JUNOTRAX

Advance with the Time · Lead the World

ONE-STOP INTELLIGENT LOGISTICS SOLUTION PROVIDER

Create an Intelligent and Efficient Logistics System

Continuous Life Cycle Support

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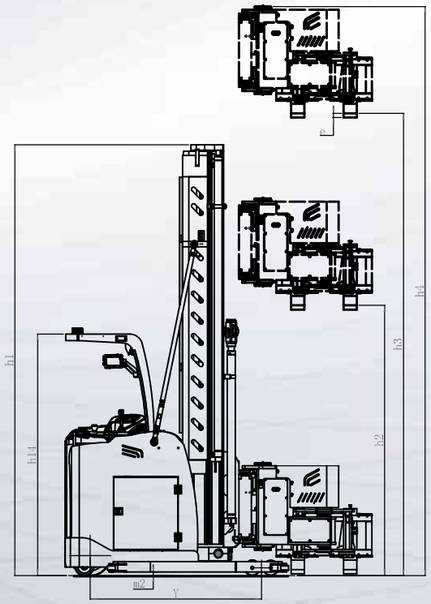
Material handling Intelligence

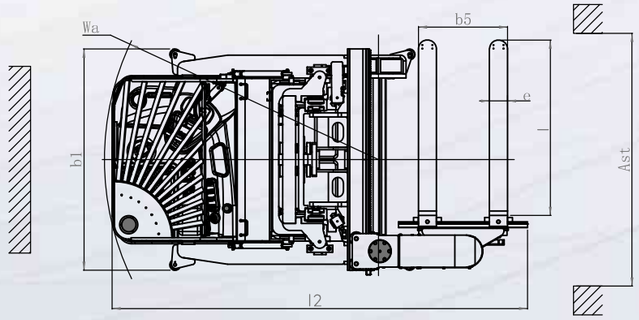
01 Electric Industrial Vehicles

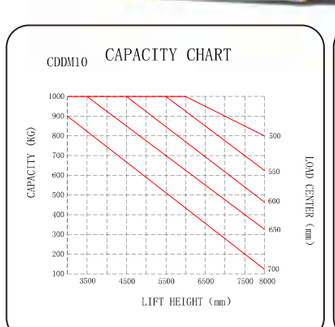
SIDE-STANDING

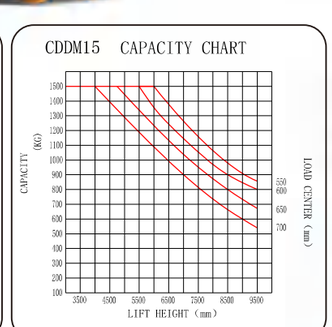
Three-way pallet stacker
CDDM/CDDM-E

- Without turning the vehicle body, three-way pallet stacker series can access goods in rotation, to left, right to unload the goods;
- Intensive storage, optimal to enlarge the warehouse capacity. The min. aisle width is only 1600mm. Outstanding performance of sorting, material handling, stacking in narrow aisles. It saves the space and enlarge the warehouse capacity greatly;
- Guide rail wheel appliance achieves steering control antomization, allowing vehicle to pass even the narrowest aisles;
- Equipped with branded control system and multi-functional protection system, it offers higher level fuctional safety;
- Equipped with high-strength German Krupp steel mast, not easy to deform, steadily operate. Optimized mast reduces the lifting and lowering viberation to offer a great operation comfort;
- Equipped with camera, electronic display, timing, fault display and excellent digit transmission LED, it shows real-time vehicle operation status for troubleshooting and maintenance easily;
- Customized electromagnetic navigation/laser navigation AGV.







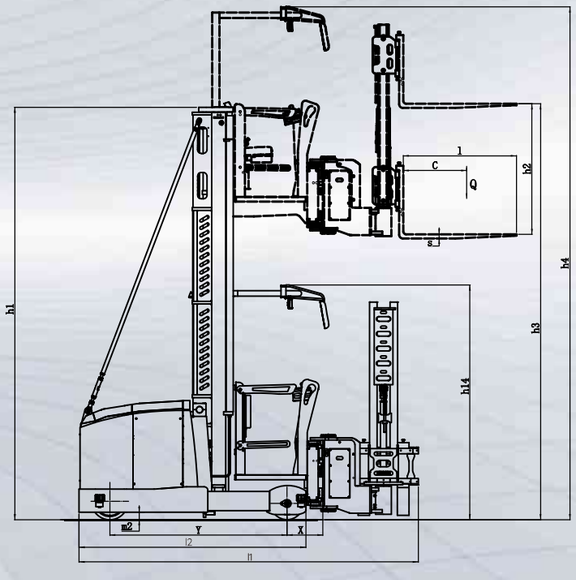


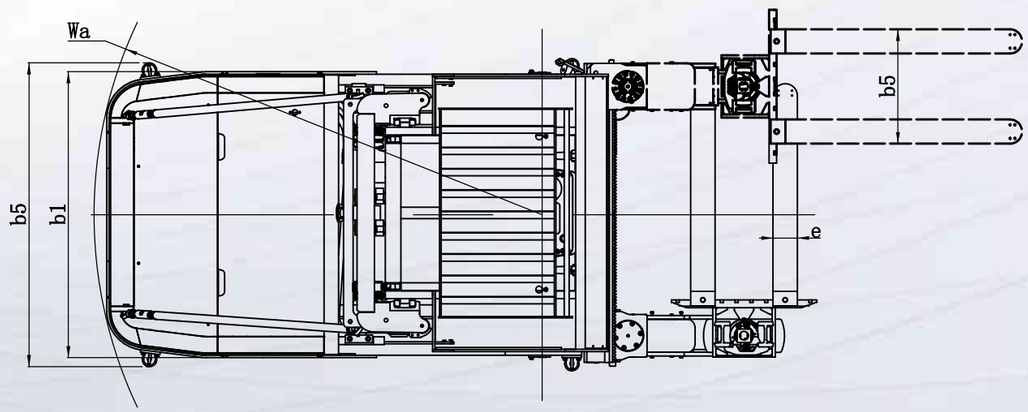
seated type

Characteristic	1.1	Type		CDDM10-60S	CDDM15-60S	CDDM15E-60S
	1.2	Power		Electric	Electric	Electric
	1.3	Operation (manual、walkie、stand-on、picker)		Side-standing	Side-standing	Seated type
	1.4	Rated load capacity	Q(kg)	1000	1500	1500
	1.5	Load center distance	C(mm)	500	600	600
Weight	2.1	Self weight with battery	kg	<5200	<6300	<6500
Wheel/ Chasis	3.1	Wheel type		PU	PU	PU
	3.2	Drive wheel specifications	ø×w(mm)	ϕ382*142	ϕ382*142	ϕ400*160
	3.3	The front wheel specification	ø×w(mm)	ϕ145*100	ϕ145*100	ϕ145*100
	3.4	The balance wheel	ø×w(mm)	ϕ180*76	ϕ180*76	/
	3.5	Wheelbase (the front wheel)	b10(mm)	1210	1315	1315
Dimensions	4.1	Vehicle height, mast retracted	h1(mm)	3165	3165	3165
	4.2	Free lifting height	h2(mm)	1980	1980	1980
	4.3	Standard lifting height	h3(mm)	6000	6000	6000
	4.4	Mast height, extended	h4(mm)	7165	7185	7185
	4.5	Overhead guardrail height	h14(mm)	2280	2280	2180
	4.6	Length (overall)	l2(mm)	2960	2907	2960
	4.7	Vehicle width	b1(mm)	1445	1550	1567
	4.8	Anti-collision guardrail width	(mm)	1500	1600	1617
	4.9	Forks dimensions	s/e/l(mm)	40/122/1070	45/125/1220	45/125/1220
	4.10	Forks adjustment dimensions	b5(mm)	260-650 (customized)	260-650 (customized)	260-650 (customized)
	4.11	The min. ground clearance (wheelbase center)	m2(mm)	32	32	32
	4.12	Stacking aisle width	Ast(mm)	1600 (1000*1000pallet)	1760 (1200*1200pallet)	1760 (1000*1200pallet)
	4.13	Aisle guardrail width	(mm)	120	120	120
	4.14	The min. turning radius	Wa(mm)	1910	1910	1989
	4.15	The main aisle width	mm	3410	3560	3560
Performance	5.1	The max. travelling speed, unladen/full-loaded	km/h	8/7	8/7	8/7
	5.2	Lift speed, unladen/full-loaded	m/s	0.275/0.215	0.275/0.215	0.275/0.215
	5.3	Lower speed, unladen/full-loaded	m/s	0.300/0.400	0.195/0.280	0.195/0.280
	5.4	Driving brake		Electromagnetic drive	Electromagnetic drive	Electromagnetic drive
Motor	6.1	Drive motor power	kw	6.5 AC	6.5 AC	8 AC
	6.2	Lift motor power	kw	7.5 DC	8.6 AC	8.6 AC
	6.3	Battery type		Lead-acid battery	Lead-acid battery	Lead-acid battery
	6.4	Battery voltage/capacity	V/Ah	48/400	48/400	48/400
	6.5	Motor	V/A	48/50	48/50	48/50
Others	7.1	Drive control mode		AC	AC	AC

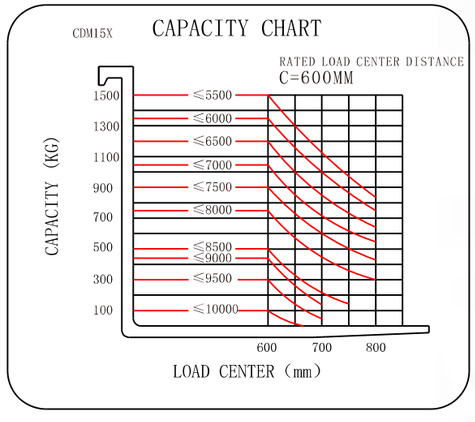
The data is for reference only, please take the real object as references

Three-way stacker forklift (people go up) CDMX





- Without turning the vehicle body, it can access goods in rotation, in side-shifting, to left, right, front to load or unload the goods;
- Equipped with high-strength German Krupp steel mast, light weight and good craft skill. Steady lifting operation and good manuverability; The gravity center is greatly reduced;
- Lifting classification control with main mast and side mast working seperately;
- Equipped with AC controller, operational handler, and instrument;
- Electrolyte proportional hydraulic control unit;
- Two drive modes to choose from: Seated type and side-standing type.



Characteristic	1.1	Type		CDMX15-75
	1.2	Rated load capacity	Q(kg)	1500
	1.3	Load center distance	C(mm)	600
	1.4	The front overhang distance	X(mm)	384
	1.5	Wheelbase	Y(mm)	1913
Weight	2.1	Self weight with battery	kg	9300
Wheel/ chasis	3.1	Wheel type		PU
	3.2	The front wheel specification	⌀×w(mm)	ϕ350*200
	3.3	Drive wheel specification	⌀×w(mm)	ϕ400*160
	3.4	Wheelbase (the front wheel)	b10(mm)	1190
	3.5	Wheel numbers (the front wheel/drive wheel)		2/1X
Dimensions	4.1	Vehicle height, mast retracted	h1(mm)	4480
	4.2	Free lifting height	h2(mm)	1500
	4.3	Standard lifting height	h3(mm)	7500
	4.4	Mast height, extended	h4(mm)	8400
	4.5	Overhead guardrail height	h14(mm)	2412
	4.6	Forks height, mast retracted	h13(mm)	45
	4.7	Overall vehicle length	l1(mm)	3679
	4.8	Vehicle body length	l2(mm)	2448
	4.9	Vehicle body width	b1(mm)	1474
	4.10	Forks dimensions	s/e/l(mm)	45/125/1220
	4.11	Trainning wheels outer width	b5(mm)	1609
	4.12	The min. ground clearance (wheelbase center)	m2(mm)	80
	4.13	Stacking aisle width, pallet 1200mm×1200mm	Ast(mm)	1700
	4.14	Main aisle width	mm	4410
	4.15	Guardrail width	mm	180
	4.16	The min. turning radius	Wa(mm)	2300
	4.17	Forks outer width	b5(mm)	260-720
Performance	5.1	Travelling speed, unladen/full-loaded	km/h	8/7
	5.2	Lift speed, unladen/full-loaded	m/s	0.35/0.3
	5.3	Lower speed, unladen/full-loaded	m/s	0.3/0.35
	5.4	The max. gradability, unladen/ full-loaded	%	⩽10
	5.5	Drive brake		Electromagnetic
Motor	6.1	Drive motor power	kw	8
	6.2	Lift motor power	kw	12AC
	6.3	Battery type		Lead-acid battery
	6.4	Battery voltage/capacity	V/Ah	48/540
	6.5	Motor	V/A	48/75
Others	7.1	Drive control mode		AC
	7.2	According to En12053 (noise level near drivers' ears)	dB(A)	75

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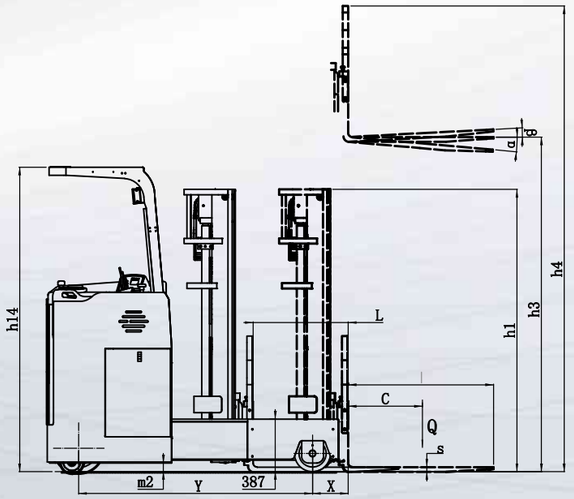
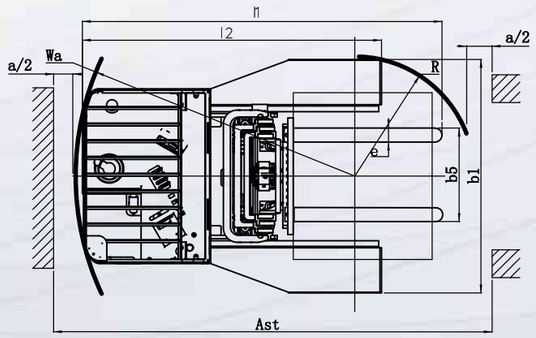
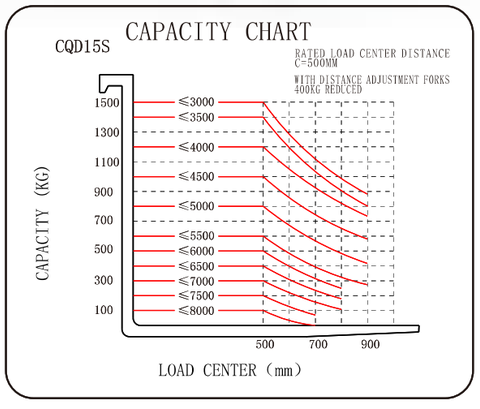
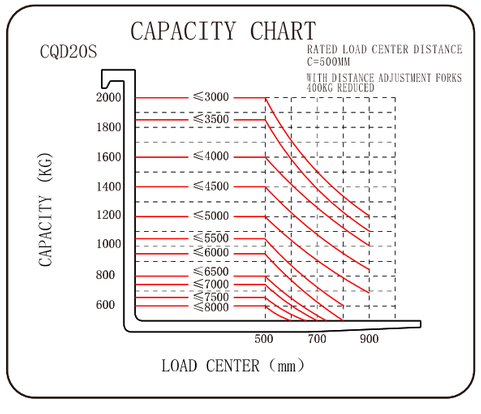
Four-directional forklift CQDS









- Four-way driving, suits for VNA stacking operation, especially the long material handling, greatly saving the warehouse storage space, it can switch from straight line driving to lateral driving quickly with easy operation. High efficiency and less fault;
- Equipped with branded control system and multi-functional protection system, it offers higher level fuctional safety;
- Equipped with smart HD display instrument, offering real-time vehicle operation status and fault display, it is easy for troubleshooting and maintenance;
- It adopts full AC drive system, with quicker response and more accurate control, further improving the vehicle performance;l
- Equipped with EPS steering system, with easy and flexible operation, improving the operational stability in high speed;
- It displays real-time drive wheel angle, easy for fine-tunning inner VNA, safe, reasonable and accurate;
- Specialised large-capacity power battery, with strong power, safe and reliable, easy for charging. Long endurance and low maintenance cost;
- Side-pull battery suits multi-shifing occasions, with standard roller cart for easy change;
- Electromagnetic brake features in quick parking and automatic brake.

