

COLD STORAGE SOLUTIONS

OPTIMAL
PERFORMANCE IN
LOW TEMPERATURES

Down to
-40°C



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CHALLENGES IN COLD STORAGE OPERATIONS

Cold storage is one of the most demanding material handling applications. Operating in cold storage environments presents unique challenges that demand specialized equipment to maintain efficiency and reliability.



Battery Performance in Cold Environment

Low temperatures can reduce battery runtime and slow down charging, impacting operational efficiency. Cold storage equipment needs high-performance batteries with thermal management systems to maintain reliable power and minimize downtime.



Space Constraints

Cold storage facilities usually prioritize space utilization due to high land and construction costs. To navigate narrow aisles and confined spaces, the compact design and small turning radius is necessary for seamless operation.



Operator Comfort & Safety

Working in freezing environments poses challenges for operators, from reduced dexterity to fatigue. Optimized configurations like spacious cabins, heaters / AC, anti-slip flooring, and ergonomically-designed controls are important for comfortable, safe and efficient operations.



Harsher Working Conditions

Low temperatures and condensation from temperature fluctuations accelerate rust and corrosion, requiring cold-resistant, waterproof, and anti-corrosion designs. Additionally, power efficiency and slip-resistant traction are crucial for stable operation on icy surfaces.



High Efficiency Demands

Temperature variations may cause spoiled products. In temperature-sensitive sectors like fresh food and pharmaceutical storage, it's crucial to transfer goods quickly to or from a refrigerated vehicle. This requires efficient and tough material handling equipment to optimize turnover and meet market demands.

EP's Cold Storage Solutions



TOUGH ON ICE SMOOTH IN OPERATION



Waterproof Electronic Components

Waterproof electronic components and connectors, and rubber-sealed casings protect the truck from water ingress and short circuit for safety and reliability in cold and humid conditions.



Enhanced Corrosion Resistance

Condensation can easily form on metal surfaces and under cover panels when moving in and out of cold storage. Structural components are treated with electrophoresis coating and powder spraying, offering superior protection against rust and corrosion in high-moisture environments.



Cold-resilience Hydraulics System

Equipped with low-temperature hydraulic oil and stainless steel fittings, the hydraulic system operates smoothly even in freezing temperatures.



Anti-Slip Tires for Maximum Grip

Even cold conditioned trucks sweat, anti-slip tires provide enhanced traction on icy and slippery surfaces for safe driving.



Reliable Battery Performance in the Cold

Equipped with optimized thermal management for cold environments, EP's battery system ensures consistent power output for stable operation and uncompromising runtime in freezing conditions.



CPD15/18/20TV8

Electric Cold Storage
Forklift 1500-2000kg

The CPD15/18/20TV8 is built for cold storage operations in temperatures down to **-40°C**. Built on the market-proven CPD15/18/20TV8, it offers reliable performance for large-scale frozen warehousing and cold chain logistics centers.

For simple inspection and maintenance, the CPD15/18/20TV8 is engineered with neat part and wire layout, while the optional Telematics system also enables truck data tracking and remote diagnosis.



Mesh guard for
operational safety

IP67 motor
protection

Rubber drive wheel
for enhanced slip
resistance

Warning light

Comfortable seat

OPS system

3-wheel
design ideal
for tight space

CPD15/18/20TV8

Its 3-wheel design provides excellent maneuverability in tight spaces and narrow aisles, ideal for high-density storage areas. In frozen food and pharmaceutical warehouses, the CPD15/18/20TV8 stacks and retrieves pallets up to 6000mm rack systems for maximum vertical storage.

