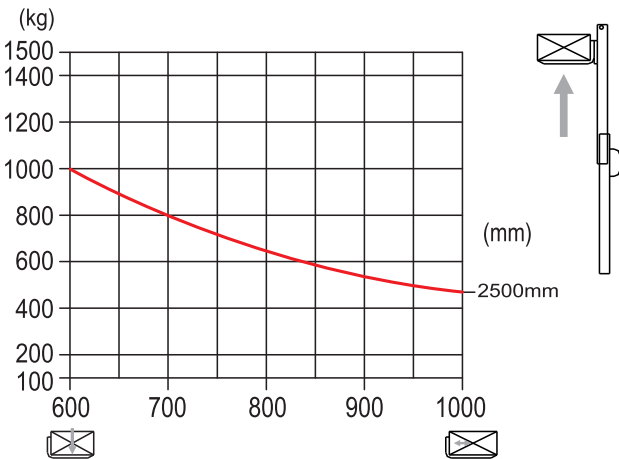
Option

- Battery (24V/240Ah)
- Separate Charger (24V/30A)
- Cold storage Specifications -18°C
- Key pad ignition
- Battery trolley
- Fork length(mm)
800, 900, 1,000, 1,220
- Mast : Triplex 1.6m, 2.0m MFH
- German Frei tiller (Normal)
- lifting sensor switch to limit height (1.8m)

Mast Specifications

Mast Ref.	Lift Height		Overall Height		Service Weight (kg)	Residual Capacity (kg)
	Max. (mm) h3	Free lift (mm) -	Lowered (mm) h1	Extended (mm) h4		
Triplex mast with free lift (1.6m MFH)	1.6	N/A	1082	2118	1130	2000
Triplex mast with free lift (2.0m MFH)	2	N/A	1212	2508	1130	2000
Triplex mast with free lift (2.5m MFH)	2.5	N/A	1382	3018	1130	2000

Lifting Capacity



Specifications (according to VDI 2198)

Characteristics				
1.1	Manufacturer(abbreviation)			Hyundai
1.2	Model			20EDPR
1.3	Drive type			electric
1.4	Operator type			standing
1.5	Load capacity/rated load	Q	kg	2000
1.6	Load center distance	c	mm	600
1.8	Load distance	x	mm	767
1.9	Wheelbase	y	mm	1348
Weight				
2.1	Service weight(with battery)			1130
2.2	Axle load, front/rear, laden			1090/2040
2.3	Axle load, front/rear, unladen			840/290
Wheels/Chassis				
3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane			polyurethane
3.2	Tyre size, front			Φ 250×80
3.3	Tyre size, rear			Φ 80×70
3.4	Additional wheel(dimension)			Φ 127×57
3.5	Wheels number, front/rear (x = driven wheels)			1X+2/4
3.6	Tread, front	b10	mm	490
3.7	Tread, rear	b11	mm	400/470
Dimension				
4.2	Height of mast, lowered	h1	mm	See mast Specifications
4.4	Lift height	h3	mm	See mast Specifications
4.5	Max. height of mast, extended	h4	mm	See mast Specifications
4.7	Lifting height for leg	h5	mm	120
4.9	Min. /Max. height of operation handle, in driving position	h14	mm	1150/1430
4.15	Height, lowered	h13	mm	90
4.19	Overall length	l1	mm	1948
4.20	Length to fork face	l2	mm	798
4.21	Overall width of truck body	b1	mm	775
4.22	Fork dimension	s/e/l	mm	54×180×1150
4.25	Overall width of fork	b5	mm	580/650
4.32	Wheelbase ground distance	m2	mm	28
4.33	Aisle width, with pallet 1000x1200 crosswise	Ast	mm	2098/2148
4.34	Aisle width, with pallet 800x1200 lengthwise	Ast	mm	2198
4.35	Turning radius	Wa	mm	1600
Performance Data				
5.1	Traveling speed, laden/unladen	km/h		6.2/9.0
5.2	Lifting speed, laden/unladen	m/s		0.11/0.19
5.3	Lowering speed, laden/unladen	m/s		0.16/0.11
5.7	Gradeability, laden/unladen	%		6/12
5.8	Max. gradeability, laden/unladen	%		8/20
5.10	Traveling brake			electromagnetic braking
Motor				
6.1	Driving motor power	kW		1.5
6.2	Lifting motor power	kW		2.2
6.4	Battery voltage/rated capacity	V/Ah		24/240
6.5	Battery weight	Kg		235

Electric Stacker

10/12/15ES



■ photo may include optional equipment.

Standard Configurations

10ES

- Lifting Capacity : 1,000kg
- AC Drive Motor 1.2kW / Lift motor 2.2kW
- Curtis controller
- Drive wheel : $\phi 250 \times 70 \text{mm}$
- Double Fork wheel : $\phi 80 \times 70 \text{mm}$
- Hourmeter, battery discharge indicator(BDI) & lift cut off
- Duplex 3.0m MFH Mast without free lift
- Overall Fork Width x Length : 570mm x 1,150mm
- Turtle mode switch
- Curtis Tiller with Convenient Control Buttons
- Side Battery Removal

12ES

- Lifting Capacity : 1,200kg
- AC Drive Motor 1.2kW / Lift motor 2.2kW
- Curtis controller
- Drive wheel : $\phi 250 \times 70 \text{mm}$
- Double Fork wheel : $\phi 80 \times 70 \text{mm}$
- Hourmeter, battery discharge indicator(BDI) & lift cut off
- Duplex 3.0m MFH Mast without free lift
- Overall Fork Width x Length : 570mm x 1,150mm
- Turtle mode switch
- Curtis Tiller with Convenient Control Buttons
- Side Battery Removal

15ES

- Lifting Capacity : 1,500kg
- AC Drive Motor 1.5kW / Lift motor 3.2kW
- Curtis controller
- Drive wheel : $\phi 250 \times 70 \text{mm}$
- Double Fork wheel : $\phi 84 \times 80 \text{mm}$
- Hourmeter, battery discharge indicator(BDI) & lift cut off
- Duplex 3.0m MFH Mast with free lift
- Overall Fork Width x Length : 570mm x 1,150mm
- Turtle mode switch
- German Frei Tiller with Convenient Control Buttons
- Proportional Lifting
- Automatic Drive speed reduction (lifting over 1.8m)
- Side Battery Removal

Advantages

SAFETY AND PRODUCTIVITY

- Advanced AC control system eliminats directional contactors, which brings minimal maintenance requirements.
- Intelligentized regenerative brake system.
- Multi-function display with BDI and hour meter etc.
- Belly switch.
- Emergency switch.
- Propotional Travel speed control.
- Lift limit switch to shut off pump motor at the max. lifting height.
- Vertical drive motor has a small turning radius.
- The motor structure is water-proof and dust-proof(IP 44).

SERVICEABILITY

- CANbus technology reduces wiring complexity and increase reliability.
- Side-way battery with roll-out system.

