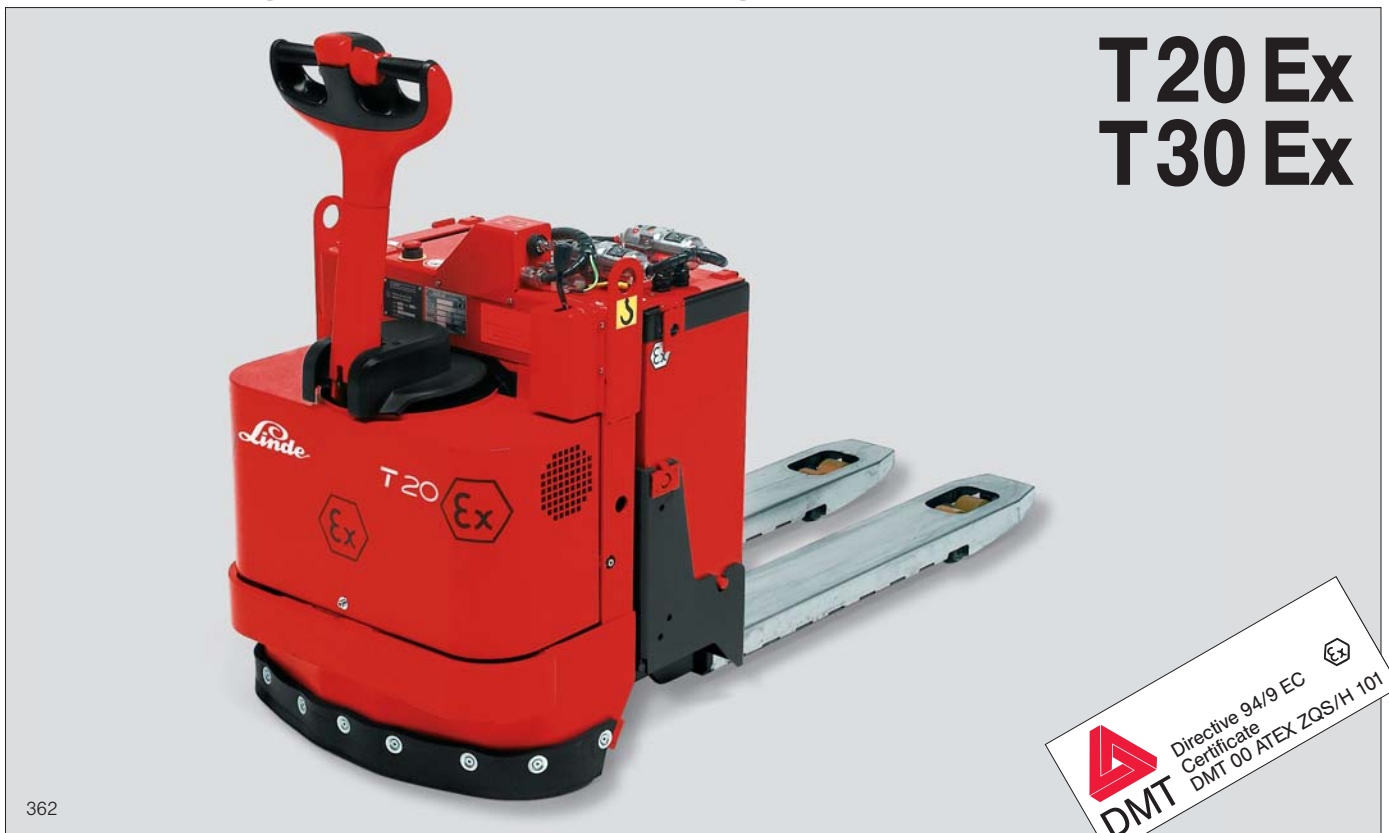


Electric Pallet Trucks for Explosion-hazard Areas 2000 kg and 3000 kg

Linde

T20 Ex
T30 Ex



362

Design of the T20Ex and T30Ex pallet trucks is based on the standard truck versions T20 and T30. In other words, these special-duty trucks for use in explosion-hazard areas incorporate the same features as the standard-production models: easy operation, exemplary ergonomics, high performance, optimized reliability and outstanding manoeuvrability. They provide high economy in low-level handling of deck and box pallets, even where space is severely restricted.

The trucks comply with EC regulations pertaining to use in explosion-hazard environments and the ATEX version for example has been **type-tested** to Directive 94/9 EC by the French Institut National de l'Environnement Industriel et des Risques (INERIS), Certificate No. 14361/98.

According to their actual equipment, these type-tested EX trucks are approved for use in hazardous areas as follows:

- Zone 1 II B T4 or T5 ATEX to 94/9EC (INERIS Certificate No. 14361/98)
- Zone 2 II B T4 or T5 ATEX
- Explosive Materials to ZH 1/168

Essential components of these explosion-proof trucks are identical with the corresponding standard Linde models. The following description highlights the modifications incorporated in the version for Zone 1 application.

Ergonomic tiller control

All controls are made explosion-proof (Class d) without any impairment of operating convenience. The tiller arm is outwardly

identical to the standard truck version, ensuring maximum protection for the operator's hands. Electronic control components are protected just as efficiently by the rugged cast aluminium housing.

Explosion-proof traction motor

The traction motor is explosion-proof, enclosed together with the brake by a sturdy cast steel housing. Its performance data are largely identical to those on the standard truck version. A high-temperature cut-out reliably limits surface heating.