Characteristic	1.1	Type		CQDS15-45S	CQDS20-45S	CQDS25-45S
	1.2	Operation (manual、walkie、stand-on、picker)		Side-standing	Side-standing	Side-standing
	1.3	Rated load capacity	Q(kg)	1500	2000	2500
	1.4	Load center distance	C(mm)	500	500	500
	1.5	Wheelbase	Y(mm)	1622	1722	1822
	1.6	The front overhang distance	X(mm)	200	200	200
Weight	2.1	Self weight with battery	kg	3400	3500	3800
Wheel/ chasis	3.1	Wheel type		PU	PU	PU
	3.2	The front wheel specification	⌀×w(mm)	ф267*114	ф267*114	ф267*114
	3.3	Drive wheel specification	⌀×w(mm)	ф382*142	ф382*142	ф382*142
	3.4	Balance wheel specification	⌀×w(mm)	ф180*76	ф180*76	ф180*76
	3.5	Wheelbase (the front wheel)	b10(mm)	1430	1430	1430
Dimensions	4.1	Wheelbase (the rear wheel)	b11(mm)	703	703	703
	4.2	Vehicle height, mast retracted	h1(mm)	2110	2110	2360
	4.3	Free lifting height	h2(mm)	1500	1500	1500
	4.4	Standard lifting height	h3(mm)	4500	4500	4500
	4.5	Mast height, extended	h4(mm)	5480	5480	5480
	4.6	Overhead guardrail height	h14(mm)	2280	2280	2280
	4.7	Forks height, mast retracted	h13(mm)	35	40	45
	4.8	Mast/forks tilting angle (the front/the rear)	α/β(°)	3/5	3/5	3/5
	4.9	Overall vehicle length (with forks)	l1mm)	2505	2585	2700
	4.10	Vehicle body length (forks excluded)	l2(mm)	2046	2146	2246
	4.11	Vehicle body width	b1(mm)	1680	1680	1680
	4.12	Forks dimensions	s/e/l(mm)	35/100/1070	40/122/1070	45/125/1070
	4.13	Forks adjustment dimensions	b5(mm)	210-705	260-705	270-840
	4.14	Forward moving distance	L(mm)	655	700	640
	4.15	The min. ground clearance (wheelbase center)	m2(mm)	80	80	80
	4.16	Stacking aisle width, pallet1000×1200(1200 across forks)	Ast(mm)	2705	2785	2900
Performance	5.1	The min. turning radius	Wa(mm)	1905	2000	2105
	5.2	Travelling speed, unladen/ full-loaded	km/h	8/7	8/7	8/7
	5.3	Lift speed, unladen/ full-loaded	m/s	0.250/0.240	0.240/0.220	0.240/0.220
	5.4	Lower speed, unladen/ full-loaded	m/s	0.240/0.260	0.240/0.260	0.240/0.260
	5.5	The max. gradability, unladen/ full-loaded	%	⩽10	⩽10	⩽10
	5.6	Drive brake		Electromagnetic	Electromagnetic	Electromagnetic
Motor	6.1	Drive motor power	kw	6.5	6.5	6.5
	6.2	Lift power power	kw	8.6 AC	8.6 AC	8.6 AC
	6.3	Battery type		Lead-acid battery	Lead-acid battery	Lead-acid battery
	6.4	Battery voltage/capacity	V/Ah	48/300	48/400	48/400
	6.5	Motor	V/A	48/40	48/50	48/50
Others	7.1	Drive control mode		AC	AC	AC
	7.2	According to En12053 (noise level near drivers' ears)	dB(A)	75	75	75

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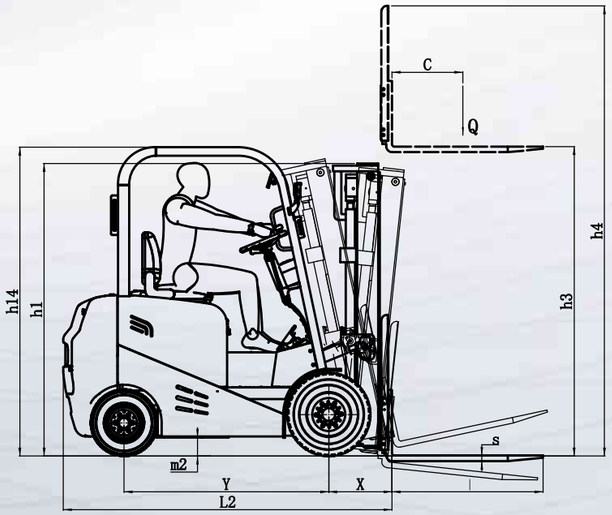
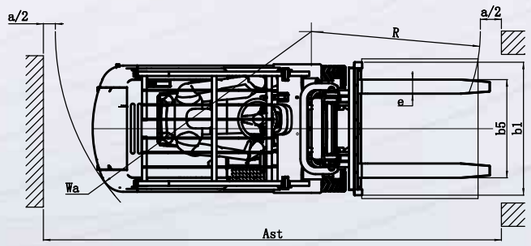
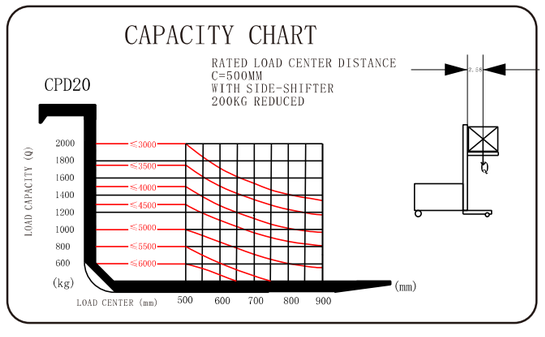
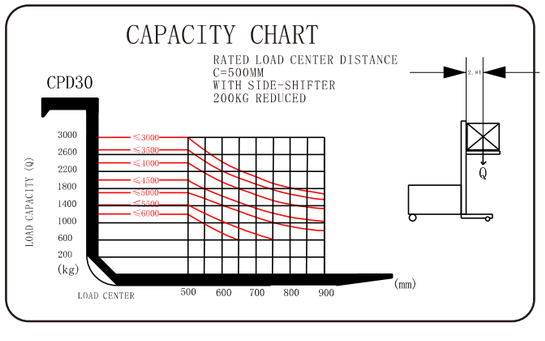
4-Wheel Electric Forklift CPD









- Streamline design: it adopts a new concept appearance design, through reducing the air friction to improve the drive speed of SILVER FOX. The outline beauty is matched with sense of racing and smoothness. It resembles a fox running in the wild field, agile and flexible;
- Excellent: 48V AC control system technology and branded controller matched with industrial advancing hydraulic system, over or equal to IP4 Q proof class, ensures energy consumption reduction and performance improvement of SILVER FOX; H-type box integrated structure, more compact structure, improves transmission efficiency, reduces the noise, simplifies the structure, easy to achieve lightweight. SILVER FOX can customize larger capacity battery or lithium battery, with longer endurance;
- Maintenance and comfort improvement: flexible open hood design of SILVER FOX breakthrough inconvenience of traditional vehicle maintenance:
  1: Take down the counterweight plate to change the battery straightly;
  2: Take down the left cover plate to examine electrical control maintenance;
  3: Full digital instrument system makes forklifts diagnosis and maintenance convenient and easy accessing;
- Equipped with ergonomic control platform, adjustable wrap-around safety seat, compact lift mast to ensure high operators comfort during the whole operation process.

Characteristic	1.1	Type		CPD15-30	CPD20-30	CPD25-30	CPD30-30
	1.2	Power (electricity, diesel, petrol, LPG, manual)		Electric	Electric	Electric	Electric
	1.3	Operation (Manual, walkie, side-standing, picker)		Seated type	Seated type	Seated type	Seated type
	1.4	Rated load capacity	Q(kg)	1500	2000	2500	3000
	1.5	Load center distance	C(mm)	500	500	500	500
	1.6	The front overhang distance	X(mm)	447	447	495	495
Weight	2.1	Wheelbase	Y(mm)	1460	1460	1600	1600
	3.1	Self weight with battery	kg	2850	3260	4210	4410
	3.2	Wheel type		Inflatable	Solid	Solid	Solid
Wheel/ chasis	3.3	The front wheel specification	⌀×w(mm)	6.50-10	6.50-10	23X9-10	23X9-10
	3.4	The rear wheel specification	⌀×w(mm)	5.00-8	5.00-8	18X7-8	18X7-8
	3.5	Wheelbase (the front wheel)	b10(mm)	910	910	970	970
	3.6	Wheelbase (the rear wheel)	b11(mm)	930	930	980	980
Dimensions	4.1	Vehicle height, mast retracted	h1(mm)	2095	2095	2095	2095
	4.2	Free lifting height	h2(mm)	80	80	80	80
	4.3	Standard lifting height	h3(mm)	3000	3000	3000	3000
	4.4	Mast height, extended	h4(mm)	4010	4010	4150	4150
	4.5	Overhead guardrail height	h14(mm)	2190	2190	2185	2185
	4.6	Forks height when mast retracted	h13(mm)	40	40	45	45
	4.7	Mast/forks tilting angle (the front/ the rear)	α/β(°)	6/10	6/10	6/12	6/12
	4.8	Vehicle body length (forks included/excluded)	L2(mm)	2330/3400	2330/3400	2530/3600	2530/3600
	4.9	Vehicle body width	b1(mm)	1105	1105	1200	1200
	4.10	Forks dimensions	s/e/l(mm)	35/100/1070	40/122/1070	45/125/1070	45/125/1070
	4.11	Forks adjustment dimensions	b5(mm)	244-1042	244-1042	250-1070	250-1070
	4.12	The min. ground clearance (wheelbase)	m2(mm)	130	130	130	130
	4.13	Stacking aisle width, pallet 1000×1200 (1200 cross forks)	Ast(mm)	3857	3857	4015	4015
	4.14	Stacking aisle width, pallet 1000×1200 (1000 cross forks)	Ast(mm)	4015	4015	4170	4170
	4.15	The min. turning radius	Wa(mm)	2090	2090	2200	2200
Performance	5.1	Travelling speed, full-loaded/unladen	km/h	11/12	11/12	11/12	11/12
	5.2	Lift speed, full-loaded/unladen	m/s	0.205/0.221	0.196/0.214	0.260/0.30	0.195/0.30
	5.3	Lower speed, full-loaded/unladen	m/s	0.350/0.260	0.365/0.240	0.365/0.30	0.365/0.240
	5.4	The max. gradability, unladen/ full-loaded	%	20/15	20/15	20/12	20/12
	5.5	Drive brake		Hydraulic	Hydraulic	Hydraulic	Hydraulic
	6.1	Drive motor power	kw	8 AC	8 AC	11 AC	11 AC
	6.2	Lift motor power	kw	8.6 AC	8.6 AC	12 AC	12 AC
	6.3	Battery type		Lead-acid battery	Lead-acid battery	Lead-acid battery	Lead-acid battery
	6.4	Battery voltage/capacity	V/Ah	48/400	48/450	48/480	48/550
	6.5	Battery charger	V/A	48/50	48/60	48/60	48/70
	6.5	Battery weight	kg	645	710	730	850
Others	7.1	Drive control mode		AC	AC	AC	AC
	7.2	According to En12053 (noise level near drivers' ears)	dB(A)	75	75	75	75

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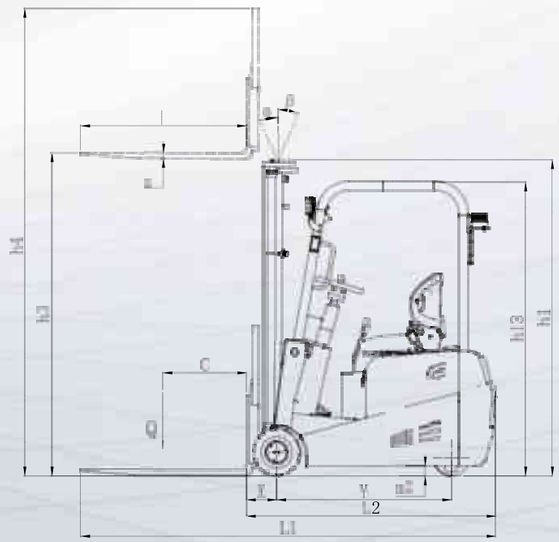
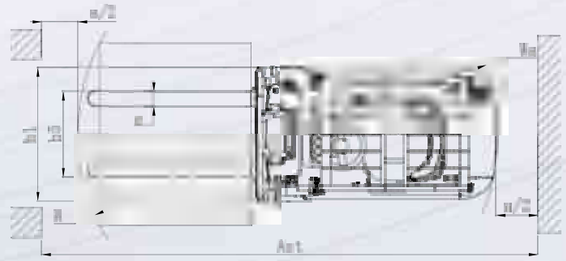
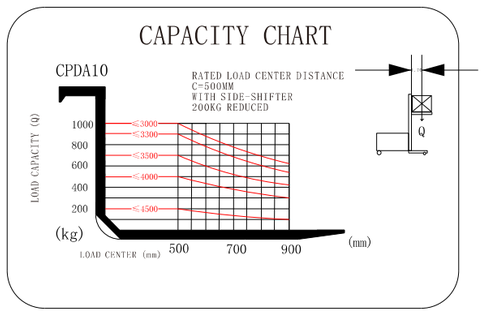
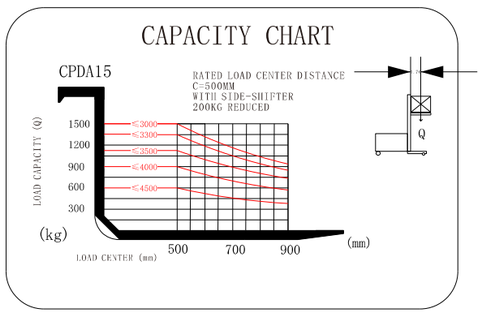




3-Wheel Electric Forklift

CPDA



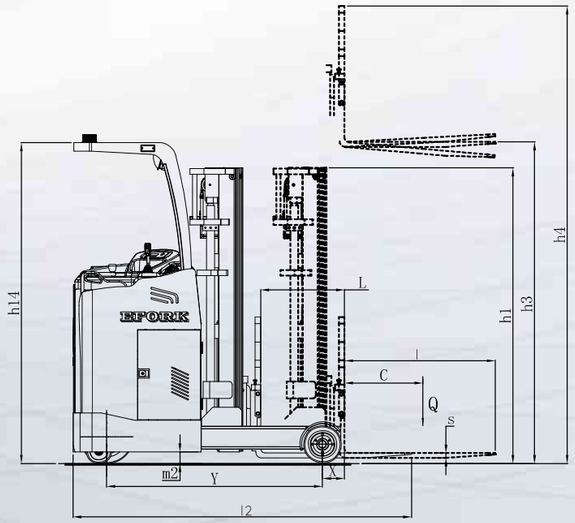


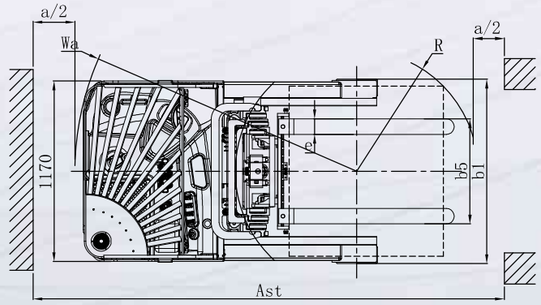
- Small volume, light weight, small turning radius. Easy to enter into lift, it suits operation between floors and carriages, improving the accessibility and space utility;
- Equipped with branded control system and multi-functional protection system, offering high- level functional safety;
- Equipped with vertical branded gear box, multi-functional solutions and flexible module construction system. Optimized gear meshing technology can reduce the noise and offer high performance and efficiency;
- EPS steering energy reduces 20% with accurate operation, flexible steering, relieving operators pressures and greatly improving the production ability;
- Equipped with full AC drive system, small volume, light weight, high efficiency, free-maintenance and carbon-brush replacement. No more maintenance and protection;
- Equipped with lift overload system, hydraulic anti-explosion design. In spite of exploded hoses, mast can still descend steadily to improve the safety;
- The front wheel adopts rubber material with strong grip and steady operation;
- Mast is equipped with buffering system and tilting up or down function;
- Temporary parking in forklifts ramp adopts electrical control and foot brake modes, offering the safety protection to its limit.

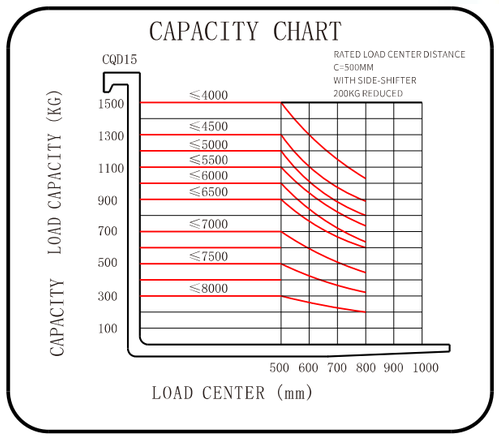
Characteristics	1.1	Type		CPDA10-30	CPDA15-30
	1.2	Power (electricity, diesel, petrol, LPG, manual)		Electric	Electric
	1.3	Operation (manual, walkie, side-standing, picker)		Seated type	Seated type
	1.4	Rated load capacity	Q(kg)	1000	1500
	1.5	Load center distance	C(mm)	500	500
	1.6	The front overhang distance	X(mm)	196	196
	1.7	Wheelbase	Y(mm)	1130	1130
Weight	2.1	Self weight with battery	kg	1700	2150
Wheel/ chasis	3.1	Wheel type		Rubber (the front)/PU (the rear)	Rubber (the front)/PU (the rear)
	3.2	Wheel dimensions, the rear wheel (drive wheel)	⌀×w(mm)	ϕ230×110	ϕ230×110
	3.3	Wheel dimensions, the front wheel	⌀×w(mm)	ϕ305×127	ϕ305×127
Dimensions	4.1	The front wheel distance	mm	752	752
	4.2	Vehicle height, mast retracted	h1(mm)	2035	2035
	4.3	Mast tilting scope, the front/the rear	α/β(°)	2/4	2/4
	4.4	Standard lifting height	h3(mm)	3000	3000
	4.5	Mast height, extended	h4(mm)	3918	3918
	4.6	Overhead guardrail height	h13(mm)	1930	1930
	4.7	Forks height, mast retracted	h(mm)	35	35
	4.8	Vehicle body length (forks excluded/included)	L2(mm)	1610/2680	1610/2680
	4.9	Overall width	b1(mm)	880	880
	4.10	Forks dimensions	s/e/l(mm)	35/100/1070	35/100/1070
	4.11	Forks adjustable outer width	b5(mm)	210-580	210-580
	4.12	The min. ground clearance (wheelbase center)	m2(mm)	60	60
	4.13	Stacking aisle width, pallet 1000×1200(1200 cross forks)	Ast(mm)	2931	2931
	4.14	The min. turning radius	Wa(mm)	1425	1425
Performance	5.1	Travelling speed, unladen/full-loaded	km/h	5.2/5	5.2/5
	5.2	Lift speed, unladen/full-loaded	m/s	0.135/0.095	0.135/0.090
	5.3	Lower speed, unladen/full-loaded	m/s	0.085/0.120	0.085/0.120
	5.4	The max. gradability, unladen/full-loaded	%	6/4	6/4
	5.5	Drive brake		Hydraulic+electromagnetic	Hydraulic+electromagnetic
Motor	6.1	Drive motor power	kw	1.5	2.5
	6.2	Lift motor power	kw	3.0	3.0
	6.3	Battery voltage/capacity	V/Ah	24/270	24/300
	6.4	Motor	V/A	24/40	24/40
Others	7.1	Drive control mode		AC	AC
	7.2	According to En12053 (noise level near drivers' ears)	dB(A)	75	75

The data is for reference only, please take the real object as references

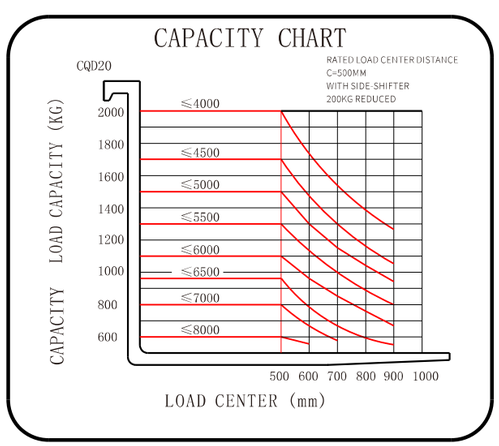
Electric Reach Forklift (Stand Type)48V CQD

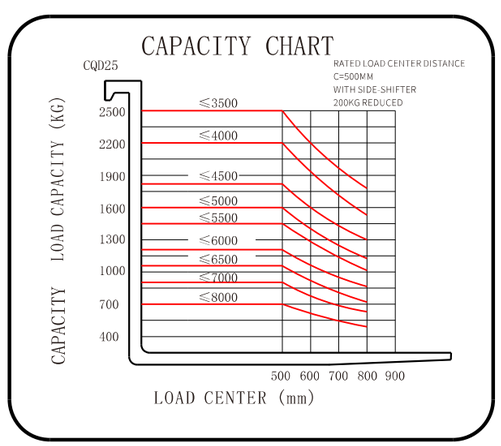






- Compact structure, high maneuverability. Low gravity center with good stability. It suits large tonnage, high lifting goods storage scenarios;
- It features in overall mast moving forward, with small turning radius to neglect obstacles at the bottom of the racks. It suits any space-limited scenarios, easy accessing or unloading goods;
- Equipped with full AC drive system, small volume, light weight, high efficiency, free-maintenance and carbon-brush replacement. No more maintenance and protection;
- Standard forks tilting up or down function, prevents goods from tipping over and improving the load capability。
- Side-pull battery suits multi-shifing occasions, with standard roller cart for easy change;
- 6.5m or above high-strength H type mast steel, not easy to deform, with reliable and stable operation.





