

## Standard and Optional Equipment

### Standard Equipment

- Maintenance-free AC drive motor
- ZAPI controller
- Electrical steering
- Electromagnetic brake
- Polyurethane drive and load wheel tyres
- Clearview standard mast lift 2,950mm
- Fork carriage: 570/1150mm
- Lateral battery change
- Battery 24V/210Ah
- Creep speed function
- Multifunction display with hourmeter, discharger indicator and fault codes

### Optional Equipment

- Various masts for different lift heights available
- Big battery capacity 280Ah/345Ah
- Proportional lifting control
- Battery Trolley, 2 batt.
- Overhead guard

## Other Options Available on Request



## Electric Pallet Stackers

CAPACITY 1600 kg  
ML16AP **CDD** 1165

### Safety

Automatic half speed turning function, more smooth in turning. Standard platform switch to prevent mis operation. Battery discharge protection can cut-off lifting function automatically at low voltage for a longer lifetime.

### Performance

Creep speed button as standard, even the narrow space can be easily operated. Side battery change and multiple battery capacity ensure that each truck is precisely matched to the demands of individual applications. Superior driving comfort with minimum effort due to electric steering.

### Comfort

A perfect interface between operator and truck has achieved with the ergonomic design concept. The centralized tiller protect

operator's hands safely. The lateral side guards are covered with foam protection to provide safe and comfortable holding.

### Reliability

This truck has reliable imported brand components to ensure the reliability of long working time. Reliable electric braking system ensures safety operation. Can-Bus architecture enables fast, easy access to all truck data.

### Service

All internal components and servicing points well accessible behind detachable hood. All the performance parameters can be configured easily to match the requirements of the customer's application.

## Features

### Steering system

- Electrical steering for effortless, precise operation.
- Stable automatic speed reduction in cornering.
- Creep speed function ensures high maneuverability in narrow space.



### Operation platform

- Wrap-around hand operation
- Comfortable controls, operable with either hands and gloves.



### Drive system

- Maintenance-free AC drive motor.
- Imported brand controller provides precise control and adjustable parameters



### Braking system

- Automatic braking when tiller is moved fully up or down.
- Automatic braking on releasing travel control switch.
- Belly switch ensures a safety distance
- Emergency button close to your hand.

### Lifting system

- Lifting limit: cut-off the lifting motor automatically at max. lifting height to ensure stability.
- Dual lowering speed: fast lowering function can be used in no-load, slow lowering function can be used in load to ensure efficiency and stability.



\*Subject to modification in the interests of progress, illustration and technical details not binding for actual constructions and may show the optional equipments.\*

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Linde Material Handling

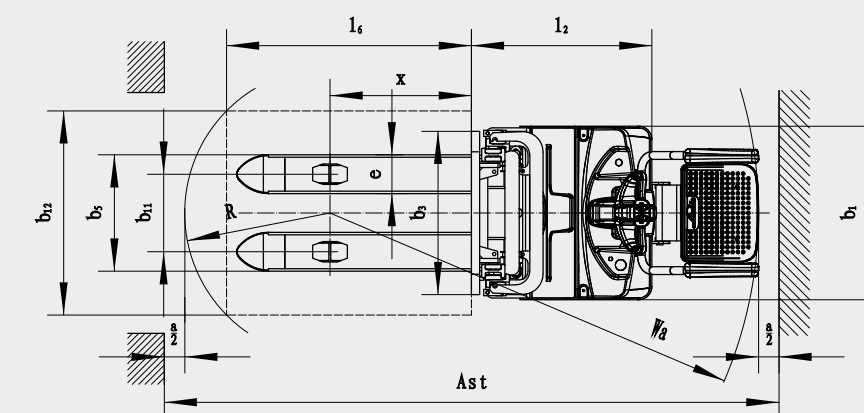
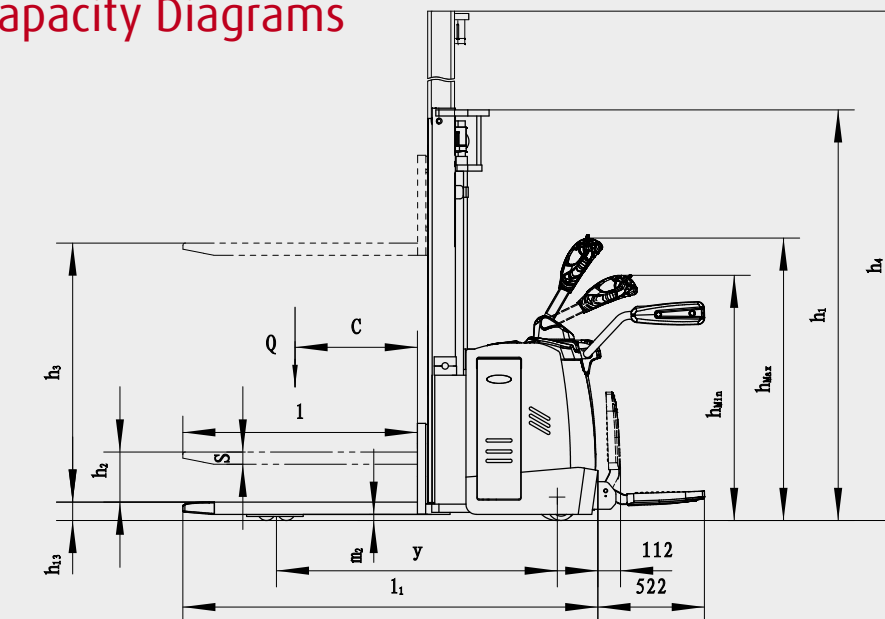
Linde