Pressure-tight lift motor

The lift motor is installed in a separate pressure-tight casing. Here again, a cut-out ensures that surface heating is controlled within the defined maximum safe temperature.

Efficient LTM control

The benefits of Linde LTM control have been retained in these special-duty versions. They include powerful acceleration and millimetre-accurate positioning. All operator controls and the circuitry are installed in the same pressure-tight casing. A power economizer switches the truck off automatically if it is idle for 9 minutes. This adds to safe prevention of the truck accidentally being under live power.

Optional insulation monitoring

Type-tested insulation monitoring (PTB Certificate No. Ex-95.Y.37474) reliably detects any decrease in insulation resistance below 1k Ω /V and visually alarms the condition. Insulation monitoring status is continuously signalled by four LED indicators.

Standard equipment

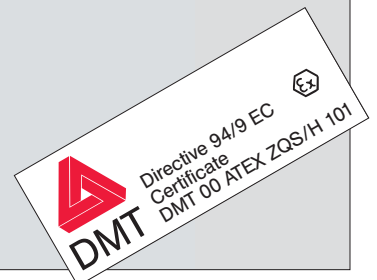
- Drive motor 1.2 kW hourly rating
- Bevel gear drive power transmission
- Electric service brake
- Automatic parking brake
- Electronic traction controller (LTM pulse control)
- Packaged hydraulic unit (integrating motor, control block, pump, filter and tank)
- 125 mm lift
- Electrically conducting rubber drive wheel, polyurethane load wheels and entry/exit rollers
- Tiller head hand protection guard
- Horn
- Key-lock switch
- Safety circuit isolator
- Battery compartment for batteries to 24 V/375 Ah
- Fork length 1152 mm, width over forks 564 mm

For Zone 1 ATEX: Insulation monitoring capable of reliably detecting insulation resistance less than 1 k Ω /V, which is visually alarmed. Insulation monitoring status continually signalled by LEDs.

Optional equipment

Alternative fork lengths and widths. Polyurethane drive wheel. Combined hour meter/battery discharge indicator with lift cut-out. Carriage backrest.

Other options available on request.



LINDE

Pedestrian electric pallet trucks

Data sheet for material handling equipment

EGU

VDI 2198

April 2003

Designation to VDI 3586

to VDI 3586

Characteristics	Linde		Linde		
	T 20 Ex		T 30 Ex		
1.1	Manufacturer		Linde		
1.2	Model designation		Battery		
1.3	Power unit: battery, diesel, petrol, LP gas, mains power		Pedestrian		
1.4	Operation: manual, pedestrian, stand-on, seated, order picker		Pedestrian		
1.5	Load capacity	Q (kg)	2000	3000	
1.6	Load centre	c (mm)	600	600	
1.8	Load distance	x (mm)	961	961	
1.9	Wheelbase	y (mm)	1446	1446	
Weights	2.1	Service weight	kg	750	
	2.2	Axle load with load, front/rear	kg	1720/1020	
	2.3	Axle load without load, front/rear	kg	150/600	
Wheels and tyres	3.1	Tyres, front/rear (SE = CS superelastic, P = pneumatic)	VU/VU		
	3.2	Tyre size, front	250 x 105	250 x 105	
	3.3	Tyre size, rear	85 x 95	85 x 95	
	3.4	Additional wheels (Dimensions)	2 / 100 x 40		
	3.5	Wheels, number front/rear (x = driven)	1x2 / 4		
	3.6	Track width, front	b10 (mm)	510	
	3.7	Track width, rear	b11 (mm)	387	
Dimensions	4.2	Height of mast, lowered	h1 (mm)	-	
	4.3	Free lift	h2 (mm)	-	
	4.4	Lift	h3 (mm)	125	
	4.5	Height of mast, extended	h4 (mm)	-	
	4.6	Initial lift	h5 (mm)	-	
	4.9	Height of tiller in operating position min./max.	h14 (mm)	880 / 1240	
	4.15	Height lowered	h13 (mm)	93	
	4.19	Overall length	l1 (mm)	1824	
	4.20	Length to fork face	l2 (mm)	670	
	4.21	Overall width	b1/b2 (mm)	780	
	4.22	Fork dimensions	s/e/l (mm)	61 x 182 x 1150	
4.25	Surface width of fork	b5 (mm)	567		
4.32	Ground clearance, centre of wheelbase	m2 (mm)	32		
4.33	Aisle width with pallets 1000 x 1200 across forks	Ast (mm)	1830		
4.34	Aisle width with pallets 800 x 1200 along forks	Ast (mm)	2030		
4.35	Turning radius	Wa (mm)	1590		
Performance	5.1	Travel speed, with/without load	km/h	4.0/6.0	
	5.2	Lifting speed, with/without load	m/s	0.036/0.069	
	5.3	Lowering speed, with/without load	m/s	0.069/0.036	
	5.7	Climbing ability, with/without load	%	5.0/23.2	
	5.8	Maximum climbing ability, with/without load	%	14.0/55.9	
5.10	Service brake		electrical	electrical	
Drive	6.1	Drive motor (S2 60 min.)	kW	1.2	
	6.2	Lift motor (S3 15 %)	kW	2.0	
	6.3	Battery according to IEC		254-2	254-2
	6.4	Battery voltage, rated capacity (K5)	V/Ah	24/345	24/345
	6.5	Battery weight	kg	335	335
8.1	Type of drive control		LTM transistor control	LTM transistor control	

Subject to modification in the interests of progress. Illustrations and technical details not binding for actual constructions. All dimensions subject to customary tolerances.

T 20/T 30