Characteristics	1.1	Type		CQD15-45S	CQD20-45S	CQD20M-70S
	1.2	Power (electricity, diesel, LPG, petrol, manual)		Electric	Electric	Electric
	1.3	Operation (manual, walkie, side-standing, picker)		Side-standing	Side-standing	Side-standing
	1.4	Rated load capacity	Q(kg)	1500	2000	2000
	1.5	Load center distance	C(mm)	500	500	500
	1.6	Wheelbase	Y(mm)	1383	1533	1693
	1.7	Forward moving distance	L(mm)	500	594	565
Weight	2.1	Self weight with battery	kg	2700	3025	3355
Wheel/ chasis	3.1	Wheel type		PU	PU	PU
	3.2	Front wheel specification	⌀×w(mm)	ф267*114	ф267*114	ф267*114
	3.3	Drive wheel specification	⌀×w(mm)	ф382*142	ф382*142	ф382*142
	3. 4	Balance wheel specification	⌀×w(mm)	ф180*76	ф180*76	ф180*76
	3.5	Wheelbase (the front wheel)	b10(mm)	1081	1081	1155
Dimensions	4.1	Vehicle height, mast retracted	h1(mm)	2100	2100	3210
	4.2	Free lift height	h2(mm)	1500	1500	2320
	4.3	Standard lifting height	h3(mm)	4500	4500	7000
	4.4	Mast height, extended	h4(mm)	5480	5480	7965
	4.5	Overhead guardrail height	h14(mm)	2305	2305	2305
	4.6	Forks height , mast retracted	h13(mm)	35	40	40
	4.7	Mast/forks tilting angle (the front/the rear)	α/β(°)	3/5	3/5	3/5
	4.8	Vehicle body length (forks excluded/included)	l2(mm)	1752/2405	1902/2405	2060/2550
	4.9	Vehicle body width	b1(mm)	1195	1195	1270
	4.10	Forks dimensions	s/e/l(mm)	35/100/1070	40/122/1070	40/122/1070
	4.11	Forks adjustment dimensions	b5(mm)	210-700	244-700	244-700
	4.12	The min. ground clearance (Wheelbase center)	m2(mm)	80	80	80
	4.13	Stacking aisle width, pallet 1m×1.2m (1.2m cross forks)	Ast(mm)	2730	2882	3042
	4.14	The min. turning radius	Wa(mm)	1680	1836	1996
Performance	5.1	Travelling speed, unladen/full-loaded	km/h	8/7	8/7	8/7
	5.2	Lift speed unladen/full-loaded	m/s	0.330/0.245	0.300/0.235	0.280/0.200
	5.3	Lower speed unladen/full-loaded	m/s	0.260/0.325	0.330/0.400	0.330/0.400
	5.4	The max. gradability, unladen/full-loaded	%	⩽10	⩽10	⩽10
	5.5	Drive brake		Electromagnetic	Electromagnetic	Electromagnetic
Motor	6.1	Drive motor power	kw	4.5	6.5	6.5
	6.2	Lift motor power	kw	6.3	6.3	6.3
	6.3	Battery type		Lead-acid battery	Lead-acid battery	Lead-acid battery
	6.4	Battery voltage/capacity	V/Ah	48/300	48/400	48/400
	6.5	Charger	V/A	48/40	48/50	48/50
Others	7.1	Drive control mode		AC	AC	AC
	7.2	According to En12053 (noise level near drivers' ears)	dB(A)	75	75	75

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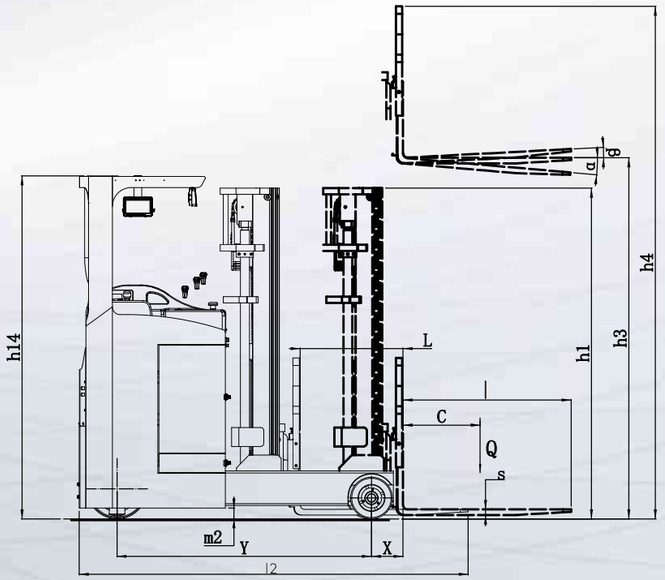
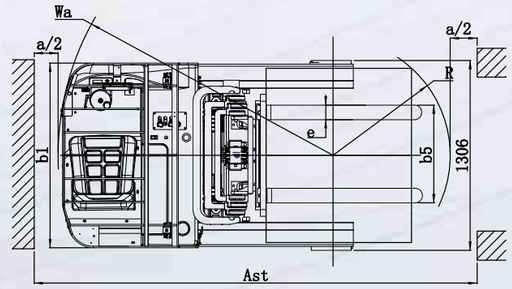
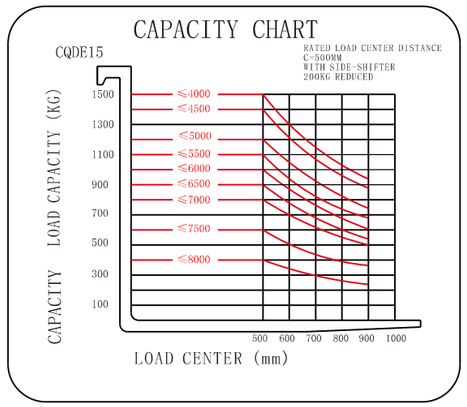
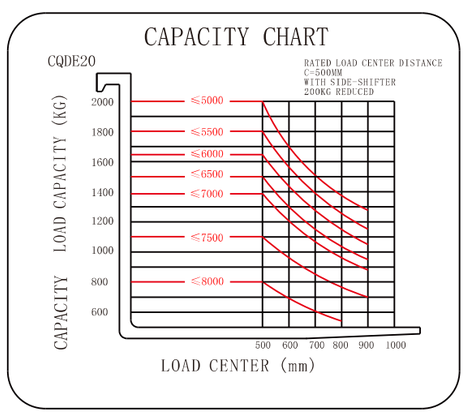
Electric Reach Forklift (Seated Type)48V CQDE

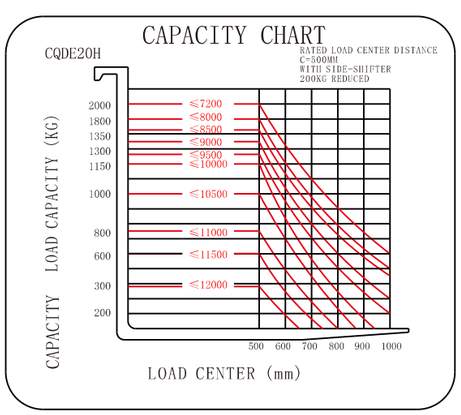




- Compact structure, high maneuverability. Low gravity center with good stability. It suits large tonnage, high lifting goods storage scenarios;
- Equipped with full AC drive system, small volume, light weight, high efficiency, free-maintenance and carbon-brush replacement. No more maintenance and protection;
- Equipped with branded control system and multi-functional protection system, it offers higher level functional safety;
- Equipped with smart HD display instrument, offering real-time vehicle operation status and fault display, it is easy for troubleshooting and maintenance;
- EPS steering energy reduces 20% with accurate operation, flexible steering, relieving operators pressures and greatly improving the production ability;
- Standard forks tilting up or down function, prevents goods from tipping over and improving the load capability;
- Side-pull battery suits multi-shifing occasions, with standard roller cart for easy change.



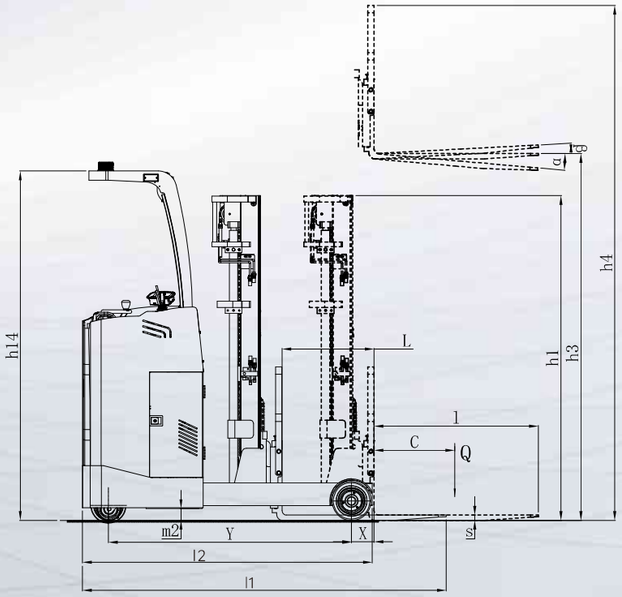


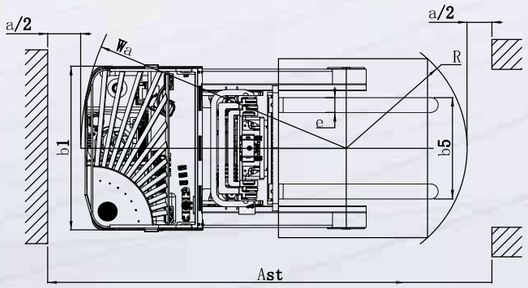


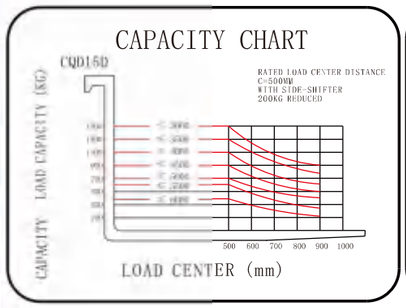
The data is for reference only, please take the real object as references

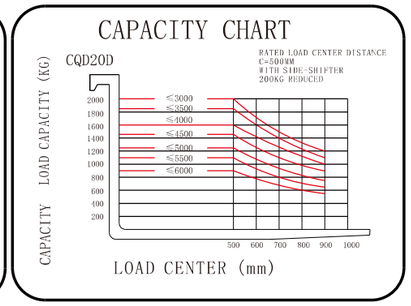
Characteristics	1.1	Type		CQDE15-45S	CQDE20-45S	CQDE20H-120S
	1.2	Power (electricity, diesel, LPG, petrol, manual)		Electric	Electric	Electric
	1.3	Operation (manual, walkie, side-standing, picker)		Seated type	Seated type	Seated type
	1.4	Rated load capacity	Q(kg)	1500	2000	2000
	1.5	Load center distance	C(mm)	500	500	500
	1.6	Wheelbase	Y(mm)	1470	1620	1650
	1.7	Forward moving distance	L(mm)	505	655	610
	1.7	Forward moving distance	X(mm)	183	183	183
Weight	2.1	Self weight with battery	kg	3000	3050	5860
Wheel/ chasis	3.1	Wheel type		PU	PU	PU
	3.2	Front wheel specification	⌀×w(mm)	ϕ267*114	ϕ267*114	ϕ280*135
	3.3	Drive wheel specification	⌀×w(mm)	ϕ382*142	ϕ382*142	ϕ382*142
	3.4	Wheelbase (the front wheel)	b10(mm)	1180	1180	1329
Dimensions	4.1	Vehicle height, mast retracted	h1(mm)	2105	2105	5136
	4.2	Free lift height	h2(mm)	1500	1500	4020
	4.3	Standard lifting height	h3(mm)	4500	4500	12000
	4.4	Mast height, extended	h4(mm)	5500	5500	12580
	4.5	Overhead guardrail height	h14(mm)	2180	2180	2180
	4.6	Forks height , mast retracted	h13(mm)	35	40	40
	4.7	Mast/forks tilting angle (the front/the rear)	α/β(°)	3/5	3/5	3/5
	4.8	Vehicle body length (forks excluded/included)	l2(mm)	2477	2477	2565
	4.9	Vehicle body width	b1(mm)	1270	1270	1270/1460
	4.10	Forks dimensions	s/e/l(mm)	35/100/1070	40/122/1070	40/122/1070
	4.11	Forks adjustment dimensions	b5(mm)	210-705	244-705	260-840
	4.12	The min. ground clearance (Wheelbase center)	m2(mm)	70	70	70
	4.13	Stacking aisle width, pallet 1m×1.2m (1.2m cross forks)	Ast(mm)	2964	3007	3010
	4.14	The min. turning radius	Wa(mm)	1800	1900	1922
Performance	5.1	Travelling speed, unladen/full-loaded	km/h	7.8/6.8	7.8/6.8	7.8/6.8
	5.2	Lift speed unladen/full-loaded	m/s	0.330/0.245	0.300/0.235	0.240/0.175
	5.3	Lower speed unladen/full-loaded	m/s	0.260/0.325	0.330/0.400	0.270/0.400
	5.4	The max. gradability, unladen/full-loaded	%	⩽10	⩽10	⩽10
	5.5	Drive brake		Electromagnetic	Electromagnetic	Electromagnetic
Motor	6.1	Drive motor power	kw	6.5	6.5	6.5
	6.2	Lift motor power	kw	6.3	6.3	12
	6.3	Battery type		Lead-acid battery	Lead-acid battery	Lead-acid battery
	6.4	Battery voltage/capacity	V/Ah	48/300	48/400	48/400
	6.5	Charger	V/A	48/40	48/50	48/50
Others	7.1	Drive control mode		AC	AC	AC
	7.2	According to En12053 (noise level near drivers' ears)	dB(A)	75	75	75

Electric Reach Forklift (Stand Type)24V CQD-D









- Compact structure, high maneuverability. Low gravity center with good stability. It suits large tonnage, high lifting goods storage scenarios;
- It features in overall mast moving forward, with small turning radius to neglect obstacles at the bottom of the racks. It suits any space-limited scenarios, easy accessing or unloading goods;
- Equipped with branded control system and multi-functional protection system, it offers higher level functional safety;
- Equipped with vertical branded gear box, multi-functional solutions and flexible module construction system. Optimized gear meshing technology can reduce the noise and offer high performance and efficiency;
- EPS steering energy reduces 20% with accurate operation, flexible steering, relieving operators pressures and greatly improving the production ability;
- Equipped with full AC drive system, small volume, light weight, high efficiency, free-maintenance and carbon-brush replacement. No more maintenance and protection.