Tiller Head



Curtis Tiller with convenient control buttons
(Standard for 10/12ES only)



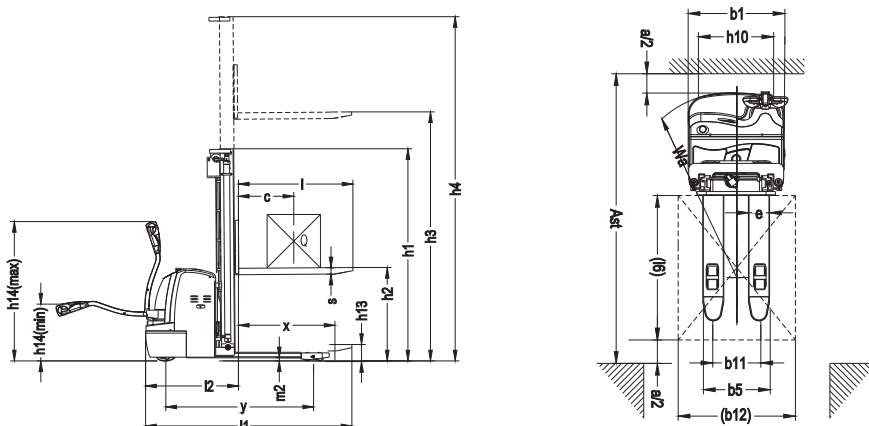
Germany Frei Tiller
with convenient control buttons
(Standard for 15ES only)



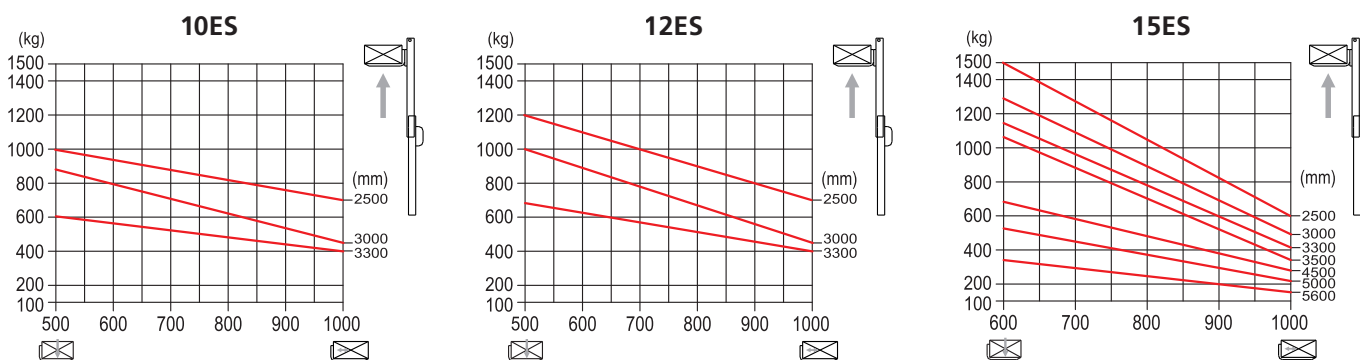
Normal Germany Frei Tiller (option)

Electric Stacker

Dimension



Lifting capacity



Option

- **Battery**
10/12 ES : (24V/120Ah)
15 ES : (24V/300Ah)
- **Integrated Charger (Built-In)**
10/12 ES : (24V/15A)
15 ES : (24V/40A)
- **Separate Charger**
10/12 ES : (24V/15A)
15 ES : (24V/40A)
- **Key pad ignition**
- **Battery trolley (15ES only)**
- **Fork length(mm)**
10/12/15 ES : 800, 900, 1000, 1220
- **Germal Feri Tiller (Nomal)**
- **Germal Feri Tiller with big button (including initial lifting button) (15ES)**
- **Cold Storage Specifications -18°C**
- **Initial Lift (15ES)**

Mast Specifications

Mast Ref.		Lift Height		Overall Height		Service Weight (kg)	Residual Capacity (kg)
		Max. (mm) h3	Free lift (mm) -	Lowered (mm) h1	Extended (mm) h4		
10ES	Duplex 2.5m MFH Mast without free lift	2.5	N/A	1837	3087	730	1000
	Duplex 3.0m MFH Mast without free lift *	3.0	N/A	2087	3587	750	750
	Duplex 3.3m MFH Mast without free lift	3.3	N/A	2237	3887	770	550
12ES	Duplex 2.5m MFH Mast without free lift	2.5	N/A	1837	3087	750	1200
	Duplex mast with free lift (2.9m MFH)	2.9	N/A	2000	3415	790	1000
	Duplex 3.0m MFH Mast without free lift *	3.0	N/A	2087	3587	770	1000
15ES	Duplex 3.3m MFH Mast without free lift	3.3	N/A	2237	3887	790	700
	Duplex mast without free lift (2.5m MFH)	2.5	N/A	1735	2955	1040	1500
	Duplex mast without free lift (3.0m MFH)	3.0	N/A	1985	3455	1160	1300
	Duplex mast without free lift (3.3m MFH)	3.3	N/A	2135	3755	1180	1150
	Duplex mast without free lift (3.5m MFH)	3.5	N/A	2235	3955	1200	1100
	Duplex mast with free lift (2.5m MFH)	2.5	1300	1735	2955	1080	1500
	Duplex mast with free lift (3.0m MFH) *	3.0	1550	1985	3455	1200	1300
	Duplex mast with free lift (3.3m MFH)	3.3	1700	2135	3755	1220	1150
	Duplex mast with free lift (3.5m MFH)	3.5	1800	2235	3955	1240	1100
	Triplex mast with free lift (4.3m MFH)	4.3	1500	1990	4870	1370	600
	Triflex mast with free lift (4.5m MFH)	4.5	1570	2050	5070	1405	700
	Triflex mast with free lift (5.0m MFH)	5.0	1740	2210	5550	1450	500
	Triflex mast with free lift (5.6m MFH)	5.6	1940	2410	6150	1490	350

* : Standard

Specifications (according to VDI 2198)