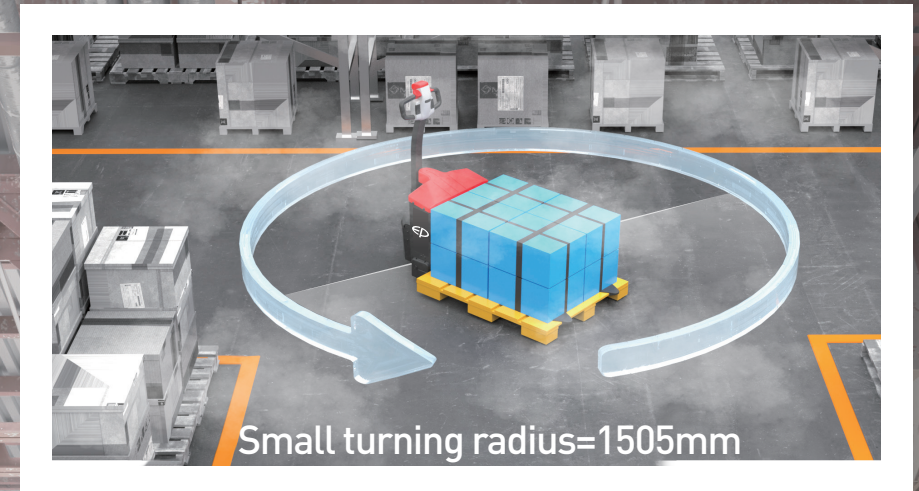


EPT20-20ETC

Electric Cold Storage Pallet Truck 2000kg

The EPT20-20ETC is a compact electric walkie pallet truck designed for short-distance and last-mile deliveries in cold storage environments down to **-25°C**. Built on the EPT20-ETH with a new streamlined design, it excels in small-to-medium warehouses, especially on uneven roads.

In supermarkets and distribution centers, the EPT20-20ETC ensures the smooth transfer of temperature-sensitive products such as dairy, beverages, and produce from storage to outbound trucks. It's also ideal for central kitchens and catering services, where quick and efficient movement of frozen and chilled ingredients in and out of refrigerated zones is essential.



Optimized drive system

Fully sealed design

Rubber drive wheel for enhanced slip resistance

IP67 motor protection



SPECIFICATION

CPD15/18/20TV8

Distinguishing mark	1.1	Manufacturer			EP	EP	EP
	1.2	Model designation			CPD15TV8	CPD18TV8	CPD20TV8
	1.3	Drive			Electric	Electric	Electric
	1.4	Operator type			Seated	Seated	Seated
	1.5	Load capacity	Q	kg	1500	1800	2000
	1.6	Load center distance	c	mm	500	500	500
	1.8	Load distance, centre of drive axle to fork	x	mm	402	402	402
	1.9	Wheelbase	y	mm	1357	1467	1467
Service weight	2.1	Service weight		kg	3089	3238	3608
	2.2	Axle loading, laden front/rear		kg	4077/511	4077/511	4952/655
	2.3	Axle loading, unladen front/rear		kg	1583/1505	1583/1505	1725/1882
Tyres/chassis	3.1	Tyre type			Solid tire	Solid tire	Solid tire
	3.2	Tyre size, front			18×7-8	18×7-8	200/50-10
	3.3	Tyre size, rear			15x4.5-8	15x4.5-8	15x4.5-8
	3.5	Wheels, number front/rear (x=drive wheels)		mm	2x, /2	2x, /2	2x, /2
	3.6	Tread width, front	b10	mm	911	911	940
	3.7	Tread width, rear	b11	mm	169	169	169
Dimensions	4.1	Tilt of mast/fork carriage forward/backward	α/β	°	6/6	6/6	6/6
	4.2	Retracted mast height	h1	mm	1069	1069	1069
	4.3	Free lift	h2	mm	100	100	100
	4.4	Lift height	h3	mm	3000	3000	3000
	4.5	Height, mast extended	h4	mm	3415	3415	3415
	4.7	Height of overhead guard (cabin)	h6	mm	2160	2160	2160
	4.8	Seat height/standing height	h7	mm	1090	1090	1090
	4.12	Tow coupling height	h10	mm	460	460	460
	4.19	Overall length	l1	mm	3100	1069	3210
	4.20	Length to face of forks	l2	mm	2060	2170	2170
	4.21	Overall width	b1/b2	mm	1050	1050	1050
	4.22	Fork dimensions	s/e/l	mm	40x100x920	40x100x920	40x100x920
	4.23	A,B Fork carriage class/type A, B			2A	2A	2A
	4.24	Fork carriage width	b3	mm	1040	1040	1040
	4.31	Ground clearance, laden, below mast	m1	mm	120	120	120
	4.32	Ground clearance, center of wheelbase	m2	mm	74	74	74
	4.34.1	Aisle width for pallets 1000×1200 crossways	Ast	mm	3090	3090	3200
	4.34.2	Aisle width for pallets 800×1200 lengthways	Ast	mm	3290	3290	3300
	4.35	Turning radius	Wa	mm	1570	1570	1680
Performance data	5.1	Travel speed, laden/unladen		km/h	13/14	13/14	13/14
	5.2	Lifting speed, laden/unladen		m/s	0.26/0.43	0.26/0.43	0.26/0.43
	5.3	Lowering speed, laden/unladen		m/s	0.44/0.435	0.44/0.435	0.44/0.435
	5.8	Max. gradeability, laden/unladen		%	10.5/14.5	10.5/14.5	10.5/14.5
	5.10	Service brake			Hydraulic	Hydraulic	Hydraulic
	5.11	Parking brake			Mechanical	Mechanical	Mechanical
Electric-engine	6.1	Drive motor rating S2 60 min		kW	5x2	5x2	5x2
	6.2	Lift motor rating at S3 15%		kW	11	11	11
	6.4	Battery voltage/nominal capacity		V/Ah	80/360	80/360	80/360
	6.5	Battery weight		kg	933	933	933
Addition data	8.1	Type of drive control			AC	AC	AC
	10.5	Steering design			Hydraulic	Hydraulic	Hydraulic
	10.7	Sound pressure level at the driver's ear		dB(A)	74	74	74