Characteristics	1.1	Type		CQD12D-45S	CQD15D-45S	CQD20D-45S
	1.2	Power (electricity, diesel, LPG, petrol, manual)		Electric	Electric	Electric
	1.3	Operation (manual, walkie, side-standing, picker)		Side-standing	Side-standing	Side-standing
	1.4	Rated load capacity	Q(kg)	1200	1500	2000
	1.5	Load center distance	C(mm)	500	500	500
	1.6	Front overhang	X(mm)	145	145	145
	1.7	Wheelbase	Y(mm)	1399	1399	1584
Weight	2.1	Self weight with battery	kg	2200	2200	2250
Wheel/ chasis	3.1	Wheel type		PU	PU	PU
	3.2	Front wheel specification	⌀×w(mm)	ϕ254*104	ϕ254*104	ϕ254*104
	3.3	Drive wheel specification	⌀×w(mm)	ϕ230*75	ϕ230*75	ϕ230*75
	3. 4	Balance Wheel specification	⌀×w(mm)	ϕ150*50	ϕ150*50	ϕ150*50
	3.5	Wheelbase (the front wheel)	b10(mm)	978	978	978
	3.6	Wheelbase (the rear wheel)	b11(mm)	804	804	804
Dimensions	4.1	Vehicle height, mast retracted	h1(mm)	2120	2120	2120
	4.2	Standard lifting height	h3(mm)	4500	4500	4500
	4.3	Mast height, extended	h4(mm)	5485	5485	5485
	4.4	Overhead guardrail height	h14(mm)	2305	2305	2305
	4.5	Forks height , mast retracted	h13(mm)	35	35	40
	4.6	Mast/forks tilting angle (the front/the rear)	α/β(°)	3/5	3/5	3/5
	4.7	Vehicle body length (forks included)	l1(mm)	2272	2272	2385
	4.8	Vehicle body length (forks excluded)	l2(mm)	1703	1703	1888
	4.9	Vehicle body width	b1(mm)	1098	1098	1098
	4.10	Forks dimensions	s/e/l(mm)	35/100/1070	35/100/1070	40/122/1070
	4.11	Forks adjustment dimensions	b5(mm)	210-705	210-705	244-705
	4.12	Forward moving distance	L(mm)	500	500	600
	4.13	The min. ground clearance (Wheelbase center)	m2(mm)	77	77	77
	4.14	Stacking aisle width, pallet 1m×1.2m (1.2m cross forks)	Ast(mm)	2771	2771	2880
	4.15	The min. turning radius	Wa(mm)	1600	1600	1781
Performance	5.1	Travelling speed, unladen/full-loaded	km/h	5/4	5/4	5/4
	5.2	Lift speed unladen/full-loaded	m/s	0.135/0.115	0.135/0.110	0.135/0.100
	5.3	Lower speed unladen/full-loaded	m/s	0.085/0.120	0.085/0.132	0.085/0.140
	5.4	The max. gradability, unladen/full-loaded	%	8/6	8/4	8/4
	5.5	Drive brake		Electromagnetic	Electromagnetic	Electromagnetic
Motor	6.1	Drive motor power	kw	1.5	2.5	2.5
	6.2	Lift motor power	kw	3	3	3
	6.3	Battery type		Lead-acid battery	Lead-acid battery	Lead-acid battery
	6.4	Battery voltage/capacity	V/Ah	24/280	24/280	24/280
	6.5	Charger	V/A	24/40	24/40	24/40
Others	7.1	Drive control mode		AC	AC	AC
	7.2	According to En12053 (noise level near drivers' ears)	dB(A)	75	75	75

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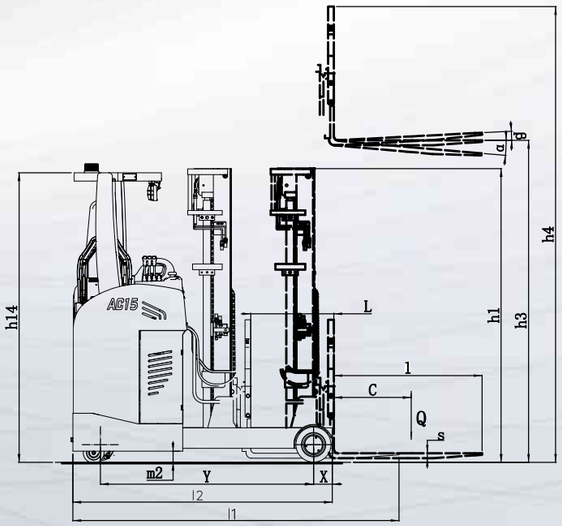
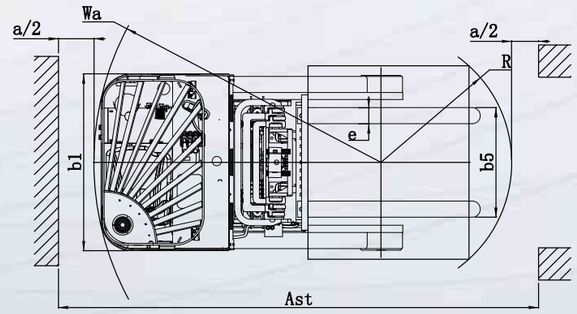
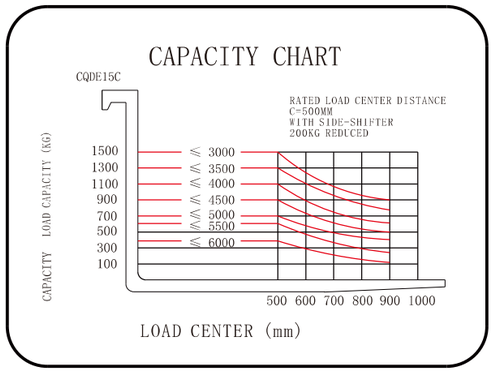
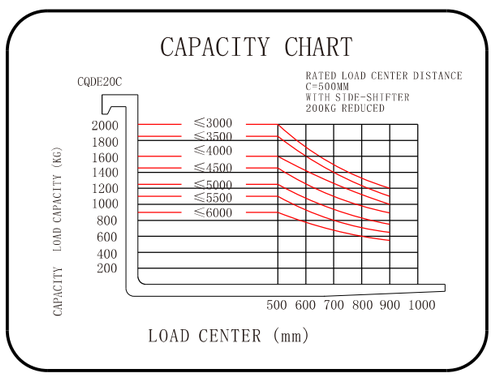
Electric Reach Forklift (Seated Type)24V CQDE-C









- Compact structure, high maneuverability. Low gravity center with good stability. It suits large tonnage, high lifting goods storage scenarios;
- It features in overall mast moving forward, with small turning radius to neglect obstacles at the bottom of the racks. It suits any space-limited scenarios, easy accessing or unloading goods;
- Equipped with branded control system and multi-functional protection system, it offers higher level functional safety;
- Equipped with vertical branded gear box, multi-functional solutions and flexible module construction system. Optimized gear meshing technology can reduce the noise and offer high performance and efficiency;
- EPS steering energy reduces 20% with accurate operation, flexible steering, relieving operators pressures and greatly improving the production ability;
- Equipped with full AC drive system, small volume, light weight, high efficiency, free-maintenance and carbon-brush replacement. No more maintenance and protection;
- Lift control lever lies in safety lowering position. When the forks are 100mm or so from the ground, it lowers slowly automatically to ensure the operation safety;
- When the forks are up to the highest level, the buffering system reduces the mast shock, improving the operation safety;
- Emergency power off switch, as a standard configuration, is pressed to cut off all power. The vehicle immediately stops by power cutting off to ensure secure protection.

				CQDE12C-45S	CQDE15C-45S	CQDE20C-45S
Characteristics	1.1	Type		Electric	Electric	Electric
	1.2	Power (electricity, diesel, LPG, petrol, manual)		Seated type	Seated type	Seated type
	1.3	Operation (manual, walkie, side-standing, picker)		1200	1500	2000
	1.4	Rated load capacity	Q(kg)	500	500	500
	1.5	Load center distance	C(mm)	180	180	180
	1.6	Front overhang	X(mm)	1355	1355	1540
	1.7	Wheelbase	Y(mm)			
Weight	2.1	Self weight with battery	kg	1995	2180	2535
Wheel/ chasis	3.1	Wheel type		PU	PU	PU
	3.2	Front wheel specification	⌀×w(mm)	ϕ254*104	ϕ254*104	ϕ254*104
	3.3	Drive wheel specification	⌀×w(mm)	ϕ230*75	ϕ230*75	ϕ230*75
	3.4	Balance Wheel specification	⌀×w(mm)	ϕ150*50	ϕ150*50	ϕ150*50
	3.5	Wheelbase (the front wheel)	b10(mm)	984	984	984
	3.6	Wheelbase (the rear wheel)	b11(mm)	772	772	772
Dimensions	4.1	Vehicle height, mast retracted	h1(mm)	2120	2120	2120
	4.2	Standard lifting height	h3(mm)	4500	4500	4500
	4.3	Mast height, extended	h4(mm)	5485	5485	5485
	4.4	Overhead guardrail height	h14(mm)	2090	2090	2090
	4.5	Forks height , mast retracted	h13(mm)	35	35	40
	4.6	Mast/forks tilting angle (the front/the rear)	α/β(°)	3/5	3/5	3/5
	4.7	Vehicle body length (forks included)	l1(mm)	2250	2250	2350
	4.8	Vehicle body length (forks excluded)	l2(mm)	1689	1689	1874
	4.9	Vehicle body width	b1(mm)	1100	1100	1100
	4.10	Forks dimensions	s/e/l(mm)	35/100/1070	35/100/1070	40/122/1070
	4.11	Forks adjustment dimensions	b5(mm)	210-705	210-705	244-705
	4.12	Forward moving distance	L(mm)	500	500	600
	4.13	The min. ground clearance (Wheelbase center)	m2(mm)	80	80	80
	4.14	Stacking aisle width, pallet 1m×1.2m (1.2m cross forks)	Ast(mm)	2764	2764	2872
	4.15	The min. turning radius	Wa(mm)	1600	1600	1780
Performance	5.1	Travelling speed, unladen/full-loaded	km/h	6.5/5.5	6.5/5.5	6.5/5.5
	5.2	Lift speed unladen/full-loaded	m/s	0.135/0.115	0.135/0.110	0.135/0.100
	5.3	Lower speed unladen/full-loaded	m/s	0.085/0.120	0.085/0.132	0.085/0.140
	5.4	The max. gradability, unladen/full-loaded	%	8/6	8/4	8/4
	5.5	Drive brake		Electromagnetic	Electromagnetic	Electromagnetic
Motor	6.1	Drive motor power	kw	1.5	2.5	2.5
	6.2	Lift motor power	kw	3	3	3
	6.3	Battery type		Lead-acid battery	Lead-acid battery	Lead-acid battery
	6.4	Battery voltage/capacity	V/Ah	24/280	24/280	24/280
	6.5	Charger	V/A	24/40	24/40	24/40
Others	7.1	Drive control mode		AC	AC	AC
	7.2	According to En12053 (noise level near drivers' ears)	dB(A)	75	75	75

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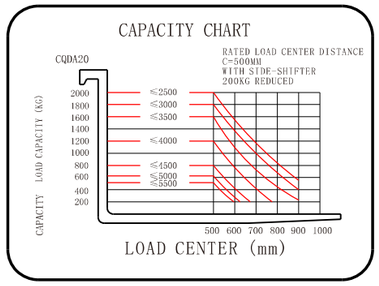
Electric Reach Forklift (Stand Type)CQDA



- Compact structure features in more convenient goods accessing in limited spaces. The mast moves forward as a whole, with adjustable forged forks. Suitable for various pallets, small turning radius. Barriers under the bottom of racks can be neglected;
- Equipped with branded control system and multi-functional protection system, it offers higher level functional safety;
- Equipped with vertical branded gear box, multi-functional solutions and flexible module construction system. Optimized gear meshing technology can reduce the noise and offer high performance and efficiency;
- AC drive, no carbon brush, maintenance-free, high-efficiency motor, accurate control, strong power.

Characteristics	1.1	Type		CQDA10-25	CQDA15-25	CQDA20-25
	1.2	Power (electricity, diesel, LPG, petrol, manual)		Electric	Electric	Electric
	1.3	Operation (manual, walkie, side-standing, picker)		Stand type	Stand type	Stand type
	1.4	Rated load capacity	Q(kg)	1000	1500	2000
	1.5	Load center distance	C(mm)	500	500	500
	1.6	Front overhang	X(mm)	155	155	155
	1.7	Wheelbase	Y(mm)	1335	1435	1585
	1.8	Forward moving distance	l4(mm)	500	600	730
Weight	2.1	Self weight with battery	kg	1875	1900	2050
Wheel/ chasis	3.1	Wheel type		PU	PU	PU
	3.2	Drive wheel specification	⌀×w(mm)	ф230*75	ф230*75	ф230*75
	3.3	Front wheel specification	⌀×w(mm)	ф210*85	ф210*85	ф210*85
	3.4	Rear Wheel specification	⌀×w(mm)	ф150*50	ф150*50	ф150*50
	3.5	Wheelbase (the front wheel)	b10(mm)	945	945	945
	3.6	Wheelbase (the rear wheel)	b11(mm)	735	735	735
Dimensions	4.1	Vehicle height, mast retracted	h1(mm)	1845	1845	1845
	4.2	Standard lifting height	h3(mm)	2500	2500	2500
	4.3	Mast height, extended	h4(mm)	3470	3470	3470
	4.4	Forks height , mast retracted	h13(mm)	35	35	40
	4.5	Mast/forks tilting angle (the front/the rear)	α/β(°)	3/5	3/5	3/5
	4.6	Vehicle body length (forks excluded/included)	l2(mm)	1734/2276	1834/2276	1984/2346
	4.7	Vehicle body width	b1(mm)	1034	1034	1034
	4.8	Forks dimensions	s/e/l(mm)	35/100/1070	35/100/1070	40/122/1070
	4.9	Forks adjustment dimensions	b5(mm)	210-680	210-680	245-705
	4.10	The min. ground clearance (Wheelbase center)	m2(mm)	70	70	70
	4.11	Stacking aisle width, pallet folded 1m×1.2m (1m along forks)	Ast(mm)	2681	2715	2816
	4.12	Stacking aisle width, pallet unfolded 1m×1.2m (1m along forks)	Ast(mm)	3083	3116	3220
	4.13	The min. turning radius (pallets folded/extended)	Wa(mm)	1652/2053	1752/2153	1900/2304
Performance	5.1	Travelling speed, unladen/full-loaded	km/h	5/4	5/4	5/4
	5.2	Lift speed unladen/full-loaded	m/s	0.112/0.095	0.112/0.092	0.112/0.085
	5.3	Lower speed unladen/full-loaded	m/s	0.094/0.110	0.094/0.115	0.096/0.123
	5.4	The max. gradability, unladen/full-loaded	%	8/5	8/5	6/4
	5.5	Drive brake		Electromagnetic	Electromagnetic	Electromagnetic
Motor	6.1	Drive motor power	kw	1.5	1.5	2.5
	6.2	Lift motor power	kw	2.2DC	2.2DC	2.2DC
	6.3	Battery type		Lead-acid battery	Lead-acid battery	Lead-acid battery
	6.4	Battery voltage/capacity	V/Ah	24/210	24/210	24/210
	6.5	Charger	V/A	24/30	24/30	24/30
Others	7.1	Drive control mode		AC	AC	AC
	7.2	According to En12053 (noise level near drivers' ears)	dB(A)	75	75	75

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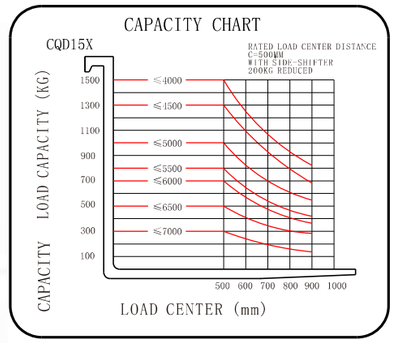
Double Deep Reach Truck CQD-X



- Equipped with double reach arms. The telescopic structure makes good forward or backward moving. When forks extend, the vehicle resembles a counterbalance stacker. Suitable for non-standard pallet, sealed pallet and enclosed racks. When forksretract, it resembles a straddle forklift. Flexible operation in narrow aisles;
- Extend and retract distance is1200mm, the largest good accessing depth is1500mm;
- Equipped with full AC drive system, small volume, light weight, high efficiency, free-maintenance and carbon-brush replacement. No more maintenance and protection.

Characteristics	1.1	Type		CQD15X-45
	1.2	Power (electricity, diesel, LPG, petrol, manual)		Electric
	1.3	Operation (manual, walkie, side-standing, picker)		Side-standing
	1.4	Rated load capacity	Q(kg)	1500
	1.5	Load center distance	C(mm)	500
	1.6	Wheelbase	Y(mm)	1562
Weight	2.1	Self weight with battery	kg	3540
Wheel/ chasis	3.1	Wheel type		PU
	3.2	Drive wheel specification	⌀×w(mm)	ф382*142
	3.3	Front wheel specification	⌀×w(mm)	ф145*100
	3.4	Balance Wheel specification	⌀×w(mm)	ф180*76
	3.5	Wheel numbers (the front wheel/X drive wheel/balance wheel)		4/2X/2
	3.6	Wheelbase (the front wheel)	b10(mm)	1562
Dimensions	4.1	Standard lifting height	h3(mm)	4500
	4.2	Mast height when closed	h1(mm)	3050
	4.3	Mast height, extended	h4(mm)	5585
	4.4	Overhead guardrail height	h14(mm)	2280
	4.5	Vehicle body length (forks included/excluded when folded)	l2(mm)	2410/1977
	4.6	Vehicle body width	b1(mm)	1390
	4.7	Forks dimensions	s/e/l(mm)	35/100/1070
	4.8	Forks adjustment dimensions	b5(mm)	210-680
	4.9	The min. ground clearance (Wheelbase center)	m2(mm)	65
	4.10	Stacking aisle width, pallet 1m×1.2m (1.2m cross forks)	Ast(mm)	2835
	4.11	The min. turning radius	Wa(mm)	1854
	4.12	Forks extend and retract distance	(mm)	1200
Performance	5.1	Max. travelling speed, unladen/full-loaded	km/h	7/6.5
	5.2	Lift speed unladen/full-loaded	m/s	0.330/0.245
	5.3	Lower speed unladen/full-loaded	m/s	0.260/0.325
	5.4	Drive brake		Electromagnetic
Motor	6.1	Drive motor power	kw	4.5
	6.2	Lift motor power	kw	6.3DC
	6.3	Battery type	Lead-acid battery	Lead-acid battery
	6.4	Battery voltage/capacity	V/Ah	48/300
Others	7.1	Charger	V/A	48/40
	7.2	Drive control mode		AC

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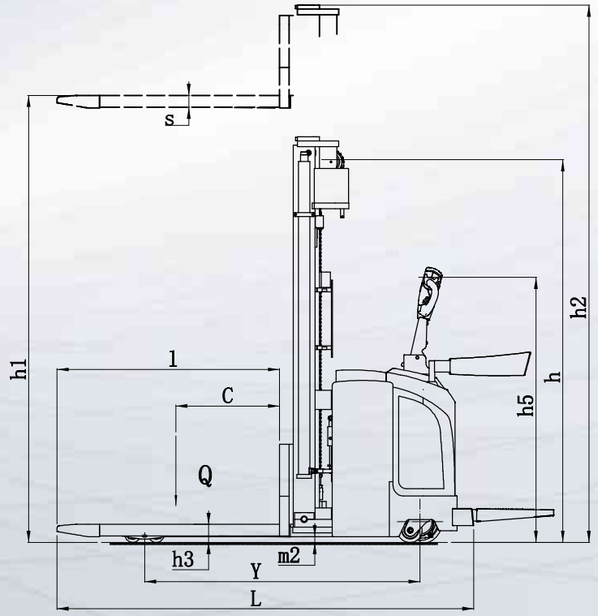
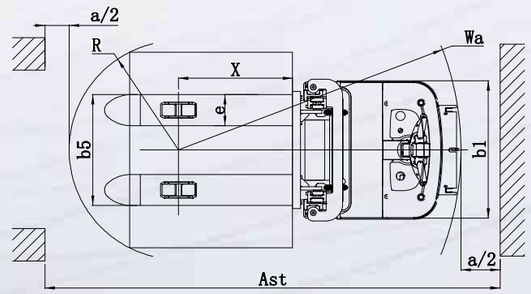
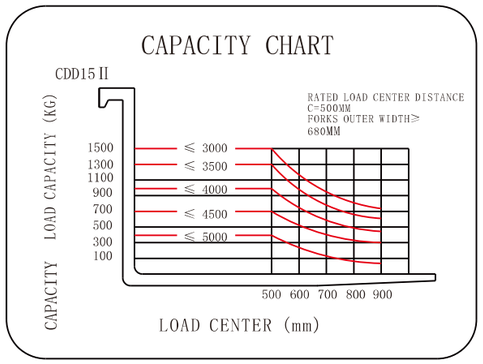
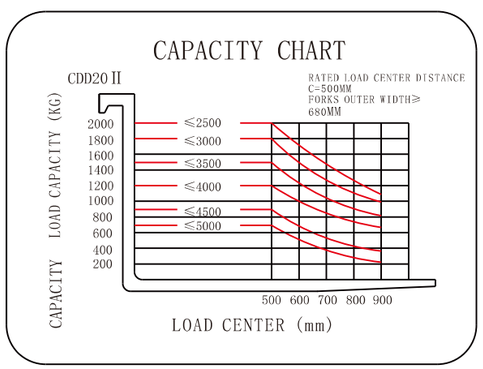
Electric Pallet Stacker (Stand Type)CDD II

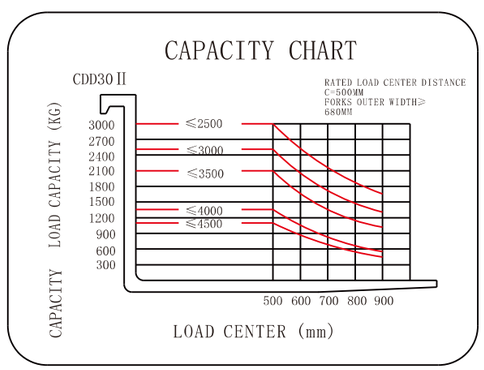




- Equipped with branded control system and multi-functional protection system, it offers higher level functional safety;
- Equipped with vertical branded gear box, multi-functional solutions and flexible module construction system. Optimized gear meshing technology can reduce the noise and offer high performance and efficiency;
- EPS steering energy reduces 20% with accurate operation, flexible steering, relieving operators pressures and greatly improving the production ability;
- No need to adjust the buffering spring. It can adjust the vertical drive unit according to road conditions, increasing the steady operation efficiency;
- High quality with buffering hydraulic system. Low noise, light shock, good seal, steady lift and lower processes;
- Equipped with full AC drive system, small volume, light weight, high efficiency, free-maintenance and carbon-brush replacement. No more maintenance and protection;
- Wide field mast design, specialized groove steel with high strength;
- Customized electromagnetic or laser navigation AGV.