Characteristics				
1.1	Manufacturer(abbreviation)		Hyundai	Hyundai
1.2	Model		10ES	12ES
1.3	Drive type		electric	electric
1.4	Operator type		pedestrian	pedestrian
1.5	Load capacity/rated load	Q	kg	1000
1.6	Load center distance	c	mm	500
1.8	Load distance	x	mm	697
1.9	Wheelbase	y	mm	1335
Weight				
2.1	Service weight(with battery)	kg	See mast Specifications	
2.2	Axle load, front/rear, laden	kg	950/770	1060/870
2.3	Axle load, front/rear, unladen	kg	555/165	560/170
Wheels/Chassis				
3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		polyurethane	
3.2	Tyre size, front		Φ 250×70	Φ 250×70
3.3	Tyre size, rear		Φ 80×70	Φ 80×84
3.4	Additional wheel(dimension)		Φ 150×60	Φ 150×60
3.5	Wheels number, front/rear (x = driven wheels)		1x+1/4	1x+1/4
3.6	Tread, front	b10	mm	520
3.7	Tread, rear	b11	mm	410/525
Dimension				
4.2	Height of mast, lowered	h1	mm	See mast Specifications
4.3	Free lift height(optional)		See mast Specifications	
4.4	Lift height	h3	mm	See mast Specifications
4.5	Max. height of mast, extended	h4	mm	See mast Specifications
4.9	Min. /Max. height of operation handle, in driving position	h14	mm	670/1300
4.15	Height, lowered	h13	mm	90
4.19	Overall length	l1	mm	1965
4.20	Length to fork face	l2	mm	792
4.21	Overall width of truck body	b1	mm	820
4.22	Fork dimension	s/e/l	mm	60/170(1220)
4.25	Overall width of fork	b5	mm	580/695
4.32	Wheelbase ground distance	m2	mm	28
4.33	Aisle width, with pallet 1000x1200 crosswise	Ast	mm	2400
4.34	Aisle width, with pallet 800x1200 lengthwise	Ast	mm	2370
4.35	Turning radius	Wa	mm	1525
Performance Data				
5.1	Traveling speed, laden/unladen	km/h	5.3/6.0	5.3/6.0
5.2	Lifting speed, laden/unladen	m/s	0.11/0.19	0.11/0.19
5.3	Lowering speed, laden/unladen	m/s	0.16/0.11	0.16/0.11
5.8	Max. gradeability, laden/unladen	%	6/15	6/15
5.10	Traveling brake		electromagnetic brake	
Motor				
6.1	Driving motor power	kW	1.2	1.2
6.2	Lifting motor power	kW	2.2	2.2
6.4	Battery voltage/rated capacity	V/Ah	24/120	24/120
6.5	Battery weight	kg	90	90

Electric Stacker

15/20ERSP



■ photo may include optional equipment.

Standard Configurations

15ERSP

- Lifting Capacity : 1,500kg
- AC Drive Motor 2.2kW
- DC Lift motor : 4.5KW
- Curtis controller 1234E
- Drive wheel : 250x80mm
- Balance wheel 150x62mm (2pcs)
- Double PU fork wheel 125x82mm
- Hourmeter, battery discharge indicator (BDI) & Limiter with lift cut off
- Duplex 3.0m MFH Mast without free lift (Germany Mast)
- Single Scissors Fork Carriage (Pantograph Type)
- Fork Length : 1070mm
- German Frei tiller
- Automatic speed reduction (>1.8m lift)
- Without Battery / Charger
- Top Removal Battery
- Without Platform / Arm protection
- With EPS (Electric Power Steering, Curtis steering controller)
- With Load Back Rest (Height : 787mm)

20ERSP

- Lifting Capacity : 2,000kg
- AC Drive Motor 2.2kW
- DC Lift motor : 4.5KW
- Curtis controller 1234E
- Drive wheel : 250x80mm
- Balance wheel 150x62mm (2pcs)
- Double PU fork wheel 125x82mm
- Hourmeter, battery discharge indicator (BDI) & Limiter with lift cut off
- Duplex 3.0m MFH Mast without free lift (Germany Mast)
- Single Scissors Fork Carriage (Pantograph Type)
- Fork Length:1,070mm
- German Frei tiller
- Automatic speed reduction (> 1.8m lift)
- Without Battery / Charger
- Top Removal Battery
- Without Platform / Arm protection
- With EPS(Electric Power Steering, Curtis steering controller)
- With Load Back Rest (Height : 787mm)

Advantages

SAFETY AND PRODUCTIVITY

- Advanced AC drive motor eliminates replacement of carbon brush, with good ramp starting performance.
- Cylinder have safety explosion proof valve to avoid fork dropping suddenly when oil tube is broken ensure the safety of operator.
- Automatic speed deceleration when lifting height is up 1.8M
- Mast with micro switch limit the cylinder lifting height to avoid mast shock problems.
- Option EPS power steering system makes steering more light and reliable.

SERVICEABILITY

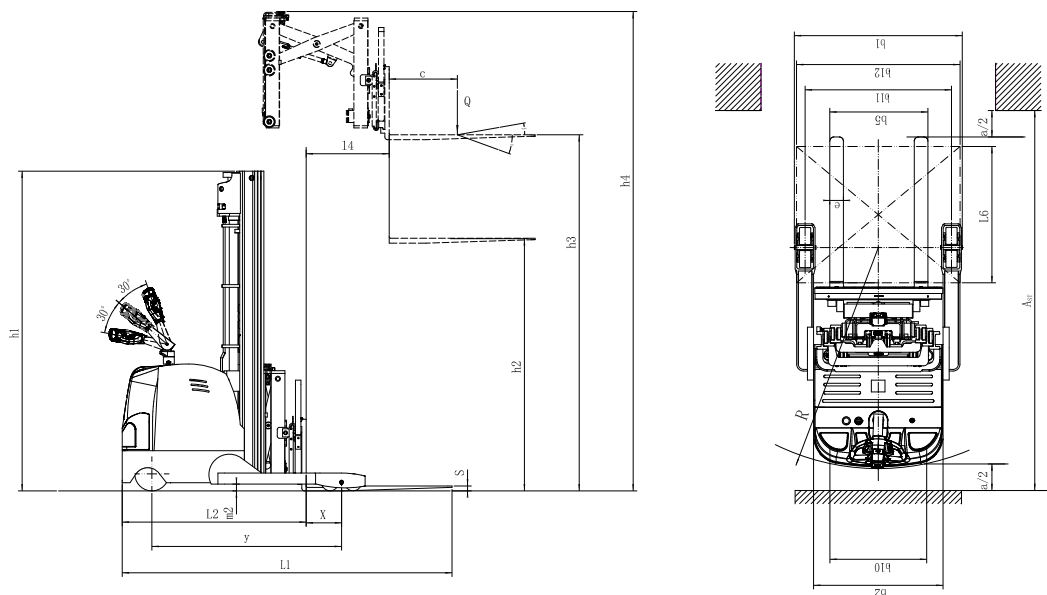
- Low voltage protection setting prolongs the battery life.
(while battery less 20% only can drive no lifting)

STRUCTURAL

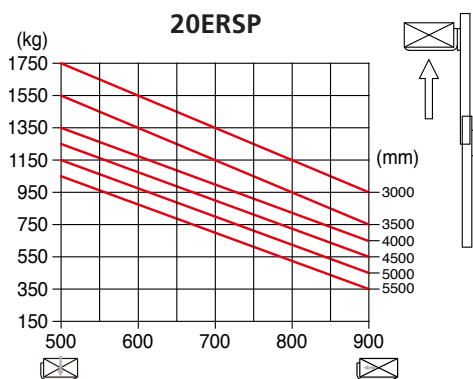
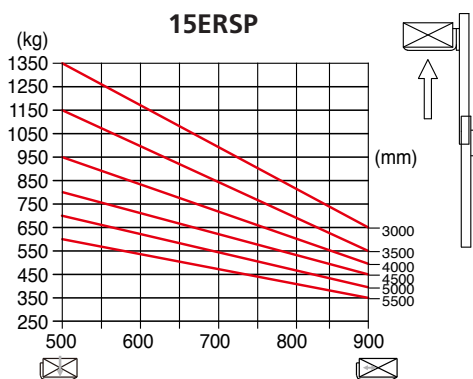
- Reach stacker with very compact design have different option with platform or without platform.
- Low gravity ensure safety operation.
- Water proof and dust proof motor structure keeps the braking and motor more durable and reliable.
- Multi function display with BDI, hour meter and fault code.
- Vertical driving wheel ensures convenient maintenance and small turning radius.
- The mast and frame are dividable and exchangeable.