SPECIFICATION

EPT20-20ETC

Distinguishing mark	1.1	Manufacturer			EP
	1.2	Model designation			EPT20-20ETC
	1.3	Drive			Electric
	1.4	Operator type			Pedestrian
	1.5	Load capacity	Q	kg	2000
	1.6	Load center distance	c	mm	600
	1.8	Load distance, centre of drive axle to fork	x	mm	946
	1.9	Wheelbase	y	mm	1301
Service weight	2.1	Service weight		kg	309
	2.2	Axle loading, laden front/rear		kg	722/1498
	2.3	Axle loading, unladen front/rear		kg	180/40
Tyres/chassis	3.1	Tyre type			Rubber/Polyurethane Rubber/Nylon
	3.2.1	Tyre size, front		mm	Φ210x70
	3.3.1	Tyre size, rear		mm	Φ80x61 /105X88
	3.5	Wheels, number front/rear (x=drive wheels)		mm	1x, — /4
	3.7.1	Tread width, rear	b11	mm	410 (535)
Dimensions	4.4	Lift height	h3	mm	115
	4.9	Height of tiller handle in drive position min./max.	h14	mm	790/1250
	4.15	Lowered height	h13	mm	80/105
	4.19	Overall length	l1	mm	1673
	4.20	Length to face of forks	l2	mm	522
	4.21	Overall width	b1/b2	mm	560 (685)
	4.22	Fork dimensions	s/e/l	mm	50/150/1150
	4.25	Distance between fork-arms	b5	mm	560 (685)
	4.32	Ground clearance, center of wheelbase	m2	mm	30
	4.34.1	Aisle width for pallets 1000×1200 crossways	Ast	mm	2307
	4.34.2	Aisle width for pallets 800×1200 lengthways	Ast	mm	2179
	4.35	Turning radius	Wa	mm	1505
Performance data	5.1	Travel speed, laden/unladen		km/h	4/4.5
	5.2	Lifting speed, laden/unladen		m/s	0.027/0.038
	5.3	Lowering speed, laden/unladen		m/s	0.059/0.039
	5.8	Max. gradeability, laden/unladen		%	8/20
	5.10	Service brake			Electromagnetic
Electric-engine	6.1	Drive motor rating S2 60 min		kW	0.9
	6.2	Lift motor rating at S3 15%		kW	0.8
	6.4	Battery voltage/nominal capacity		V/Ah	48/40
	6.5	Battery weight		kg	40.8
Addition data	8.1	Type of drive control			AC
	10.5	Steering design			Mechanical
	10.7	Sound pressure level at the driver's ear		dB(A)	74