Characteristics	1.1	Type		CDD10II-30	CDD15II-30	CDD20II-30
	1.2	Power (electricity, diesel, LPG, petrol, manual)		Full electric	Full electric	Full electric
	1.3	Operation (manual, walkie, side-standing, picker)		Stand type	Stand type	Stand type
	1.4	Rated load capacity	Q(kg)	1000	1500	2000
	1.5	Load center distance	C(mm)	500	500	500
	1.6	Bearing distance	X(mm)	676	676	676
	1.7	Wheelbase	Y(mm)	1430	1430	1430
Weight	2.1	Self weight with battery	kg	1075	1115	1150
Wheel/ chasis	3.1	Wheel type (The front/rear)		PU	PU	PU
	3.2	Front wheel specification	⌀×w(mm)	ϕ80x70	ϕ80x70	ϕ80x70
	3.3	The rear wheel specification	⌀×w(mm)	ϕ230x75	ϕ230x75	ϕ230x75
	3.4	Wheelbase (The front tyre)	b2(mm)	490	490	490
	3.5	Wheelbase (The rear tyre)	b3(mm)	658	658	658
Dimensions	4.1	Forks height , mast retracted	h(mm)	2060	2060	2060
	4.2	Standard lifting height	h1(mm)	3000	3000	3000
	4.3	Mast height, extended	h2(mm)	3541	3541	3541
	4.4	Handle height	h5(mm)	1430	1430	1430
	4.5	Forks height, mast retracted	h3(mm)	85	85	85
	4.6	Overall vehicle length (pallet folded/unfolded)	L(mm)	2185/2605	2185/2605	2185/2605
	4.7	Overall width	b1(mm)	850	850	850
	4.8	Forks dimensions	s/e/l(mm)	65/190/1150	65/190/1150	65/190/1150
	4.9	Forks outer distance	b5(mm)	680	680	680
	4.10	The min. ground clearance (Wheelbase center)	m2(mm)	30	30	30
	4.11	Stacking aisle width, pallet folded 1m×1.2m (1m cross forks)	Ast(mm)	2615	2615	2615
	4.12	Stacking aisle width, pallet unfolded 1m×1.2m (1m cross forks)	Ast(mm)	3016	3016	3016
	4.13	The min. turning radius (pallet folded/unfolded)	Wa(mm)	1729/2130	1729/2130	1729/2130
Performance	5.1	Travelling speed, unladen/full-loaded	km/h	5.5/5	5.5/5	5.5/5
	5.2	Lift speed unladen/full-loaded	m/s	0.11/0.1	0.1/0.09	0.1/0.086
	5.3	Lower speed unladen/full-loaded	m/s	0.082/0.112	0.082/0.115	0.082/0.123
	5.4	The max. gradability, unladen/full-loaded	%	8/6	8/6	8/4
	5.5	Drive brake		Electromagnetic	Electromagnetic	Electromagnetic
Motor	6.1	Drive motor power	kw	1.5	1.5	1.5
	6.2	Lift motor power	kw	2.2DC	2.2DC	2.2DC
	6.3	Battery type		Lead-acid battery	Lead-acid battery	Lead-acid battery
	6.4	Battery voltage/capacity	V/Ah	24/210	24/210	24/210
	6.5	Charger	V/A	24/30	24/30	24/30
Others	7.1	Drive control mode		AC	AC	AC
	7.2	According to En12053 (noise level near drivers' ears)	dB(A)	75	75	75

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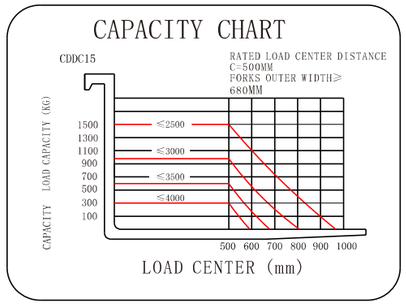
Electric Pallet Stacker(Walkie Type) CDDC



- Suitable for medium and short distances material handling in various scenarios of different height;
- High performance sealed internal battery. Long endurance. It works without adding water or other liquids;
- Compact structure saves the space. It goes through narrow aisles.

Characteristics	1.1	Type		CDDC10-16	CDDC10-30	CDDC15-16	CDDC15-30
	1.2	Power (electricity, diesel, LPG, petrol, manual)		Electric	Electric	Electric	Electric
	1.3	Operation (manual, walkie, side-standing, picker)		Walkie	Walkie	Walkie	Walkie
	1.4	Rated load capacity	Q(kg)	1000	1000	1500	1500
	1.5	Load center distance	C(mm)	500	500	500	500
	1.6	Front overhang	X(mm)	726	726	726	726
	1.7	Wheelbase	Y(mm)	1197	1197	1197	1197
Weight	2.1	Self weight with battery	kg	506	566	596	656
	2.2	Axle bearing capacity when full-loaded, drive end/bearing end	kg	711/1294	732/1344	743/1343	764/1392
	2.3	Axle bearing capacity when unladen, drive end/bearing end	kg	368/138	411/155	433/163	477/179
Wheel/ chasis	3.1	Wheel type (The front/rear)		PU/PU	PU/PU	PU/PU	PU/PU
	3.2	Front wheel specification	⌀×w(mm)	ϕ80x70	ϕ80x70	ϕ80x70	ϕ80x70
	3.3	The rear wheel specification	⌀×w(mm)	ϕ210x70	ϕ210x70	ϕ210x70	ϕ210x70
	3.4	Wheelbase (The front tyre)	b10(mm)	515	515	515	515
	3.5	Wheelbase (The rear tyre)	b11(mm)	530	530	530	530
Dimensions	4.1	Forks height , mast retracted	h1(mm)	2055	1980	2055	1980
	4.2	Standard lifting height	h3(mm)	1600	3000	1600	3000
	4.3	Mast height, extended	h4(mm)	2075	3478	2075	3478
	4.4	Forks height, mast retracted	h13(mm)	85	85	85	85
	4.5	Overall vehicle length	l2(mm)	1858	1865	1858	1865
	4.6	vehicle width	b1(mm)	800	800	800	800
	4.7	Forks dimensions	s/e/l(mm)	65/165/1150	65/165/1150	65/165/1150	65/165/1150
	4.8	Forks adjustment dimensions (forks outer width)	b5(mm)	350-680	350-680	350-680	350-680
	4.9	The min. ground clearance (Wheelbase center)	m2(mm)	25	25	25	25
	4.10	Stacking aisle width, pallet 1m×1.2m (1.2m cross forks)	Ast(mm)	2238	2238	2238	2238
	4.11	The min. turning radius	Wa(mm)	1380	1380	1380	1380
Performance	5.1	Travelling speed, unladen/full-loaded	km/h	4/3.5	4/3.5	4/3.5	4/3.5
	5.2	Lift speed unladen/full-loaded	m/s	0.11/0.095	0.101/0.095	0.101/0.09	0.101/0.09
	5.3	Lower speed unladen/full-loaded	m/s	0.111/0.125	0.111/0.125	0.111/0.130	0.111/0.130
	5.4	The max. gradability, unladen/full-loaded	%	6/5	6/5	6/3	6/3
	5.5	Drive brake		Electromagnetic	Electromagnetic	Electromagnetic	Electromagnetic
Motor	6.1	Drive motor power	kw	0.75	0.75	0.75	0.75
	6.2	Lift motor power	kw	2.2DC	2.2DC	2.2DC	2.2DC
	6.3	Battery type		Lead-acid battery	Lead-acid battery	Lead-acid battery	Lead-acid battery
	6.4	Battery voltage/capacity	V/Ah	2x12/80	2x12/80	2x12/80	2x12/80
	6.5	Charger	V/A	24/10	24/10	24/10	24/10
Others	7.1	Drive control mode		DC	DC	DC	DC
	7.2	According to En12053 (noise level near drivers' ears)	dB(A)	75	75	75	75

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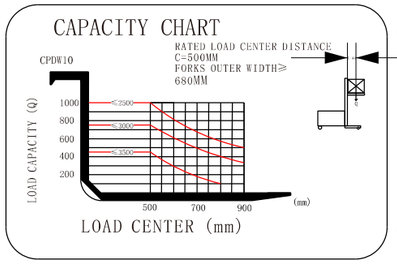
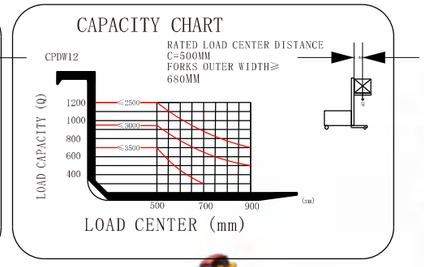
Electric Pallet Stacker(Walkie Counterbalanced Type) CPDW



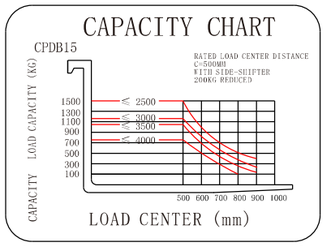


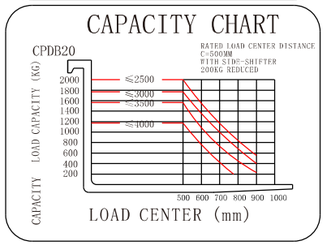
- Compared to the same kind products in market, it owns smaller turning radius and aisles, larger load center distance (500mm), outstanding in performance;
- Equipped with branded control system and multi-functional protection system, it offers higher level functional safety;
- Free-maintenance battery(Li-ion optional). No need to add liquids. It is easy to maintain, saving the energy. Build-in motor. Easy charging by only open the cover;
- Excellent layout structure, Easy parts assembly or disassembly, easy for maintenance.

Characteristics	1.1	Type		CPDW10-30	CPDW12-30
	1.2	Power (electricity, diesel, LPG, petrol, manual)		Electric	Electric
	1.3	Operation (manual, walkie, side-standing, picker)		Walkie	Walkie
	1.4	Rated load capacity	Q(kg)	1000	1200
	1.5	Load center distance	C(mm)	500	500
	1.6	Front overhang	X(mm)	71	85
	1.7	Wheelbase	Y(mm)	1340	1312
Weight	2.1	Self weight with battery	kg	1320	1480
Wheel/ chasis	3.1	Wheel type (The front/rear)		PU/PU	
	3.2	Front wheel specification	⌀×w(mm)	ϕ140x100	ϕ210*85
	3.3	The rear wheel specification	⌀×w(mm)	ϕ210x70	ϕ250x80
	3.4	Wheelbase (The front tyre)	b2(mm)	816	801
Dimensions	4.1	Forks height , mast retracted	h1(mm)	2065	2115
	4.2	Free lift height	h2(mm)	0	0
	4.3	Standard lifting height	h(mm)	3000	3000
	4.4	Mast height, extended	h2(mm)	3913	3913
	4.5	Forks height, mast retracted	h3(mm)	35	35
	4.6	Overall vehicle length(Without Forks / With Forks)	L(mm)	1652/2573	1684/2612
	4.7	vehicle width (Lifting height＜3500/＞3500mm)	b1(mm)	916	886
	4.8	Forks dimensions	s/e/l(mm)	920*100*35	1070*100*35
	4.9	Forks adjustment dimensions	b5(mm)	200-580	200-580
	4.10	The min. ground clearance (Wheelbase center)	m2(mm)	40	72
	4.11	Stacking aisle width, pallet 1m×1.2m (1.2m cross forks)	Ast(mm)	2956	2846
	4.12	Stacking aisle width, pallet 1m×1.2m (1.2m along forks)	Ast(mm)	3094	3083
	4.13	The min. turning radius	Wa(mm)	1528	1480
Performance	5.1	Travelling speed, unladen/full-loaded	km/h	4.0/3.5	4.0/3.5
	5.2	Lift speed unladen/full-loaded	m/s	0.215/0.130	0.215/0.130
	5.3	Lower speed unladen/full-loaded	m/s	0.105/0.130	0.105/0.130
	5.4	The max. gradability, unladen/full-loaded	%	5.0/4.0	5.0/4.0
	5.5	Drive brake		Electromagnetic	Electromagnetic
Motor	6.1	Drive motor power	kw	0.75	1.5
	6.2	Lift motor power	kw	2.2DC	2.2DC
	6.3	Battery type		Lead-acid battery	Lead-acid battery
	6.4	Battery voltage/capacity	V/Ah	24/100	24/150
	6.5	Charger	V/A	24/10	24/20
Others	7.1	Drive control mode		DC	AC
	7.2	According to En12053 (noise level near drivers' ears)	dB(A)	70	70

The data is for reference only, please take the real object as references

Electric Pallet Stacker (Stand Counterbalanced Type) CPDB





- Pallet stacker(counterbalance type), with adjustable forged forks, various pallets available, easy access to goods;
- Equipped with branded control system and multi-functional protection system, it offers higher level functional safety;
- Equipped with vertical branded gear box, multi-functional solutions and flexible module construction system. Optimized gear meshing technology can reduce the noise and offer high performance and efficiency.

Characteristic	1.1	Type		CPDB10-25	CPDB15-25	CPDB20-25
	1.2	Power (electricity, diesel, LPG, petrol, manual)		Electric	Electric	Electric
	1.3	Operation (manual, walkie, side-standing, picker)		Stand type	Stand type	Stand type
	1.4	Rated load capacity	Q(kg)	1000	1500	2000
	1.5	Load center distance	C(mm)	500	500	500
	1.6	Front overhang	X(mm)	129	129	129
	1.7	Wheelbase	Y(mm)	1335	1435	1635
Weight	2.1	Self weight with battery	kg	1700	1775	1890
Wheel/ chasis	3.1	Wheel type (The front/rear)		PU	PU	PU
	3.2	Drive specification	⌀×w(mm)	ϕ230*75	ϕ230*75	ϕ230*75
	3.3	Front wheel specification	⌀×w(mm)	ϕ210*85	ϕ210*85	ϕ210*85
	3.4	The rear wheel specification	⌀×w(mm)	ϕ150*50	ϕ150*50	ϕ150*50
	3.5	Wheelbase (The front tyre)	b10(mm)	898	898	898
	3.6	Wheelbase (The rear tyre)	b11(mm)	736	736	736
Dimensions	4.1	Forks height , mast retracted	h1(mm)	1845	1845	1845
	4.2	Standard lifting height	h3(mm)	2500	2500	2500
	4.3	Mast height, extended	h4(mm)	3470	3470	3470
	4.4	Overall vehicle length, pedal folded(Without Forks / With Forks)	l2(mm)	1757/2834	1857/2934	2057/3134
	4.5	Vehicle width	b1(mm)	983	983	983
	4.6	Forks dimensions	s/e/l(mm)	35/100/1070	35/100/1070	40/122/1070
	4.7	Forks adjustment dimensions	b5(mm)	210-680	210-680	210-705
	4.8	The min. ground clearance (Wheelbase center)	m2(mm)	70	70	70
	4.9	Stacking aisle width, pallet 1m×1.2m (1.2m cross forks) (pedal folded/unfolded)	Ast(mm)	3131/3534	3231/3634	3431/3834
	4.10	The min. turning radius(pedal folded/unfolded)	Wa(mm)	1652/2055	1752/2155	1952/2355
Performance	5.1	Travelling speed, unladen/full-loaded	km/h	5/4	5/4	5/4
	5.2	Lift speed unladen/full-loaded	m/s	0.112/0.095	0.112/0.085	0.090/0.070
	5.3	Lower speed unladen/full-loaded	m/s	0.094/0.110	0.094/0.115	0.096/0.123
	5.4	The max. gradability, unladen/full-loaded	%	8/5	8/5	6/4
	5.5	Drive brake		Electromagnetic	Electromagnetic	Electromagnetic
Motor	6.1	Drive motor power	kw	1.5	1.5	2.5
	6.2	Lift motor power	kw	2.2DC	2.2DC	2.2DC
	6.3	Battery type		Lead-acid battery	Lead-acid battery	Lead-acid battery
	6.4	Battery voltage/capacity	V/Ah	24/210	24/210	24/210
	6.5	Charger	V/A	24/30	24/30	24/30
Others	7.1	Drive control mode		AC	AC	AC
	7.2	According to En12053 (noise level near drivers' ears)	dB(A)	75	75	75

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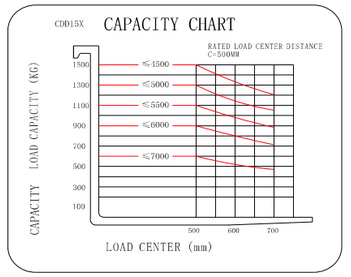

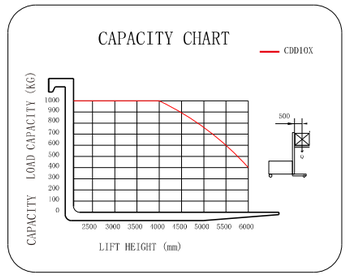

Electric Order Picker CDD-X

- High-level order picker operation, overall light weight, good mobility, suitable for one person;
- Wide field enhances operator driving safety;
- Lowering buffering increases the overall safety;
- Double protection legs structure, more secure, close to ground;
- Equipped with horn to ensure the driving safety.