Electric Stacker

Dimension



Lifting capacity



Option

- **Battery**
15ERSP : 24V/320Ah (Chinese)
24V/460Ah (Hoppeck)
20ERSP : 24V/490Ah (Chinese)
24V/525AH (Hoppeck)
- **Auto water battery filling system**
- **Separate Charger**
15ERSP : Outside, 24V/40A
Outside, 24V/60A for
460Ah battery
20ERSP : Outside, 24V/70A
- **Sideshift : For 3m/3.5m/4m mast**
For 4.5m/5m/5.5m mast
- **Fork length : 1,070(STD)/1,150/1,200**
- **With proportional lifting**
- **With protection skirt (Rubber made)**
- **Double Scissors Fork Carriage**
(Pantograph Type)

Mast Specifications

Mast Ref.		Lift Height		Overall Height		Service Weight (kg)	Residual Capacity (kg)
		Max. (mm) h3	Free lift (mm) -	Lowered (mm) h1	Extended (mm) h4		
15ERSP	Duplex mast without free lift (3.0m MFH)	3000		2119	3881	2250	1500
	Duplex mast without free lift (3.5m MFH)	3500		2369	4381	2300	1300
	Duplex mast without free lift (4.0m MFH)	4000		2619	4881	2350	1100
	Triflex mast with free lift (4.5m MFH)	4500	1575	2179	5381	2500	900
	Triflex mast with free lift (5.0m MFH)	5000	1700	2341	5881	2550	800
	Triflex mast with free lift (5.5m MFH)	5500	1825	2499	6381	2600	700
20ERSP	Duplex mast without free lift (3.0m MFH)	3000		2125	3897	2500	2000
	Duplex mast without free lift (3.5m MFH)	3500		2375	4397	2600	1800
	Duplex mast without free lift (4.0m MFH)	4000		2625	4897	2650	1600
	Triflex mast with free lift (4.5m MFH)	4500	1575	2185	5397	2800	1400
	Triflex mast with free lift (5.0m MFH)	5000	1700	2345	5897	2850	1350
	Triflex mast with free lift (5.5m MFH)	5500	1825	2505	6397	2900	1250

* : Standard

Specifications

Characteristics					
1.1	Manufacturer(abbreviation)			Hyundai	Hyundai
1.2	Model			15ERSP	20ERSP
1.3	Drive type			electric	electric
1.4	Operator type			Pedestrian(EPS)	Pedestrian(EPS)
1.5	Load capacity/rated load	Q	kg	1500	2000
1.6	Load center distance	c	mm	500	500
1.8	Load distance	x	mm	287	265
1.9	Wheelbase	y	mm	1319	1462
Weight					
2.1	Service weight(with battery)		kg	2250	2500
2.2	Axle load, front/rear, laden		kg	765/2835	1505/2795
2.3	Axle load, front/rear, unladen		kg	1395/855	1580/970
Wheels/Chassis					
3.1	Tires			polyurethane	
3.2	Tire size, Front	mm		250x80	250x80
3.3	Tire size, Rear	mm		125x82X2	125x82X2
3.4	Wheels, number front/rear (x=driving wheel)			1x+2/4	1x+2/4
3.5	Additional wheel			150×62 X2	150×62×2
3.6	Tread, Front	b10	mm	715	710
3.7	Tread, Rear	b11	mm	1074	1074
Dimension					
4.1	Tilt of mast/fork carriage forward/backward	Gard		2/5	2/5
4.2	Height, mast lowered	h1	mm	2119	2125
4.4	Lift height	h3	mm	3000	3000
4.5	Height, mast extended	h4	mm	3881	3897
4.9	Height of operation handle, in driving position min./max.	h14	mm	1150/1469	1150/1469
4.19	Overall length	l1	mm	2359	2550
4.20	Length to fork face	l2	mm	1289	1480
4.21	Overall width of truck body	b1/b2	mm	1220/950	1220/950
4.22	Fork dimension	s/e/l	mm	35 x 100 x 1070	40 x 100 x 1070
4.28	Reach distance	l4	mm	500	500
4.32	Ground clearance, center of wheelbase	m2	mm	50	50
4.33	Aisle width for pallets 1000x1200 crossways	Ast	mm	2742	2928
4.34	Aisle width for pallets 800x1200 lengthways	Ast	mm	2806	2996
4.35	Turning radius	Wa	mm	1613	1779
Performance Data					
5.1	Travel speed , laden/unladen		km/h	4.8/5	4.8/5
5.2	Lift speed , laden/unladen		m/s	0.095/0.12	0.095/0.12
5.3	Lowering speed laden/unladen		m/s	0.2/0.15	0.2/0.15
5.8	Max. gradeability, laden/unladen		%	5/12	5/12
5.10	Traveling brake			Electromagnetic brake	
Motor					
6.1	Driving motor power		kW	2.2 AC	2.2 AC
6.2	Lifting motor power		kW	4.5/24	4.5/24
6.4	Battery voltage/rated capacity		V/Ah	24/320 (460)	24/490 (525)
6.5	Battery weight		kg	325 (400)	380 (410)
6.7	Battery dimension (L x W x H)		mm	812x324x535/812x324x575	774x332x580/776x334x580
Other details					
8.4	Noise level at operator's ear, according to DIN12053	dB	A	75	75

Electric Stacker

12ESN



■ photo may include optional equipment.

Standard Configurations

12ESN

- Lifting Capacity : 1,200kg
- AC Drive Motor 1.2kW
- Lift motor : 2.2kW
- Curtis controller
- Drive wheel : $\phi 250 \times 70$ mm
- Double Fork wheel : $\phi 80 \times 70$ mm
- Hourmeter, battery discharge indicator (BDI) & lift cut off
- Single 1.95m MFH Mast
- Lowered Height : 2.33m
- Overall Fork Width x Length : 570mm x 1,150mm
- Turtle mode switch
- Curtis Tiller with Convenient Control Buttons
- Automatic drive speed reduction (lifting over 1.8m)
- Built-in Battery (24V/80Ah), Charger (24V/8A)
- Belly Switch
- Side Battery Removal

Advantages

SAFETY AND PRODUCTIVITY

- Advanced AC control system
- Intelligentized regenerative brake system.
- Multi-function display with BDI and hour meter etc.
- Belly switch.
- Emergency switch.
- Proportional Travel speed control.
- Lift limit switch to shut off pump motor at the max. lifting height.
- Vertical drive motor has a small turning radius.
- The motor structure is water-proof and dust-proof(IP 44).

SERVICEABILITY

- CANbus technology reduces wiring complexity and increase reliability.
- Side-way battery with roll-out system.

