

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 : $\phi 250 \times 70$ mm
- Double Fork wheel : $\phi 80 \times 70$ 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 : $\phi 250 \times 70$ mm
- Double Fork wheel : $\phi 80 \times 70$ 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 : $\phi 250 \times 70$ mm
- Double Fork wheel : $\phi 84 \times 80$ 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 eliminates directional contactors, which brings minimal maintenance requirements.
- Intelligent 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).

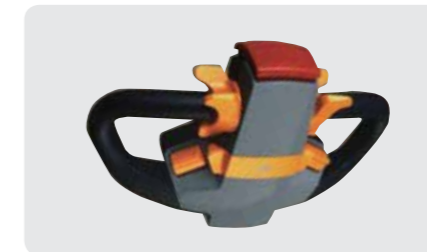
SERVICEABILITY

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

Tiller Head



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

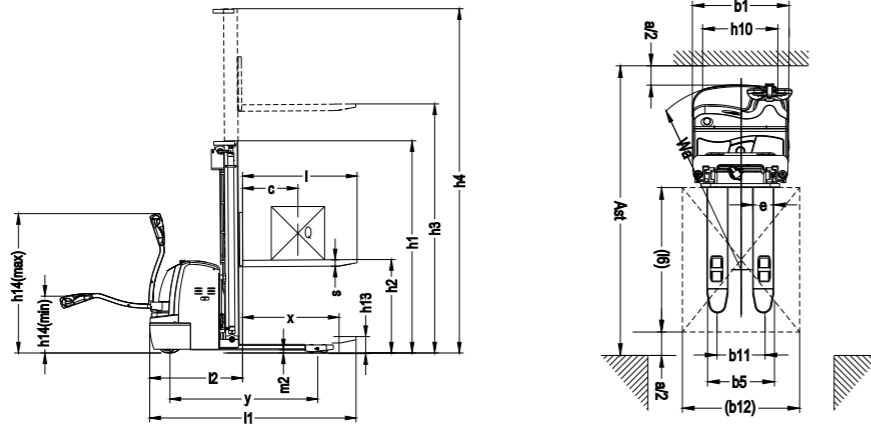


Germany Frei Tiller with convenient control buttons
(Standard for 15ES only)

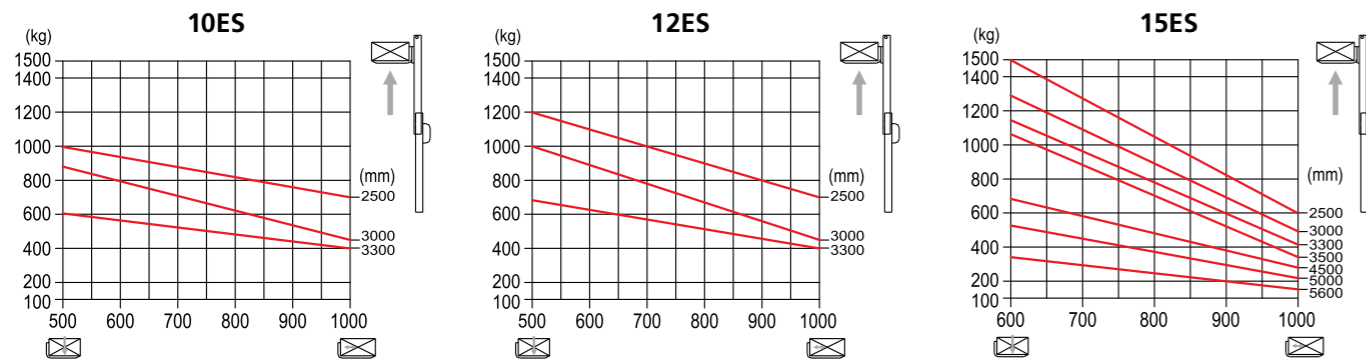


Normal Germany Frei Tiller (option)

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, 1150, 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
	Duplex 3.3m MFH Mast without free lift	3.3	N/A	2237	3887	790	700
15ES	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
1.2	Model		10ES 12ES 15ES
1.3	Drive type		electric
1.4	Operator type		pedestrian
1.5	Load capacity/rated load	Q kg	1000 1200 1500
1.6	Load center distance	c mm	500 500 600
1.8	Load distance	x mm	697 697 697
1.9	Wheelbase	y mm	1335 1335 1383
Weight			
2.1	Service weight(with battery)	kg	See mast Specifications
2.2	Axle load, front/rear, laden	kg	950/770 1060/870 1470/1310
2.3	Axle load, front/rear, unladen	kg	555/165 560/170 900/380
Wheels/Chassis			
3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		polyurethane
3.2	Tyre size, front		Φ250×70 Φ250×70 Φ250×70
3.3	Tyre size, rear		Φ80×70 Φ80×70 Φ80×84
3.4	Additional wheel(dimension)		Φ150×60 Φ150×60 Φ150×60
3.5	Wheels number, front/rear (x = driven wheels)		1x+1/4 1x+1/4 1x+1/4
3.6	Tread, front	b10 mm	520 520 520
3.7	Tread, rear	b11 mm	410/525 410/525 404/525
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 670/1300 670/1300
4.15	Height, lowered	h13 mm	90 90 90
4.19	Overall length	l1 mm	1965 1965 1950
4.20	Length to fork face	l2 mm	792 792 878
4.21	Overall width of truck body	b1 mm	820 820 820
4.22	Fork dimension	s/e/l mm	60/170(1220) 60/170(1220) 60/180(1220)
4.25	Overall width of fork	b5 mm	580/695 580/695 570/695
4.32	Wheelbase ground distance	m2 mm	28 28 31
4.33	Aisle width, with pallet 1000x1200 crosswise	Ast mm	2400 2400 2450
4.34	Aisle width, with pallet 800x1200 lengthwise	Ast mm	2370 2370 2420
4.35	Turning radius	Wa mm	1525 1525 1575
Performance Data			
5.1	Traveling speed, laden/unladen	km/h	5.3/6.0 5.3/6.0 5.8/6.0
5.2	Lifting speed, laden/unladen	m/s	0.11/0.19 0.11/0.19 0.15/0.28
5.3	Lowering speed, laden/unladen	m/s	0.16/0.11 0.16/0.11 0.41/0.27
5.8	Max. gradeability, laden/unladen	%	6/15 6/15 8/15
5.10	Traveling brake		electromagnetic brake
Motor			
6.1	Driving motor power	kW	1.2 1.2 1.5
6.2	Lifting motor power	kW	2.2 2.2 3.2
6.4	Battery voltage/rated capacity	V/Ah	24/120 24/120 24/300
6.5	Battery weight	kg	90 90 300