Characteristic	1.1	Type		CDD10X-45	CDD15X-45
	1.2	Power (electricity, diesel, LPG, petrol, manual)		Order picker	Order picker
	1.3	Operation (manual, walkie, side-standing, picker)	Q(kg)	1000	1500
	1.4	Rated load capacity	C(mm)	500	500
	1.5	Wheelbase	Y(mm)	1845	1845
Weight	2.1	Self weight with battery	kg	3000	3000
Wheel/ chasis	3.1	Wheel type (The front/rear)		PU solid tyre	PU solid tyre
	3.2	Front wheel specification	⌀×w(mm)	ϕ180*76	ϕ180*76
	3.3	Drive wheel specification	⌀×w(mm)	ϕ254*102	ϕ382*142
	3.4	Balance Wheel specification	⌀×w(mm)	125*50	/
	3.5	Wheelbase (the front wheel)	b10(mm)	1060	1160
	3.6	Wheelbase (the rear wheel)	b11(mm)	784	/
Dimensions	4.1	Standard lifting height	h3(mm)	4500	4500
	4.2	Mast height, extended	h4(mm)	6670	6670
	4.3	Overhead guardrail height	h14(mm)	2210	2210
	4.4	Vehicle length	l2(mm)	1865(Forks excluded)	2500(Forks excluded)
	4.5	Vehicle width	b1(mm)	1130	1300
	4.6	Forks dimensions	s/e/l(mm)	35/100/920	40/122/920
	4.7	Forks adjustment dimensions	b5(mm)	210-770	210-770
	4.8	The min. ground clearance (Wheelbase center)	m2(mm)	50	60
	4.9	Stacking aisle width, pallet 1m×1.2m (1.2m cross forks)	Ast(mm)	3256	3670
	4.10	The min. turning radius(pedal folded/unfolded)	Wa(mm)	1657	2140
Performance	5.1	Travelling speed, unladen/full-loaded	km/h	5/3	5/3
	5.2	The max. gradability, unladen/full-loaded	%	10/6	10/6
	5.3	Drive brake		Electromagnetic	Electromagnetic
Motor	6.1	Drive motor power	kw	2.5	6.5
	6.2	Lift speed unladen/full-loaded	m/s	0.110/0.100	0.275/0.215
	6.3	Lower speed unladen/full-loaded	m/s	0.75/0.080	0.150/0.195
	6.4	Lift motor power	kw	3	6.3
	6.5	Battery type		Lead-acid battery	Lead-acid battery
	6.6	Battery voltage/capacity	V/Ah	24/300	48/300
	6.7	Charger	V/A	24/40	48/40
Others	7.1	Drive control mode		AC	AC
	7.2	According to En12053 (noise level near drivers' ears)	dB(A)	75	75

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Electric Pallet Truck (Side Standing Type)
CBDA

- Compact structure, comfortable operation, with heavy load, suitable for factory, workshop scenarios;
- Equipped with branded control system and multi-functional protection system, it offers higher level functional safety;
- EPS steering energy reduces 20% with accurate operation, flexible steering, relieving operators pressures and greatly improving the production ability;
- Equipped with full AC drive system, small volume, light weight, high efficiency, free-maintenance and carbon-brush replacement. No more maintenance and protection;
- Only by stepping on the pedal switch can the vehicle moves. Otherwise, it stops. This design improves the safety.
- Side-pull battery is easy to change, suitable for multi-shifting;
- Large power battery, long endurance and life expectancy;
- Electromagnetic brake. It stops from sliding when powers cut off.

Characterisrtic	1.1	Type		CBD50A	CBD60A	CBD70A	CBD80A
	1.2	Power (electricity, diesel, LPG, petrol, manual)		Electric	Electric	Electric	Electric
	1.3	Operation (manual, walkie, side-standing, picker)		Side-standing	Side-standing	Side-standing	Side-standing
	1.4	Steering way		EPS	EPS	EPS	EPS
	1.5	Rated load capacity	Q(kg)	5000	6000	7000	8000
	1.6	Load center distance	C(mm)	600	600	600	600
	1.7	Wheelbase	Y(mm)	1785	1940	1990	1990
Weight	2.1	Self weight with battery	kg	1530	1586	2380	2430
Wheel/ chasis	3.1	Wheel type (The front/rear)		PU	PU	PU	PU
	3.2	Front wheel specification	⌀×w(mm)	ϕ80*110	ϕ80*110	ϕ100*120	ϕ100*120
	3.3	The rear wheel specification	⌀×w(mm)	ϕ254*102	ϕ382*142	ϕ382*142	ϕ382*142
	3.4	Balance Wheel specification	⌀×w(mm)	ϕ150*50	ϕ180*76	ϕ180*76	ϕ180*76
Dimensions	4.1	Mast height, extended	H (mm)	225	240	270	270
	4.2	Forks surface height from the ground when lowering	H1(mm)	105	120	150	150
	4.3	Forks outer width	S1 (mm)	720	720	720	720
	4.4	Vehicle length	L (mm)	2215	2370	2450	2450
	4.5	Vehicle width	S(mm)	1090	1090	1260	1260
	4.6	Forks dimensions	s/e/l(mm)	70/215/1200	70/215/1200	120/270/1200	120/270/1200
	4.7	Stacking aisle width, pallet 1m×1.2m (1.0m cross forks)	Ast(mm)	2765	2990	3050	3050
	4.8	The min. turning radius	Wa(mm)	2020	2190	2250	2250
Performance	5.1	Travelling speed, unladen/full-loaded	km/h	5/4	5/4	4/3	4/3
	5.2	Lift speed unladen/full-loaded	m/s	0.042/0.04	0.050/0.048	0.052/0.050	0.052/0.048
	5.3	Lower speed unladen/full-loaded	m/s	0.35/0.045	0.035/0.050	0.04/0.055	0.04/0.055
	5.4	The max. gradability, unladen/full-loaded	%	8/5	8/5	6/4	6/4
	5.5	Drive brake		Electromagnetic	Electromagnetic	Electromagnetic	Electromagnetic
Motor	6.1	Drive motor power	kw	3	4.5	6.5	6.5
	6.2	Lift motor power	kw	3DC	6.3DC	6.3DC	6.3DC
	6.3	Battery type		Lead-acid battery	Lead-acid battery	Lead-acid battery	Lead-acid battery
	6.4	Battery voltage/capacity	V/Ah	24/300	48/300	48/300	48/400
	6.5	Charger	V/A	24/40	48/40	48/40	48/50
Others	7.1	Drive control mode		AC	AC	AC	AC
	7.2	According to En12053 (noise level near drivers' ears)	dB(A)	75	75	75	75

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Electric Pallet Truck (Stand Type)
CBDIII

- Equipped with branded control system and multi-functional protection system, it offers higher level functional safety;
- Equipped with vertical branded gear box, multi-functional solutions and flexible module construction system. Optimized gear meshing technology can reduce the noise and offer high performance and efficiency.
- Equipped with full AC drive system, small volume, light weight, high efficiency, free-maintenance and carbon-brush replacement. No more maintenance and protection;

Characteristic	1.1	Type		CBD20III	CBD25III	CBD30III
	1.2	Power (electricity, diesel, LPG, petrol, manual)		Electric	Electric	Electric
	1.3	Operation (manual, walkie, side-standing, picker)		Stand type	Stand type	Stand type
	1.4	Steering way		EPS	EPS	EPS
	1.5	Rated load capacity	Q(kg)	2000	2500	3000
	1.6	Load center distance	C(mm)	600	600	600
	1.7	Wheelbase	Y(mm)	1380	1380	1380
Weight	2.1	Self weight with battery	kg	690	700	710
Wheel/ chasis	3.1	Wheel type (The front/rear)		PU	PU	PU
	3.2	Front wheel specification	⌀×w(mm)	ϕ80*80	ϕ80*80	ϕ80*80
	3.3	The rear wheel specification	⌀×w(mm)	ϕ230*75	ϕ230*75	ϕ230*75
	3.4	Balance Wheel specification	⌀×w(mm)	ϕ125*50	ϕ125*50	ϕ125*50
Dimensions	4.1	Mast height, extended	H (mm)	205	205	205
	4.2	Forks surface height from the ground when lowering	H1(mm)	85	85	85
	4.3	Forks outer width	S1(mm)	685/540	685/540	685/540
	4.4	Vehicle length(pedal folded/unfolded)	L (mm)	1825/2240	1825/2240	1825/2240
	4.5	Vehicle width	S(mm)	760	760	760
	4.6	Forks dimensions	s/e/l(mm)	55/175/1150	55/175/1150	55/175/1150
	4.7	Stacking aisle width, pallet 1m×1.2m (1.0m cross forks)(pedal folded/unfolded)	Ast(mm)	2220/2620	2220/2620	2220/2620
Performance	4.8	Bearing distance	X (mm)	970	970	970
	4.9	The min. turning radius	Wa(mm)	1670/2070	1670/2070	1670/2070
	5.1	Travelling speed, unladen/full-loaded	km/h	6/5.5	6/5.5	6/5
	5.2	Lift speed unladen/full-loaded	m/s	0.043/0.040	0.043/0.040	0.043/0.040
	5.3	Lower speed unladen/full-loaded	m/s	0.035/0.445	0.035/0.445	0.035/0.445
	5.4	The max. gradability, unladen/full-loaded	%	10/8	10/8	10/6
	5.5	Drive brake		Electromagnetic	Electromagnetic	Electromagnetic
Motor	6.1	Drive motor power	kw	1.5	1.5	1.5
	6.2	Lift motor power	kw	0.8DC	0.8DC	0.8DC
	6.3	Battery type		Lead-acid battery	Lead-acid battery	Lead-acid battery
	6.4	Battery voltage/capacity	V/Ah	24/210	24/210	24/210
	6.5	Charger	V/A	24/30	24/30	24/30
Others	7.1	Drive control mode		AC	AC	AC
	7.2	According to En12053 (noise level near drivers' ears)	dB(A)	75	75	75

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Electric Luggage tractor EPQ

- Low noise, pollution free, large towing capacity, widely suitable for airport, freight service spot, yard, wharf, warehouse and other industries;
- The front and rear axles utilize a suspension system with torsion beam structure with shock absorbers, leaf spring and damping devices;
- Special high-strength arch-design cab. Double rows seating layout, two doors design. Fans, parking air conditioner are optional.

Type				EPQ300
Power				Lithium iron phosphate battery
Performance	Max. hitch towing capacity		KN	28.8
	Rated hitch towing capacity			13.2
	Rated towing capacity	Single unit towing capacity	Kg	30000
	Max. drive speed	Moving forward(unladen/full-loaded)	Km/h	25
		Moving backward		10
	Min. turning radius Wa		mm	3200
	Max. gradability when unladen		%	30
	Max. brake distance	Without trailer	m	5.7
		Rated towing capacity		4.7
Appearance dimensions	Overall length (Tow pin included) l1		mm	3135
	Overall width b1			1440
	Overall height (With cab, siren light) h1			2185
	The front wheelbase b2			1220
	The rear wheelbase b3			1190
	Wheelbase Y			1600
	Tow pin hitch height up/down h3			310/400
	Min. ground clearance m2			165
Tyre	Tyre specifications	The front wheel		6.50-10PR
		The rear wheel		7.00-15PR
Weight	Overall vehicle weight (with cab)		Kg	4170
Motor	Rated power		kW	23
Battery	Voltage/capacity		V/Ah	80V /600Ah
Charger	Voltage/current		V/A	80V/80A
Steering	Hydraulic power steering			
Brake	Vacuum power brake system			
	Drive brake			Drum brake (the rear),Disc brake (the front)
	Parking brake			Mechanical rear wheel brake

The data is for reference only, please take the real object as references

10-15T Electric Tow Tractor EPQ-B

- Scenarios application: factory, workshop, wharf, port, airport. The spacious luggage compartment offers towing services for cargo loading or unloading from the aircraft;
- Full AC driving system, with branded controller. High accuracy and efficiency. Automobile trouble-shooting;
- New circumnavigation-style electric power steering system. Higher transmission efficiency. Comfortable operation and long life expectancy.

Type				EPQ100	EPQ120	EPQ150
Power				Lead-acid battery	Lead-acid battery	Lead-acid battery
Performance	Max. hitch towing capacity		KN	8.5	11.3	12.3
	Rated hitch towing capacity			2.2	2.56	3.8
	Rated towing capacity	Single unit towing capacity	Kg	10000	12000	15000
	Max. drive speed	Moving forward(unladen/full-loaded)	Km/h	12/6.0	16.0/8	16.0/8
		Moving backward		6	10	10
	Min. turning radius Wa		mm	2890	2890	2890
	Max. gradability when unladen		%	20	25	20
	Max. brake distance	Without trailer	m	2.8	2.8	2.8
		Rated towing capacity		2.3	2.3	2.3
Appearance dimensions	Overall length (Tow pin included) l1		mm	2460	2460	2540
	Overall width b1			1150	1150	1150
	Overall height (With cab, siren light) h1			2190	2190	2190
	The front wheelbase b2			1010	1010	1010
	The rear wheelbase b3			985	985	985
	Wheelbase Y			1530	1530	1530
	Tow pin hitch height up/down h3			350/450	350/450	350/450
	Min. ground clearance m2			105	105	105
Tyre	Tyre specifications	The front wheel		5.00-8	5.00-8	5.00-8
		The rear wheel		6.00-9	6.00-9	6.00-9
Weight	Overall vehicle weight (with cab)		Kg	1950	2130	2230
Motor	Rated power		kW	8	9	12
Battery	Voltage/capacity		V/Ah	48V /400Ah	80V /300Ah	80V /375Ah
Charger	Voltage/current		V/A	48V/50A	80V/40A	80V/40A
Steering	Electronic power steering					
Brake	Drive brake			Drum brake (the rear)		
	Parking brake			Mechanical rear wheel brake		

The data is for reference only, please take the real object as references

Electric Tow Tractor(Seated Type)
EPQ-B

- Equipped with adjustable towing pin, it meets various towing needs;
- 4-6t luggage compartment offers towing services for cargo loading or unloading from the aircraft;
- Equipped with branded control system and multi-functional protection system, it offers higher level functional safety;
- EPS steering energy reduces 20% with accurate operation, flexible steering, greatly improving the production ability;
- AC driving system, large torsion. Strong gradability and strong power ensures steady driving even in uneven road and slope;
- Large diameter solid tyre, suitable for various road conditions;
- Emergency power off switch, as a standard configuration, is pressed to cut off all power. The vehicle immediately stops by power cutting off to ensure secure protection;
- Battery gauge configuration reminds user to charge promptly for battery protection;
- Customized electromagnetic or laser navigation AGV.

				EPQ20B	EPQ30B	EPQ40B	EPQ60B
Characteristic	1.1	Type		EPQ20B	EPQ30B	EPQ40B	EPQ60B
	1.2	Power (electricity, diesel, LPG, petrol, manual)		Electric	Electric	Electric	Electric
	1.3	Operation (manual, walkie, side-standing, picker)		Seated	Seated	Seated	Seated
	1.4	Rated towing weight	Q(kg)	2000	3000	4000	6000
	1.5	Rated hitch towing capacity	C(N)	500	750	1000	1500
	1.6	Wheelbase	Y(mm)	1040	1040	1355	1355
Weight	2.1	Self weight with battery	kg	880	905	1000	1200
	2.2	Battery weight	kg	180	205	355	550
Wheel/ chasis	3.1	Wheel type		Rubber solid tyre	Rubber solid tyre	Rubber solid tyre	Rubber solid tyre
	3.2	Front wheel specification	⌀×w(mm)	3.50-5	3.50-5	3.50-5	3.50-5
	3.3	Rear wheel specification	⌀×w(mm)	4.00-8	4.00-8	4.00-8	4.00-8
	3.4	Overall vehicle height	h1 (mm)	1338	1338	1435	1435
Dimensions	4.1	Seat height	h2 (mm)	880	880	900	900
	4.2	Towing pin height	h3(mm)	300/380	300/380	310/410	310/410
	4.3	Rear overhang	h13(mm)	480	480	492	492
	4.4	Loading platform width	mm	/	/	420	420
	4.5	Vehicle body length	l2(mm)	1710	1710	2030	2030
	4.6	Vehicle body width	b1(mm)	845	845	985	985
	4.8	Ground clearance	m2	100	100	100	100
	4.9	Pedal height	h4(mm)	400	400	380	380
Performance	5.1	Turning radius	Wa(mm)	1460	1460	1700	1700
	5.2	Travelling speed, unladen/full-loaded	km/h	7/5	7/5	7/5	7/5
	5.3	The max. gradability, unladen/full-loaded	%	10/8	8/6	8/4	10/5
	5.4	The max. towing power, full-loaded	N	1000	2200	3000	3200
	5.5	Drive brake		Mechanic+hydraulic	Mechanic+hydraulic	Mechanic+hydraulic	Mechanic+hydraulic
Motor	6.1	Drive motor power	kw	2.5	2.5	3	4.5
	6.2	Battery type		Lead-acid battery	Lead-acid battery	Lead-acid battery	Lead-acid battery
	6.3	Battery voltage/capacity	V/Ah	24/210	24/240	24/350	48/280
	6.4	Charger	V/A	24/30	24/30	24/50	48/40
	6.5	Drive control mode		AC	AC	AC	AC
Others	7.1	According to En12053 (noise level near drivers' ears)	dB(A)	75	75	75	75

The data is for reference only, please take the real object as references

Electric Tow Tractor(Standing Type)
EPQ-A

- Equipped with branded control system and multi-functional protection system, it offers higher level functional safety;
- Equipped with vertical branded gear box, multi-functional solutions Optimized gear meshing technology can reduce the noise and offer high performance and efficiency;
- AC drive system, small volume, free-maintenance and carbon-brush replacement. No more maintenance and protection;
- EPS steering system, flexible operation, enhances driving stability;
- Driving continuously variable, safety, mute, emergency reverse switch, emergency brake switch;
- Low gravity, strong driving stability;
- Multi-fuctional handle, integrate control(accelerate, horn, emergency anti-collision. Ergonomic design offers great comfort;
- Spacious operation space offers comfortable driving experience;
- Intelligent electronic braking system prevents vehicle from sliding;
- Customized electromagnetic or laser navigation AGV.