Tiller Head



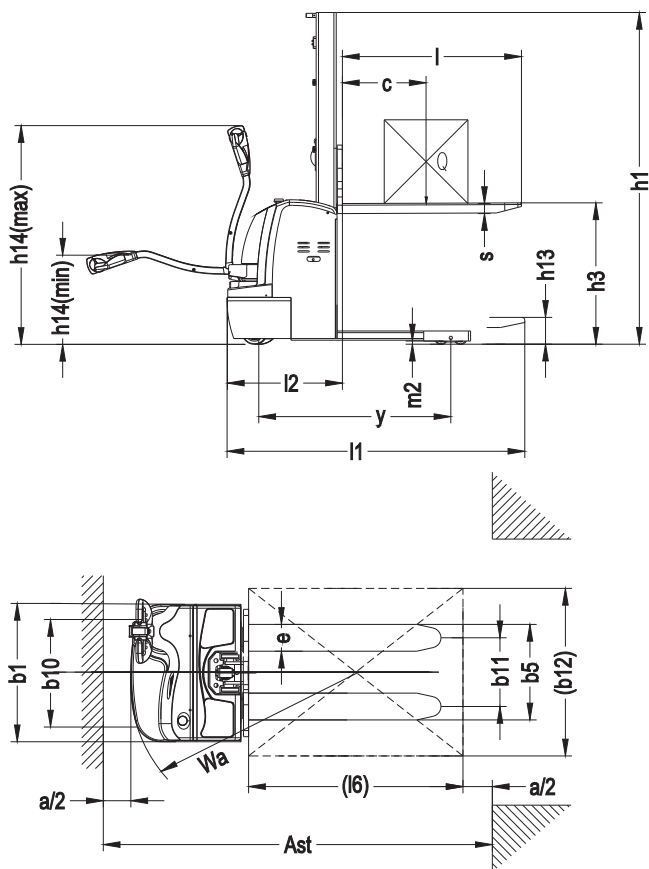
Curtis Tiller with convenient control buttons
(standard)



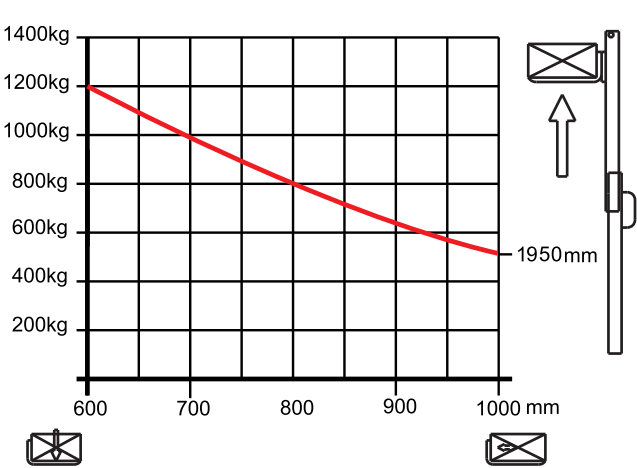
Germany Frei Tiller (option)

Electric Stacker

Dimension



Lifting capacity



Option

- Single 1.6m MFH Mast
- Fork length(mm)
800, 900, 1000, 1220
- German Frei Tiller
- Cold Storage Specifications -18°C

Mast Specifications

Mast Ref.	Lift Height		Overall Height		Service Weight (kg)	Residual Capacity (kg)
	Max. (mm) h3	Free lift (mm) -	Lowered (mm) h1	Extended (mm) h4		
Single 1.6m MFH Mast	1.6	1.6	1980	1980	600	1200
Single 1.95m MFH Mast *	1.95	1.95	2330	2330	620	1200

* : Standard

Specifications (according to VDI 2198)

Characteristics				
1.1	Manufacturer(abbreviation)			Hyundai
1.2	Model			12ESN
1.3	Drive type			electric
1.4	Operator type			walking
1.5	Load capacity/rated load	Q	kg	1200
1.6	Load center distance	c	mm	500
1.8	Load distance	x	mm	630
1.9	Wheelbase	y	mm	1146
Weight				
2.1	Service weight(with battery)		kg	See mast Specifications
2.2	Axle load, front/rear, laden		kg	790/1000
2.3	Axle load, front/rear, unladen		kg	195/395
Wheels/Chassis				
3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane			polyurethane
3.2	Tyre size, front			Φ 250×70
3.3	Tyre size, rear			Φ 80×70
3.4	Additional wheel(dimension)			Φ 150×60
3.5	Wheels number, front/rear (x = driven wheels)			1x+1/4
3.6	Tread, front	b10	mm	520
3.7	Tread, rear	b11	mm	400
Dimension				
4.2	Height of mast, lowered	h1	mm	See mast Specifications
4.4	Lift height	h3	mm	See mast Specifications
4.5	Max. height of mast, extended	h4	mm	See mast Specifications
4.9	Min. /Max. height of operation handle, in driving position	h14	mm	670/1300
4.15	Height, lowered	h13	mm	90
4.19	Overall length	l1	mm	1860
4.20	Length to fork face	l2	mm	708
4.21	Overall width of truck body	b1	mm	820
4.22	Fork dimension	s/e/l	mm	60/170/1220
4.25	Overall width of fork	b5	mm	570
4.32	Wheelbase ground distance	m2	mm	30
4.33	Aisle width, with pallet 1000x1200 crosswise	Ast	mm	2180
4.34	Aisle width, with pallet 800x1200 lengthwise	Ast	mm	2220
4.35	Turning radius	Wa	mm	1338
Performance Data				
5.1	Traveling speed, laden/unladen		km/h	5.3/5.6
5.2	Lifting speed, laden/unladen		m/s	0.11/0.19
5.3	Lowering speed, laden/unladen		m/s	0.16/0.11
5.8	Max. gradeability, laden/unladen		%	6/15
5.10	Traveling brake			electromagnetic brake
Motor				
6.1	Driving motor power		kW	1.2
6.2	Lifting motor power		kW	2.2
6.4	Battery voltage/rated capacity		V/Ah	24/80
6.5	Battery weight		kg	50

Electric Stacker(Rider Type)

15ESR



■ photo may include optional equipment.

Standard Configurations

15ESR

- Lifting Capacity : 1,500kg
- AC Drive Motor 1.5kW
- Lift motor 3.2kW
- Curtis controller
- Drive wheel : $\phi 250 \times 80 \text{mm}$
- Double Fork wheel : $\phi 84 \times 80 \text{mm}$
- Hourmeter, battery discharge indicator (BDI) & Limiter with lift cut off
- Duplex 3.0m MFH Mast with free lift
- Fork Width x Length : 570mm x 1,150mm
- Turtle mode switch
- German Frei tiller with convenient control buttons
- Proportional Lifting
- Automatic speed reduction (lifting over 1.8m)
- Belly switch
- EPS (Electric Power Steering)
- Side Battery Removal

Advantages

SAFETY AND PRODUCTIVITY

- Advanced AC control system eliminats directional contactors, which brings minimal maintenance requirements.
- Mast loweing damping cushion for low noise operation.
- Multi-function display with BDI and hour meter etc.
- Side way battery replacement.
- Auto deceleration function.
- Emergency switch.
- Turtle mode switch.
- Proportional Travel speed control.