				EPQ30A
Characteristic	1.1	Type		EPQ30A
	1.2	Power (electricity, diesel, LPG, petrol, manual)		Electric
	1.3	Operation (manual, walkie, side-standing, picker)		Stand type
	1.4	Rated towing weight	Q(kg)	3000
	1.5	Rated hitch towing capacity	C(N)	600
	1.6	Wheelbase	Y(mm)	967
Weight	2.1	Self weight with battery	kg	550
	2.2	Battery weight	kg	180
Wheel/ chasis	3.1	Wheel type		PU
	3.2	Front wheel specification	⌀×w(mm)	ϕ150X50
	3.3	Rear wheel specification	⌀×w(mm)	ϕ230X75
Dimensions	4.1	Overall vehicle height	h1(mm)	1550
	4.2	Towing pin height	h3(mm)	200-270
	4.3	Vehicle body length	l2(mm)	1380
	4.4	Vehicle body width	b1(mm)	850
	4.5	Ground clearance	m2(mm)	50
	4.6	Turning radius	Wa(mm)	1160
Performance	5.1	Travelling speed, unladen/full-loaded	km/h	6.7/4
	5.2	The max. gradability, unladen/full-loaded	%	8/6
	5.3	The max. towing power, full-loaded	N	1800
	5.4	Drive brake		Electromagnetic
Motor	6.1	Drive motor power	kw	1.5
	6.2	Battery type		Lead-acid battery
	6.3	Battery voltage/capacity	V/Ah	24/210
	6.4	Charger	V/A	24/30
Others	7.1	Drive control mode		AC
	7.2	According to En12053 (noise level near drivers' ears)	dB(A)	75

The data is for reference only, please take the real object as references

Customized (Including AGV)


3-meter forklift truck


Weighing truck


6-meter platform order picker


10m Single Reach Truck


Stainless Steel Forks and Wide Legs Stacker


Clamping 4-wheel Counterbalance Forklift


Clamping Counterbalance Stacker


Modified stainless steel forklift


Carton Clamping Three-wheel Forklift


Car Positioner


Lateral Forklift Handle Type


Electric paper roll handling forklift


Magnetic guided three-way forklift AGV


Large tonnage clamping forklift


Grooved forks with adjustable forks


Stainless steel fork straightening aid with wide legs


Reinforced three-way forklift


Mold Handling Stacker


Mold Handling Stacker


Clamping Series Pallet Stacker


Weighing Stacker


Single column stacker

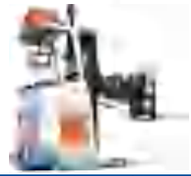

Dumping materials Counterweight Stacker


Low-level order picker


Electromagnetic lifter truck


Plus Trailer Equipment Counterweight Stacker


5.5-Ton Heavy Duty Counterbalance AGV


Double deep reach truck AGV forklift


Clamping Counterbalance AGV


Attachment customized three-way stacker


Electric crane


Rotary clamping three-wheel forklift


Stacker for pulling bags


Multi-adjustable stacker with four forks


Square connecting rod Stacker


Compact Stacking AGV


Counterbalance Side Fork AGV


Tow Tractor AGV Body


Push-Pull Forklift AGV


Rotary Clamping Vehicle

Aircraft Tractor

Oil tank dumping material stacker

Carton clamping Counterbalance Forklift

Fully Enclosed Tow Tractor

Stacker for the boiler industry

Clamping AGV for nonwoven industry

Customized stacking AGV body

Customized stacking AGV

Multi-Fork AGV Body

Tunnel Handling Vehicle

Canopy Tow Tractor

Platform Tow Tractor

Counterweight stacker with irregular forks

Forks modification for clamping stacker

Four-way forklift with adjustable forks

Customized handling truck AGV Body

Customized Reach Truck AGV Forklift

Tow Tractor AGV Body

Customized Tow Tractor AGV

Explosion-proof Forklift AGV

Couterweight stacker with additional hook

Stacker with load stabilizer

Specialized Vehicle for Cleaning high-speed train

Clamping tire pallet stacker

Clamping Counterbalance Stacker

Automatic distance adjusting clamping AGV body

Clamping electrical cabinet AGV

Customized small reach truck AGV body

Customized Omni-directional AGV forklift

Customized omni-directional AGV forklift

02 Mobile Robot Series

Stacking Mobile Robot

Performance features:

1. Very narrow aisle for high position and efficient storage;
2. Thin body, small turning radius;
3. Excellent flexibility and high working efficiency.

Stacking Mobile Robot	Technical Parameter			
Model	EDA15-16	EDA20-16	EDA15-30	EDA20-30
Navigation mode	Fusion navigation	Fusion navigation	Fusion navigation	Fusion navigation
Communication mode	WIFI/5G	WIFI/5G	WIFI/5G	WIFI/5G
Rated load	2000 kg	2000 kg	1500 kg	2000 kg
Standard lifting height	1600 mm	1600 mm	3000 mm	3000 mm
Positioning accuracy	± 10 mm	± 10 mm	± 10 mm	± 10 mm
Minimum ground clearance	30 mm	30 mm	35 mm	30 mm
Charge mode	Automatic + manual	Automatic + manual	Automatic + manual	Automatic + manual
Traveling direction	Forward, backward, turn	Forward, backward, turn	Forward, backward, turn	Forward, backward, turn
Standard battery	24 V/160 Ah	24 V/160 Ah	24 V/200 Ah	24 V/160 Ah
Safety measures	Laser obstacle avoidance, mechanical collision prevention, remote emergency stop, fork collision prevention			
Alarm mode	Light alarm, broadcast	Light alarm, broadcast	Light alarm, broadcast	Light alarm, broadcast
Drive mode	Steering wheel drive	Steering wheel drive	Steering wheel drive	Steering wheel drive
Load center distance	600 mm	600 mm	600 mm	600 mm
Stacking aisle width Pallet 1000*1200 (1200 along forks C600)	1825 mm	1825 mm	1855 mm	1855 mm
Runningspeed(Unladn/Full-loaded)	1.5 /1.0m/s	1.5 /1.0m/s	1.5 /1.0m/s	1.5 /1.0m/s
Turning radius	1130 mm	1130 mm	1180 mm	1180 mm
Fork size	61/190/1150 mm	61/190/1150 mm	61/190/1150 mm	61/190/1150 mm
Fork outer width	680 mm	680 mm	780 mm	680 mm
Overall size (L*W)	1620/945 mm	1620/945 mm	1635/945 mm	1635/945 mm
Dead weight	850 kg	850 kg	1025 kg	1025 kg
Maximum lifting height (indentify according to accessible heigt)	2325 mm	2325 mm	3672 mm	3672 mm
Overall projection area	1.52 ㎡	1.54 ㎡	3.08 ㎡	2.06 ㎡

Note: The stacking aisle width excludes the safety distance. The parameters above are for reference only and are subject to technical change without notice. Thanks for your understanding.

Handling Mobile Robot

Handling Mobile Robot	Technical Parameter
Model	EBA20
Navigation mode	Fusion navigation
Communication mode	WIFI/5G
Rated load	2000 kg
Standard lifting height	205 mm
Positioning accuracy	± 10 mm
Minimum ground clearance	30 mm
Minimum height above ground	30 mm
Charge mode	Automatic + manual
Traveling direction	Forward, backward, turn
Standard battery	24 V/160 Ah
Safety measures	Laser obstacle avoidance, mechanical collision prevention, remote emergency stop, fork collision prevention
Alarm mode	Light alarm, broadcast
Drive mode	Steering wheel drive
Load center distance	600 mm
Stacking aisle width Pallet 1000*1200 (1200 along forks C600)	1825 mm
Running speed(Unladn/Full-loaded)	1.5 /1.0m/s
Turning radius	1130 mm
Fork size	61/190/1150 mm
Fork outer width	680 mm
Overall size (L*W)	1620/945 mm
Dead weight	850 kg
Maximum handling weight	2000 kg
Overall projection area	1.56 ㎡

Note: The stacking aisle width excludes the safety distance. The parameters above are for reference only and are subject to technical change without notice. Thanks for your understanding.

Performance features:

1. Adapt to carriers or materials such as pallets and material boxes; be able to achieve accurate positioning of fork operation in natural environment; carry high sensitivity sensing module to offer carrier detection and release detection functions; accurately fork materials with a repeated release accuracy of ± 10 mm;
2. Narrow body, small aisle, and small turning radius allow for flexible unattended handling in a narrow space;
3. Fast, efficient, flexible, and improved factory efficiency;
4. Intelligent application, supporting special customization according to customer demands;
5. Small body but large battery for longer service time;
6. The body is built-in with multiple protection mechanisms and alarm devices for usage safety.

Narrow Aisle AMR

Three-directional Mobile Robot

Performance features:

1. Apply to indoor narrow aisle warehouse with a minimum width of 1600 mm, saving space and significantly improving warehouse capacity;
2. Be able to control the fork to complete turning or moving left or right without body steering; greatly improving working efficiency;
3. Support lithium iron phosphate battery automatic charging system solution;
4. The complete vehicle adopts CAN communication protocol.

Three-directional Fork AMR	Technical Parameter
Model	CDDM15（max9 m)
Navigation mode	Fusion navigation
Communication mode	WIFI/5G
Rated load	1500 kg
Standard lifting height	5500 mm
Positioning accuracy	± 20 mm
Minimum ground clearance	32 mm
Charge mode	Automatic + manual
Traveling direction	Forward, backward, turn
Standard battery	48 V/300 Ah
Safety measures	Laser obstacle avoidance, mechanical collision prevention, remote emergency stop, fork collision prevention
Alarm mode	Light alarm, broadcast
Drive mode	Steering wheel drive
Load center distance	600 mm
Stacking aisle width Pallet 1000*1200 (1200 along forks C600)	1600 mm
Running speed(Unladn/Full-loaded)	1.5/1.0 m/s
Turning radius	2075 mm
Main aisle width	3560 mm
Fork size	45/125/1220 mm
Overall size (L*W)	3167/1550 mm
Dead weight	6200 kg
Overall projection area	4.8 ㎡

Note: The stacking aisle width excludes the safety distance. The parameters above are for reference only and are subject to technical change without notice. Thanks for your understanding.

Omni-directional Stacking Mobile Robot

Performance features:

1. Have characteristics including omni-directional movement, gantry forward, high-level stacking; be able to achieve accurate positioning of unattended fork operation in natural environment; offer carrier detection and release detection functions; accurately fork materials;
2. Quick charge, long battery life, flexible operation, applicable to a variety of workplaces;
3. The body is built-in with multiple protection mechanisms, alarm devices, and hydraulic circuit proportional valve for usage safety;
4. Intelligent application, supporting special customization according to customer demands.

Omni-directional Stacking Type	Technical Parameter	
Model	EDQ15-45	EDQ30-30
Navigation mode	Fusion navigation	Fusion navigation
Communication mode	WIFI/5G	WIFI/5G
Rated load	1500 kg	3000 kg
Standard lifting height	4500 mm	3000 mm
Positioning accuracy	±15 mm	±20 mm
Minimum ground clearance (bearing center distance)	70 mm	135 mm
Charge mode	Automatic + manual	Automatic + manual
Traveling direction	Omni-directional, spin	Omni-directional, spin
Standard battery	24 V/200 Ah	48 V/300 Ah
Safety measures	Laser obstacle avoidance, mechanical collision prevention, remote emergency stop, fork collision prevention	
Alarm mode	Light alarm, broadcast	Light alarm, broadcast
Drive mode	Steering wheel drive	Steering wheel drive
Load center distance	500 mm	600 mm
Stacking aisle width Pallet 1000*1200 (1000 along forks C500)	2480 mm	3475 mm
Running speed(Unladn/Full-loaded)	1.5/1.0 m/s	1.5/1.0 m/s
Reach distance	920 mm	1200 mm
Fork size	35/100/1070 mm	50/150/1220 mm
Overall size (L*W)	2060/1845 mm	2350/2680 mm
Dead weight	2400 kg	6500 kg
Maximum lifting height	4500 mm	3000 mm
Overall projection area	5.05 ㎡	6.3 ㎡

Note: The stacking aisle width excludes the safety distance. The parameters above are for reference only and are subject to technical change without notice. Thanks for your understanding.

Counterbalance Mobile Robot

Four-wheel Counterbalance	Technical Parameter
Model	CPD20J-16
Navigation mode	Fusion navigation
Communication mode	WIFI/5G
Rated load	2000 kg
Standard lifting height	1600 mm
Positioning accuracy	± 20 mm
Minimum ground clearance	121 mm
Charge mode	Automatic + manual
Traveling direction	Forward, backward, turn
Standard battery	48 V/350 Ah
Safety measures	Laser obstacle avoidance, mechanical collision prevention, remote emergency stop, fork collision prevention
Alarm mode	Light alarm, broadcast
Drive mode	Bridge driving
Load center distance	500 mm
Stacking aisle width Pallet 1000*1200 (1000 along forks C500)	4050 mm
Running speed	1.0 m/s
Turning radius	2145 mm
Fork size	40/122/1070 mm
Overall size (L*W)	3490/1255 mm
Dead weight	3260 kg
Maximum lifting height (identify according to the accessible height)	6000 mm

Note: The stacking aisle width excludes the safety distance. The parameters above are for reference only and are subject to technical change without notice. Thanks for your understanding.

Three-wheel Counterbalance Forklift Mobile Robot

Performance features:

1. Attachments can be customized to meet the operational requirements of materials in different forms such as pallets, paper rolls and soft rolls in different scenarios;
2. The rated load capacity is 3 t;
3. Safety circuits with multiple protection and alarm configurations makes it safer to use.

Legless Counterbalance Mobile Robot

Performance features:

1. Apply to the handling, stacking and loading/unloading of materials on low shelves in the warehouse;
2. The rated load capacity is 6 t;
3. Attachments can be customized according to requirements;
4. Safety circuits with multiple protection and alarm configurations makes it safer to use.

Legless Counterbalance	Technical Parameter			
Model	EDB10-30	EDB15-30	EDB20-30	EDB30-16
Navigation mode	Fusion navigation	Fusion navigation	Fusion navigation	Fusion navigation
Communication mode	WIFI/5G	WIFI/5G	WIFI/5G	WIFI/5G
Rated load	1000 kg	1500 kg	2000 kg	3000 kg
Standard lifting height	3000 mm	3000 mm	3000 mm	1600 mm
Positioning accuracy	± 10 mm	± 10 mm	± 10 mm	± 20 mm
Minimum ground clearance	55 mm	60 mm	60 mm	85 mm
Charge mode	Automatic + manual	Automatic + manual	Automatic + manual	Automatic + manual
Traveling direction	Forward, backward, turn	Forward, backward, turn	Forward, backward, turn	Forward, backward, turn
Standard battery	24 V/160 Ah	24 V/160 Ah	24 V/200 Ah	48 V/300 Ah
Safety measures	Laser obstacle avoidance, mechanical collision prevention, remote emergency stop, fork collision prevention			
Alarm mode	Light alarm, broadcast	Light alarm, broadcast	Light alarm, broadcast	Light alarm, broadcast
Drive mode	Steering wheel drive	Steering wheel drive	Steering wheel drive	Steering wheel drive
Load center distance	500 mm	500 mm	500 mm	500 mm
Stacking aisle width Pallet 1000*1200 (1000 along forks C500)	2440 mm	2670 mm	2990 mm	3230 mm
Runningspeed(Unladn/Full-loaded)	1.5/1.0 m/s	1.5/1.0 m/s	1.5/1.0 m/s	1.5/1.0 m/s
Turning radius	1150 mm	1380 mm	1585 mm	1885 mm
Fork size	35/100/1070 mm	40/100/1070 mm	40/122/1070 mm	45/125/1070 mm
Overall size (L*W)	2360/1075 mm	2570/1180 mm	2832/1180 mm	3295/1420 mm
Dead weight	2000 kg	2370 kg	2575 kg	4700 kg
Overall height	1945 mm	2100 mm	2100 mm	2230 mm
Maximum lifting height (identify according to the accessible height)	3000 mm	3000 mm	3000 mm	3000 mm
Vehicle projection area (excl. the fork)	1.37㎡	1.8 ㎡	2.16 ㎡	2.93 ㎡
Vehicle projection area (incl. the fork)	2.19 ㎡	3 ㎡	3.49 ㎡	4.39 ㎡

Note: The stacking aisle width excludes the safety distance. The parameters above are for reference only and are subject to technical change without notice.
Thanks for your understanding.

Forward Stacking Mobile Robot

Small Forward Stacking Mobile Robot

Performance features:

1. Apply to the handling, stacking and loading/unloading of materials on low racks in the warehouse;
2. Compact structure helps achieve flexible stacking and handling in the narrow aisle;
3. Safety circuits with multiple protection and alarm configurations makes it safer to use;
4. Quick charging, long battery life, flexible operation, applicable to a variety of workplaces.

Small Forward Stacking Type	Technical Parameter	
Model	CQDA15J-30	CQDA20J-30
Navigation mode	Fusion navigation	Fusion navigation
Communication mode	WIFI/5G	WIFI/5G
Rated load	1500 kg	2000 kg
Standard lifting height	3000 mm	3000 mm
Positioning accuracy	± 10 mm	± 10 mm
Minimum ground clearance (bearing center distance)	70 mm	70 mm
Charge mode	Automatic + manual	Automatic + manual
Traveling direction	Forward, backward, turn	Forward, backward, turn
Standard battery	24 V/160 Ah	24 V/200 Ah
Safety measures	Laser obstacle avoidance, mechanical collision prevention, remote emergency stop, fork collision prevention	
Alarm mode	Light alarm, broadcast	Light alarm, broadcast
Drive mode	Steering wheel drive	Steering wheel drive
Load center distance	500 mm	500 mm
Stacking aisle width Pallet 1000*1200 (1200 along forks C600)	2615 mm	2730 mm
Running speed(Unladn/Full-loaded)	1.5/1.0 m/s	1.5/1.0 m/s
Turning radius	1750 mm	1900 mm
Reach distance	600 mm	730 mm
Fork size	35/100/1070 mm	40/122/1070 mm
Overall size (L*W)	2335/1100 mm	2365/1100 mm
Dead weight	1900 kg	2050 kg
Overall height	2095 mm	2095 mm
Maximum lifting height (identify according to accessible height)	4500 mm	5500 mm
Overall projection area	1.79 ㎡	1.8 ㎡

Note: The stacking aisle width excludes the safety distance. The parameters above are for reference only and are subject to technical change without notice. Thanks for your understanding.

Forward Stacking Mobile Robot

Large Forward Stacking Mobile Robot

Performance features:

1. With characteristics of narrow aisle, high lifting and high operating accuracy, be able to achieve accurate positioning of fork operation in natural environment; carry high sensitivity sensing module to offer carrier detection and release detection functions; accurately fork materials with a repeated release accuracy of ±10 mm;
2. Quick charging, long battery life, flexible operation, applicable to a variety of workplaces;
3. The body is built-in with multiple protection mechanisms and alarm devices for usage safety;
4. Intelligent application, supporting special customization according to customer demands.