OPTIMUM STRUCTURAL DESIGN

- Low barycenter ensures the stable operation.
- The motor structure is water-proof and dust-proof(IP 44).
- Mast and frame dividable and exchangeable.
- Full free lifting. (3M lift height truck can enter into a 2M door)

SERVICEABILITY

- Central positional electronic component simplifies debugging and maintaining.
- CANbus technology reduces wiring complexity and increase reliability.
- User of non-contact type switch in the mast

Tiller Head



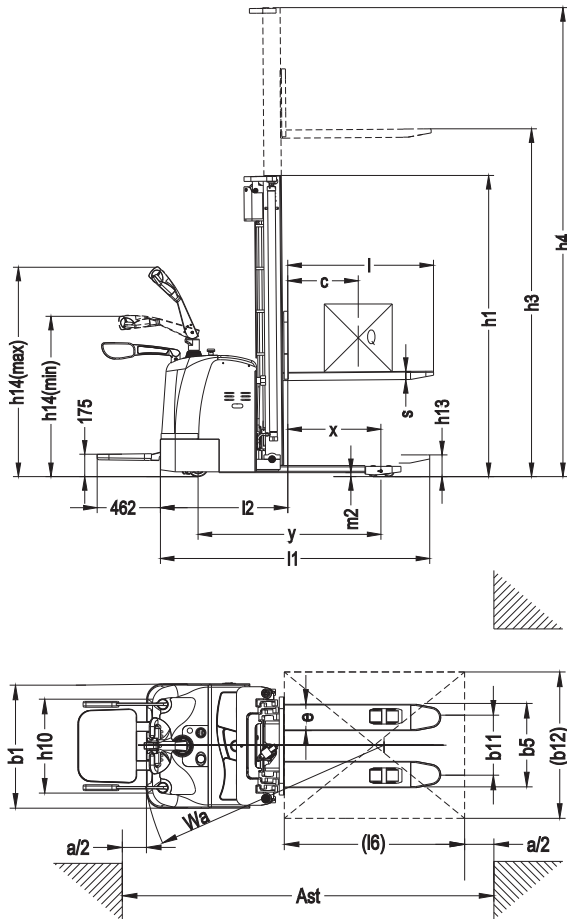
Germany Frei Tiller with convenient control buttons (standard)



Gemany Frei Tiller (option)

Electric Stacker(Rider Type)

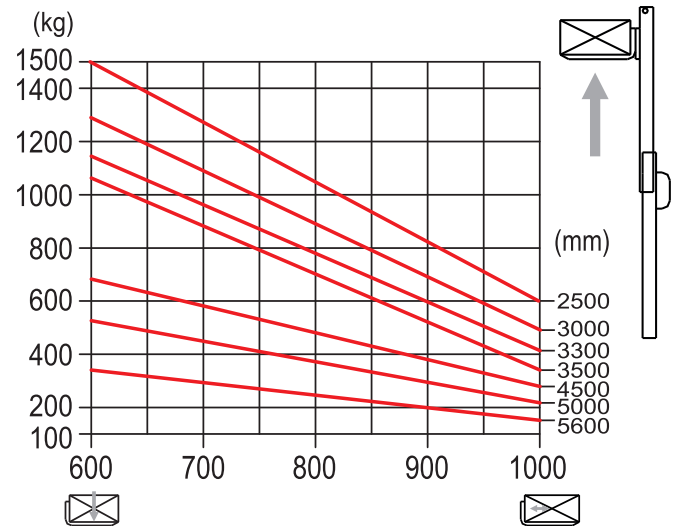
Dimension



Option

- 6.7km/h of Drive Speed
- Battery : 24V/300Ah
- Integrated Charger (24V/40A)
- Separate Charger (24V/40A)
- Germany Frei Tiller (Normal)
- Germal Feri Tiller with big button (including initial lifting button)
- Cold storage Specifications -18°C
- Key pad ignition
- Load backrest 1220mm
- Battery trolley
- Initial lift
- Fork length(mm)
800, 900, 1000, 1220
- Without EPS
- lifting sensor switch to limit the height(1.8m)

Lifting capacity



Mast Specifications

Mast Ref.	Lift Height		Overall Height		Service Weight (kg)	Residual Capacity (kg)
	Max. (mm) h3	Free lift (mm) -	Lowered (mm) h1	Extended (mm) h4		
Duplex mast without free lift (2.5m MFH)	2.5	N/A	1735	2955	1200	1500
Duplex mast without free lift (3.0m MFH)	3.0	N/A	1985	3455	1220	1300
Duplex mast without free lift (3.3m MFH)	3.3	N/A	2135	3755	1240	1150
Duplex mast without free lift (3.5m MFH)	3.5	N/A	2235	3955	1250	1100
Duplex mast with free lift (2.5m MFH)	2.5	1300	1735	2955	1240	1500
Duplex mast with free lift (3.0m MFH) *	3.0	1550	1985	3455	1265	1300
Duplex mast with free lift (3.3m MFH)	3.3	1700	2135	3755	1280	1150
Duplex mast with free lift (3.5m MFH)	3.5	1800	2235	3955	1290	1100
Triplex mast with free lift (4.3m MFG)	4.3	1500	1990	4870	1370	600
Triflex mast with free lift (4.5m MFH)	4.5	1570	2050	5070	1340	700
Triflex mast with free lift (5.0m MFH)	5.0	1740	2210	5550	1360	500
Triflex mast with free lift (5.6m MFH)	5.6	1940	2410	6150	1380	350

* : Standard

Specifications (according to VDI 2198)

Characteristics				
1.1	Manufacturer(abbreviation)			Hyundai
1.2	Model			15ESR
1.3	Drive type			electric
1.4	Operator type			standing
1.5	Load capacity/rated load	Q	kg	1500
1.6	Load center distance	c	mm	600
1.8	Load distance	x	mm	672
1.9	Wheelbase	y	mm	1378
Weight				
2.1	Service weight(with battery)		kg	See mast Specifications
2.2	Axle load, front/rear, laden		kg	1470/1310
2.3	Axle load, front/rear, unladen		kg	900/380
Wheels/Chassis				
3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane			polyurethane
3.2	Tyre size, front			φ 250×80
3.3	Tyre size, rear			φ 80×84
3.4	Additional wheel(dimension)			φ 150×60
3.5	Wheels number, front/rear (x = driven wheels)			1x+2/4
3.6	Tread, front	b10	mm	580
3.7	Tread, rear	b11	mm	404/530
Dimension				
4.2	Height of mast, lowered	h1	mm	See mast Specifications
4.3	Free lift height(optional)			See mast Specifications
4.4	Lift height	h3	mm	See mast Specifications
4.5	Max. height of mast, extended	h4	mm	See mast Specifications
4.9	Min. /Max. height of operation handle, in driving position	h14	mm	1150/1450
4.15	Height, lowered	h13	mm	90
4.19	Overall length	l1	mm	2100
4.20	Length to fork face	l2	mm	950
4.21	Overall width of truck body	b1	mm	850
4.22	Fork dimension	s/e/l	mm	60/180/1220
4.25	Overall width of fork	b5	mm	570
4.32	Wheelbase ground distance	m2	mm	31
4.33	Aisle width, with pallet 1000x1200 crosswise	Ast	mm	2535
4.34	Aisle width, with pallet 800x1200 lengthwise	Ast	mm	2515
4.35	Turning radius	Wa	mm	1655
Performance Data				
5.1	Traveling speed, laden/unladen		km/h	6.5/6.7
5.2	Lifting speed, laden/unladen		m/s	0.15/0.28
5.3	Lowering speed, laden/unladen		m/s	0.41/0.27
5.8	Max. gradeability, laden/unladen		%	8/15
5.10	Traveling brake			electromagnetic brake
Motor				
6.1	Driving motor power		kW	1.5
6.2	Lifting motor power		kW	3
6.4	Battery voltage/rated capacity		V/Ah	24/300
6.5	Battery weight		kg	300

Electric Stacker

15EST



■ photo may include optional equipment.

Standard Configurations

15EST

- Lifting Capacity : 1,500kg
- AC Drive Motor 1.5kW
- Lift motor 3.2kW (HPI)
- Curtis controller 1232
- Drive wheel : 250x70mm
- Single PU fork wheel size 80x84mm
- Hourmeter, battery discharge indicator (BDI) & Limiter with lift cut off
- Duplex 3.0m MFH Mast (German mast) with free lift
- Forged fork length : 1070mm
- Turtle mode activated
- German Frei tiller with convenient control buttons
- Side Battery Removal
- Proportional Lifting
- Automatic speed reduction (>1.8m lift)
- Without Battery / Charger

Advantages

SAFETY AND PRODUCTIVITY

- Advanced AC control system intelligentized regenerative brake system.
- Multi-function display with BDI and hour meter.
- Emergency reversing device.
- Auto deceleration system utilizes regenerative braking.

STRUCTURAL

- Stepless speed control
- With lifting limit switch to shut off pump motor at top Max. lifting height.
- Small turning radius standing drive motor system, water-proof and dust-proof motor structure.
- Built-in pressure relief valve protects the trucks from overloads.

SERVICEABILITY

- CANbus technology reduces wiring complexity.
- Side-way battery with roll-out system, convenient for replacement.

Tiller Head



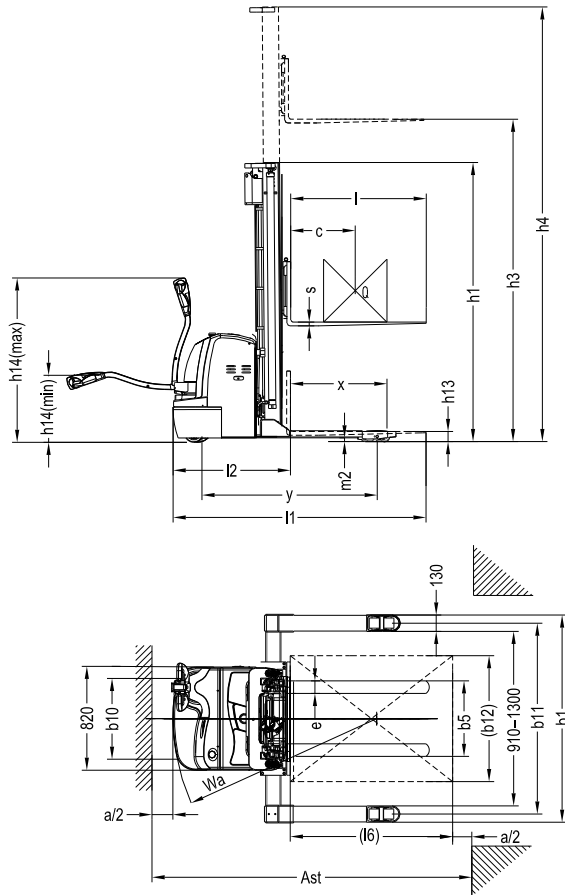
Germany Frei Tiller with convenient control buttons (standard)



Normal Germany Frei Tiller (Option)

Electric Stacker(Rider Type)

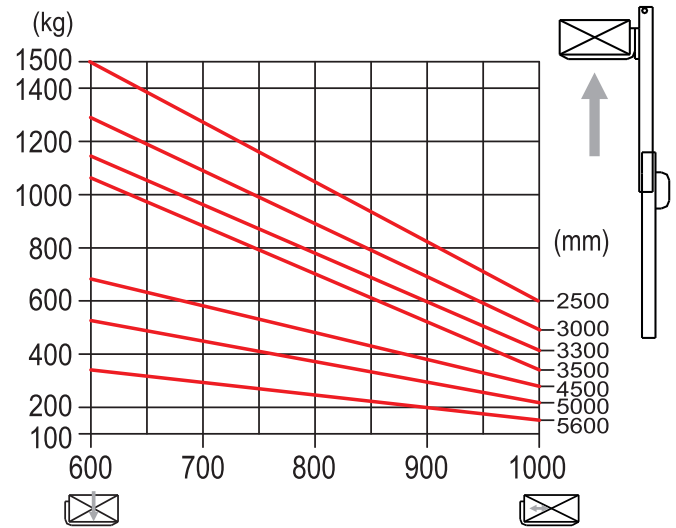
Dimension



Option

- Battery : 24V/300Ah
- Battery trolley
- Integrated Charger (24V/30A)
- Separate Charger (24V/40A)
- German Frei Tiller (Normal)
- German Frei Tiller with big button (two lifting button)
- Cold storage Specifications -18°C
- Keypad ignition (KEYA)
- Fork length (mm) : 800 / 900 / 1,070(STD) / 1,220

Lifting capacity



Mast Specifications

Mast Ref.	Lift Height		Overall Height		Service Weight (kg)	Residual Capacity (kg)
	Max. (mm) h3	Free lift (mm) -	Lowered (mm) h1	Extended (mm) h4		
Duplex mast without free lift (2.5m MFH)	2500		1805	3025	1090	1500
Duplex mast without free lift (3.0m MFH)	3000		2055	3525	1210	1500
Duplex mast without free lift (3.3m MFH)	3300		2205	3825	1230	1500
Duplex mast without free lift (3.5m MFH)	3500		2305	4025	1250	1300
Duplex mast with free lift (2.5m MFH)	2500	1300	1805	3025	1090	1500
Duplex mast with free lift (3.0m MFH)	3000	1550	2055	3525	1210	1500
Duplex mast with free lift (3.3m MFH)	3300	1700	2205	3825	1230	1500
Duplex mast with free lift (3.5m MFH)	3500	1800	2305	4025	1250	1300
Triflex mast with free lift (4.5m MFH)	4500	1570	2120	5080	1415	800
Triflex mast with free lift (5.0m MFH)	5000	1740	2280	5560	1460	600
Triflex mast with free lift (5.6m MFH)	5600	1940	2480	6160	1500	400