Large Forward Stacking Type	Technical Parameter
Model	CQDE20EHJ-65S
Navigation mode	Fusion navigation
Communication mode	WIFI/5G
Rated load	2000 kg
Standard lifting height	6500 mm
Positioning accuracy	± 20 mm
Minimum ground clearance	70 mm
Charge mode	Automatic + manual
Traveling direction	Forward, backward, turn
Standard battery	48 V/300 Ah
Safety measures	Laser obstacle avoidance, mechanical collision prevention, remote emergency stop, fork collision prevention
Alarm mode	Light alarm, broadcast
Drive mode	Steering wheel drive
Load center distance	500 mm
Stacking aisle width Pallet 1000*1000 (1000 along forks C500)	2915 mm
Runningspeed(Unladn/Full-loaded)	1.5/1.0 m/s
Turning radius	2060 mm
Reach distance	610 mm
Fork size	40/122/1070 mm
Overall size (L*W)	2702/1490 mm
Dead weight	3800 kg
Overall height	3166 mm
Maximum lifting height (identify according to accessible height)	8000 mm
Overall projection area	3.24 ㎡

Note: The stacking aisle width excludes the safety distance. The parameters above are for reference only and are subject to technical change without notice. Thanks for your understanding.

Warehouse Robot Series

03

Stable and reliable structure

Full-process tracking of information transfer

Double mechanical and electrical safety

More efficient and uninterrupted continuous stacking

High-speed stacking with free position setting

Improved product quality to avoid surface contamination or damage caused by manual stacking

Customized full range of products

Single-column Light High-speed Stacking Warehouse Robot

Single-column Light-load High-speed Type	Technical Parameter
Model	DDJ05QH
Rated load	⩽ 50 kg
Stacker height	⩽ 6 m
Lift drive form	Synchronous belt
Available fork type	Plate-fork/clamp
Travel speed	⩽ 300 m/min
Travel acceleration	⩽ 3 m/s²
Lifting speed	⩽ 80 m/min
Lifting acceleration	⩽ 1 m/s²
Fork acceleration	0.5 m/s²-1 m/s²
Positioning mode	Laser or barcode
Fork operation positioning accuracy	± 3 mm
Positioning accuracy	± 3 mm
Vertical lifting positioning accuracy	± 3 mm

Note: The parameters above are for reference only and are subject to technical change without notice. Thanks for your understanding.

Product features:

Light-load/high-speed/flexible/accurate and reliable manipulation.

1. Servo drive technology is adopted for traveling and lifting to ensure highly reliable manipulation under the condition of acceleration and high speed;
2. Single-column light weight body is adopted. The column is made of special aluminum profile;
3. The lifting device adopts automatic tensioning synchronous toothed belt transmission mechanism.

Single-column Light Stacking Warehouse Robot

Single-column Light Type	Technical Parameter
Model	DDJ05Q
Rated load	⩽ 50 kg
Stacker height	⩽ 6 m
Aisle width	⩾ 800 mm
Lift drive form	Wire rope/synchronous belt
Travel speed	⩽ 180 m/min
Travel acceleration	⩽ 1 m/s²
Lifting speed	⩽ 60 m/min
Lifting acceleration	⩽ 1 m/s²
Fork acceleration	0.5 m/s²-1 m/s²
Positioning mode	Laser or barcode
Fork	Plate-fork/clamp
Fork operation positioning accuracy	± 3 mm
Horizontal operation positioning accuracy	± 3 mm
Vertical lifting positioning accuracy	± 3 mm
Materials of column and ground rail	Aluminum alloy profile/steel profile
Operating mode	Manual, semi-automatic, automatic
Power supply mode	Sliding contact line
Speed regulation mode	Frequency conversion/servo
Communication mode	Optical communication or wireless communication

Note: The parameters above are for reference only and are subject to technical change without notice. Thanks for your understanding.

Product features:

1. Simple and practical structure
2. Small aisle width
3. Not easy to destabilize
4. Modular components

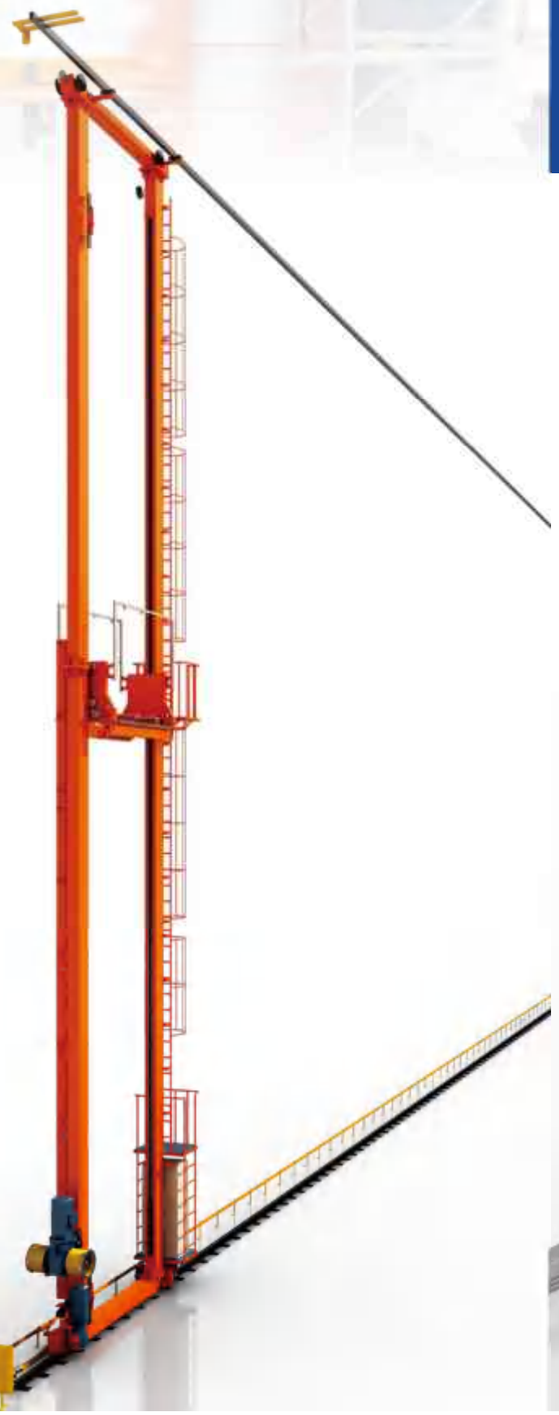
Double-column Stacking Warehouse Robot

Double-column Medium-duty /Heavy-duty Type	Technical Parameter	
Model	DDJ10	DDJ20
Rated load	Single depth≤1000kg /double depth≤ 500 kg(customized)	Single depth ≤3000kg /double depth ≤2000kg(customized)
Stacker height	3-24 m(customized)	3-24 m(customized)
Aisle width	1200 mm pallet ⩾ 1400 mm	1200 mm pallet ⩾ 1400 mm
Bottom height	Single depth 700 mm /double depth 800 mm	Single depth 800mm /double depth 900mm
Top height	1650 mm (incl. goods)	1650 mm (incl. goods)
Travel speed	⩽ 160 m/min	⩽ 160 m/min
Travel acceleration	⩽0.5 m/s^2	⩽ 0.5 m/s^2
Lifting speed	⩽ 40 m/min	⩽ 40 m/min
Lifting acceleration	⩽ 0.5 m/s^2	⩽ 0.5 m/s^2
Fork speed	⩽ 40 m/min	⩽ 40 m/min
Fork acceleration	0.5 m/s^2-1 m/s^2	0.5 m/s^2-1 m/s^2
Horizontal operation positioning accuracy	± 5 mm	± 5 mm
Vertical lifting positioning accuracy	± 5 mm	± 5 mm
Fork operation positioning accuracy	± 3 mm	± 3 mm
Operating mode	Manual, semi-automatic, automatic	Manual, semi-automatic, automatic
Power supply mode	Sliding contact line	Sliding contact line
Speed regulation mode	Frequency control	Frequency control
Positioning mode	Laser/barcode	Laser/barcode
Communication mode	Optical communication or wireless communication	Optical communication or wireless communication

Note: The parameters above are for reference only and are subject to technical change without notice. Thanks for your understanding.

Product features:

1. Mature and reliable structural design
2. Small wobble amplitude
3. Sufficient strength and rigidity
4. Simple drive system and layout



Shuttle Robot

04

Characterized by high speed, high reliability, and low cost, the automatic rail guide vehicle (RGV) is widely applied in the logistics system and mainly used for material conveying and workshop assembly.

Features:

- Adopt aluminum alloy rail with high speed and low noise;
- Repeatedly optimized command control strategy for high system operation efficiency;
- Stable performance and export quality.

Equipment parameters

Model	RGV20
Rail form	Rectilinear, circular, turnout
Rail material	Aluminum profile, GB/T11264 light rail
Load	50 kg-10 t (customizable)
Speed	⩽ 200 m/min (customizable)
Acceleration	⩽ 1 m/s^2
Debug mode	Frequency conversion/servo
Transfer mode	Chain, roller, retractable fork, customizable multi-station
Positioning mode	Laser/barcode
Traveling positioning accuracy	± 5 mm
Power supply mode	Sliding contact line
Communication mode	Optical communication, wireless communication, power line carrier, leaky wave
Control mode	Manual/automatic

Note: The parameters above are for reference only and are subject to technical change without notice. Thanks for your understanding.

Hoist Series

05

Reciprocating Hoist

Product features:

1. Frame structure for better stability
2. Large lift stroke
3. Large bearing range
4. Available safety measures

Equipment parameters

Model	TSJ10
Rated load	50-5000 kg
Hoist height	2-20 m
Lift drive form	Precise roller chain with short pitch
Lifting speed	⩽ 60 m/min
Lifting acceleration	⩽ 1 m/s^2
Lift positioning accuracy	± 5 mm
Transport mode	Chain/roller
Transport speed	12-20 m/min
Operating mode	Manual, automatic, semi-automatic
Speed regulation mode	Frequency control
Positioning mode	Encoder/laser/barcode

Note: The parameters above are for reference only and are subject to technical change without notice. Thanks for your understanding.

Dense Storage

06

Multilayer Box-type Shuttle Robot

The multilayer box-type shelf shuttle robot supports load up to 50 kg. With a very compact structure, its floor area is 30%~ 50% less than that of the general and traditional solutions. Besides, for the same spatial arrangement, it has a inbound/outbound processing capacity which is 5~10 times that of traditional warehousing system.

Model	DCC05Q
Maximum bearing capacity	50 kg
Maximum speed at no load	4 m/s
Maximum speed at full load	3 m/s
Positioning mode	Photoelectric positioning
Positioning accuracy (Y direction)	± 2 mm
Motor power	⩽ 0.4 kW
Power supply mode	Battery/supercapacitor

Note: The parameters above are for reference only and are subject to technical change without notice. Thanks for your understanding.

Four-directional Shuttle Robot

The four-directional shelf shuttle robot can operate at different layers by virtue of the layer change hoist. It is a completely automatic dense storage system that conveys, stores and manages pallet goods. Its loading and discharge change operation is achieved through mechanical structure which is more compact, stable and reliable than overhead crushire.

Model	SXC15
Maximum bearing capacity	1500 kg
Maximum speed at no load	1.5 m/s
Maximum speed at full load	1.2 m/s
Acceleration	0.5 m/s^2
Jacking time	3 s
Direction change time	3 s
Battery capacity	48 V/40 Ah
Battery type	Lithium iron phosphate
Charge mode	Automatic charging /charger
PLC	Siemens
Communication mode	WIFI

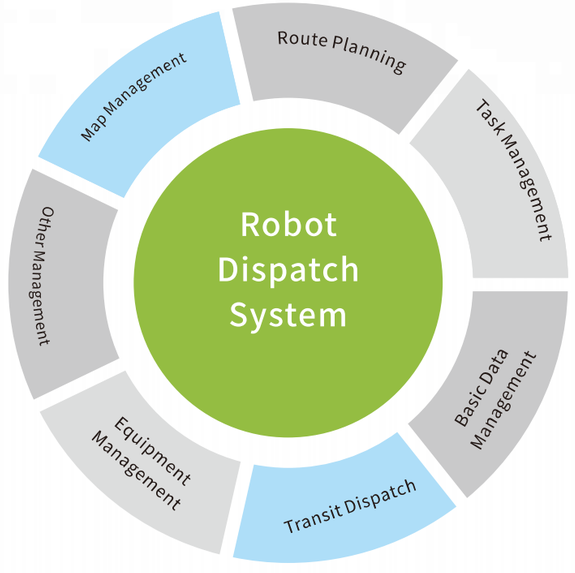
Note: The parameters above are for reference only and are subject to technical change without notice. Thanks for your understanding.

Software System

07

EFORK Fleet Management System (EFMS)

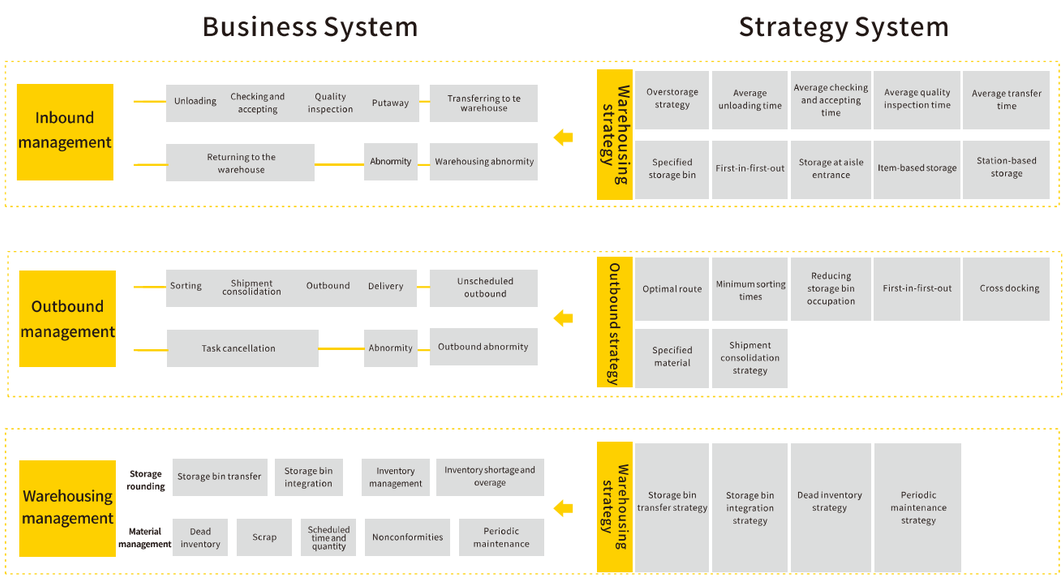
- Fusion autonomous navigation of laser and beacon
- Fusion autonomous navigation of laser, beacon, and natural environment
- Autonomous navigation in visual natural environment
- Fusion autonomous navigation of QR code and inertial navigation

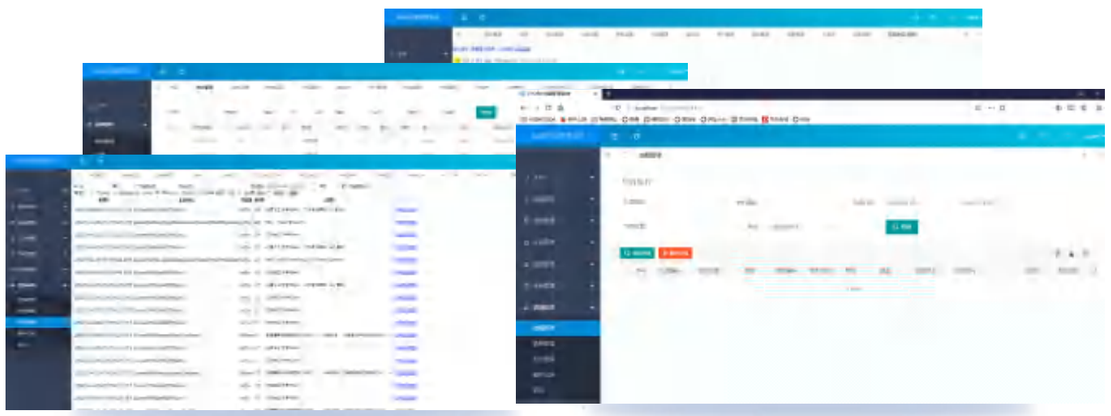


EFMS is mainly composed of two parts: the hardware and the software. The former comprises the IPC, display, wireless communication module, and relevant equipments; while the latter comprises the AGV dispatch control software, AGV route drawing software, AGV dispatch interface software, and user port protocol. AGV dispatch control system is a system that can centrally supervise, control and dispatch multiple AGVs at the same time. It communicates with each AGV via WLAN to dispatch various AGVs in the system. Users can learn the running state and location of controlled AGV in real time from the system interface, so as to automatically or manually call idle AGV and assign tasks. Functions such as AGV fault alarm, complex road section traffic control, remote AGV system upgrading and maintenance can also be added according to the user’ s actual needs.

Intelligent Warehouse Control System (WCS)

WCS is used to direct the activities of the warehouse and the distribution center. WCS, as the “Traffic Police” of the warehouse or distribution center, is responsible for keeping various operations running smoothly and maximizing the efficiency of the material handling sub-system as the activities of the warehouse are usually interrelated. It further provides a uniform interface for the extensive material handling equipment such as AS/RS, conveyor belt, conveyor system, sorters and stackers.





Intelligent Warehouse Management System (WMS)

WMS is a system that integrates various functions such as batch, material, checking and quality inspection via operations including inbound, outbound and stock transfer. It can effectively control and track the whole process of logistics and cost management of the warehouse business, thus realizing improved enterprise warehouse information management.

- **Persistent improving:** Achieve more detailed and comprehensive management of warehouse operations;
- **Automation:** Achieve the automation of warehousing operations such as inbound and outbound via hardware equipment;
- **Intelligence:** Based on the standard principle of inventory management (first-fractional-then- integral, first-in-first-out, inventory ABC, etc.), form the “Brain” of warehouse management via computer algorithm;
- **8-step warehousing management:** Track, collect, check, store, sort, delivery, count, return.

Problems that the system can solve

- Cover the shortage of ERP or upstream system;
- Inaccurate inventory;
- Accumulation of dead stock;
- Disorganized warehouse goods;
- Frequent mistakes and omissions for inbound and outbound items;
- Material shortage of production warehouse leads to production delay;
- Low operation efficiency.

Introduction to WMS function - inbound