* : Standard

Specifications

Characteristics				
1.1	Manufacturer(abbreviation)			Hyundai
1.2	Model			15EST
1.3	Drive type			Electric
1.4	Operator type			Pedestrian
1.5	Load capacity/rated load	Q	kg	1500
1.6	Load center distance	c	mm	600
1.8	Load distance	x	mm	677
1.9	Wheelbase	y	mm	1420
Weight				
2.1	Service weight(with battery)		kg	1210
2.2	Axle load, front/rear, laden		kg	1470 / 1310
2.3	Axle load, front/rear, unladen		kg	910 / 370
Wheels/Chassis				
3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane			Polyurethane
3.2	Tyre size, front			φ 250×70
3.3	Tyre size, rear			φ 80×84
3.4	Additional wheel(dimension)			φ 150×60
3.5	Wheels number, front/rear (x = driven wheels)			1x+2 / 4
3.6	Tread, front	b10	mm	580
3.7	Tread, rear	b11	mm	1040
Dimension				
4.2	Height of mast, lowered	h1	mm	2055
4.3	Free lift height(optional)			1550
4.4	Lift height	h3	mm	3000
4.5	Max. height of mast, extended	h4	mm	3525
4.9	Min. /Max. height of operation handle, in driving position	h14	mm	670 / 1300
4.15	Height, lowered	h13	mm	70
4.19	Overall length	l1	mm	1985
4.20	Length to fork face	l2	mm	915
4.21	Overall width of truck body	b1	mm	1170
4.22	Fork dimension	s/e/l	mm	40 / 100 / 1070
4.25	Overall width of fork	b5	mm	200-800
4.32	Wheelbase ground distance	m2	mm	35
4.33	Aisle width, with pallet 1000x1200 crosswise	Ast	mm	2480
4.34	Aisle width, with pallet 800x1200 lengthwise	Ast	mm	2465
4.35	Turning radius	Wa	mm	1612
Performance Data				
5.1	Traveling speed, laden/unladen		km/h	5.8 / 6
5.2	Lifting speed, laden/unladen		m/s	0.14 / 0.23
5.3	Lowering speed, laden/unladen		m/s	0.39 / 0.26
5.8	Max. gradeability, laden/unladen		%	8 / 15
5.10	Traveling brake			Electromagnetic brake
Motor				
6.1	Driving motor power		kW	1.5 (AC)
6.2	Lifting motor power		kW	3.2
6.4	Battery voltage/rated capacity		V/Ah	24 / 300
6.5	Battery weight		kg	260
6.7	Battery dimension (L×W×H)		mm	675×254×540
Other details				
8.4	Noise level at operator's ear, according to DIN12053	dB	A	70

Manual Hand Pallet Truck

20HP/25HP/25HPW/30HP

Standard Configurations

- Polyurethane drive steering wheel
- Double Polyurethane Fork wheels
- Overall Fork Width x Length : 550mm x 1,150mm
- Weighing Scale (25HPW)
- Rubber Wrapped handgrip (25HP/25HPW)

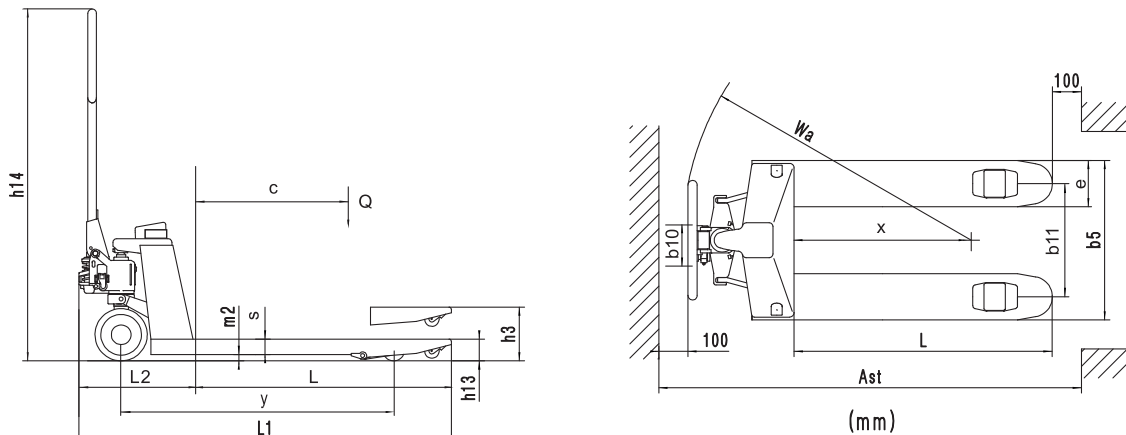
Option

- Nylon drive wheel and double nylon fork wheel
- Rubber drive wheel and double Polyurethane Fork wheel
- Polyurethane drive wheel and single Polyurethane Fork wheel (20HP/25HP/25HPW)
- Nylon drive wheel and single nylon Fork wheel (20HP/25HP/25HPW)
- Extra long foot pedal release (25HP/25HPW/30HP)
- Quick lift (5 strokes to reach max.height) (25HP/25HPW)
- Fork length (mm) 800, 900, 1000, 1100
- Overall Fork width x Length : 685mm x 1,220mm



■ photo may include optional equipment.

Dimension & Specifications (according to VDI 2198)



Characteristics					
1.1	Manufacturer(abbreviation)		Hyundai	Hyundai	Hyundai
1.2	Model		20HP	25HP	30HP
1.3	Drive type		manual	manual	manual
1.4	Operator type		hand	hand	hand
1.5	Load capacity/rated load	kg	2000	2500	3000
1.6	Load center distance	c mm	22	32	40
1.8	Load distance	x mm	600	600	600
1.9	Wheelbase	y mm	1136	1153	1124
Weight					
2.1	Service weight	kg	55	58	63
Wheels/Chassis					
3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		polyurethane	polyurethane	polyurethane
3.2	Tyre size, front(Steering wheel)	mm	Φ 160	Φ 200	Φ 200
3.3	Tyre size, rear(Fork wheel single)	mm	Φ 70x80	Φ 80x93	-
	Tyre size, rear(Fork wheel tandem)	mm	Φ 70x60	Φ 80x70	Φ 80x70
3.5	Wheels number, front/rear (x = driven wheels)		2x+2/4	2x+2/4	2x+2/4
3.6	Tread, front	b10 mm	108	111	120
3.7	Tread, rear	b11 mm	400/535	390/525	390/525
Dimension					
4.4	Max. Lift height	h3 mm	190	195	200
4.9	Min. /Max. height of operation handle, in driving position	h14 mm	1176.5	1224	1224
4.15	Height, lowered	h13 mm	75	85	85
4.19	Overall length	l1 mm	1520	1543	1533
4.20	Length to fork face	l2 mm	370	393.5	384
4.22	Fork dimension	s/e/l mm	53/150/1150	53/160/1150	45/160/1150
4.25	Overall width of fork	b5 mm	550/685	550/685	550/685
4.32	Wheelbase ground distance	m2 mm	22	32	32
4.33	Aisle width, with pallet 1000x1200 crosswise	Ast mm	1720	1743	1733
4.34	Aisle width, with pallet 800x1200 lengthwise	Ast mm	1770	1793	1783
4.35	Turning radius	Wa mm	1265	1276	1266