## Technical Data

Characteristics	1.1	Manufacturer		Linde
	1.2	Model designation		CDD
	1.2.1	Configuration code		<b>ML16AP</b>
	1.3	Power unit		battery
	1.4	Operation		Pedestrian/rider Stand
	1.5	rated capacity	Q (t)	1600
	1.6	Load center distance	c (mm)	600
	1.8	Alex centre to fork face(fork raised/lowered)	x (mm)	693
	1.9	Wheelbase(fork raised/lowered)	y (mm)	1380
Weights	2.1	Service weight (with battery)	Kg	1240 <sup>1)</sup>
	2.2	Axle load with load, drive/load side	Kg	960/1880
	2.3	Axle load without load, drive/load side	Kg	860/380
Wheels	3.1	Tyre type, Drive/Load side		PU/PU
	3.2	Tyre size, drive side(diameter×width)	mm	Φ230×75
	3.3	Tyre size, load side(diameter×width)	mm	Φ85×70
	3.4	Tyre size, caster wheels(diameter×width)	mm	Φ130×55
	3.5	Wheels number(drive/load side (x=drive wheels)	mm	1x +1/4
	3.6	Track width, drive side	b10 (mm)	574
	3.7	Track width,load side	b11 (mm)	380/410/495
Dimensions	4.2	Height of mast, lowered	h1(mm)	2045
	4.3	Free lift	h2(mm)	150
	4.4	Lift height	h3(mm)	2950
	4.5	Height of mast, extended	h4(mm)	3465
	4.9	Height of lifting arm in operation position, min./max.	h14(mm)	1270/1470
	4.15	Fork height, lowered	h13(mm)	88
	4.19	Overall length	l1(mm)	2035
	4.20	Length to forks face	l2(mm)	879
	4.21	Overall width	b1/b2	850
	4.22	Fork dimensions	s/e/l(mm)	60×190×1150
	4.24	Fork carriage width	b3(mm)	800
	4.25	Fork spread	b5(mm)	570/600/685
	4.32	Ground clearance, center of wheelbase	m2(mm)	28
	4.34.1	Aisle width, 1000 × 1200mm pallet crosswise	Ast(mm)	2605/2965 <sup>3)</sup>
4.34.2	Aisle width, 800 × 1200mm pallet lengthwise	Ast(mm)	2575/2935 <sup>3)</sup>	
4.35	Turning radius(fork raised)	Wa(mm)	1730/2090 <sup>3)</sup>	
Performances	5.1	Travel speed, with/ without load	km/ h	5.5/6.0 <sup>2)</sup>
	5.2	Lifting speed, with/ without load	m/ s	0.12/0.17
	5.3	Lowering speed, with/ without load,fast(slow)	m/ s	0.31/0.21(0.16/0.15)
	5.8	Max. gradeability, laden/unladen	%	8/16
	5.10	Service brake type		Electromagnetic
Drive	6.1	Drive motor rating S2 60 min	kW	1.6
	6.2	Lift motor rating at S3 15%	kW	3.0
	6.3	The maximum allowed size battery	mm	834×216×630
	6.4	Battery voltage/nominal capacity K5	V/ Ah	24/210
	6.5	Battery weight	kg	200
Others	8.1	Type of drive unit		AC
	8.4	Sound pressure level at driver's ear	dB (A)	74

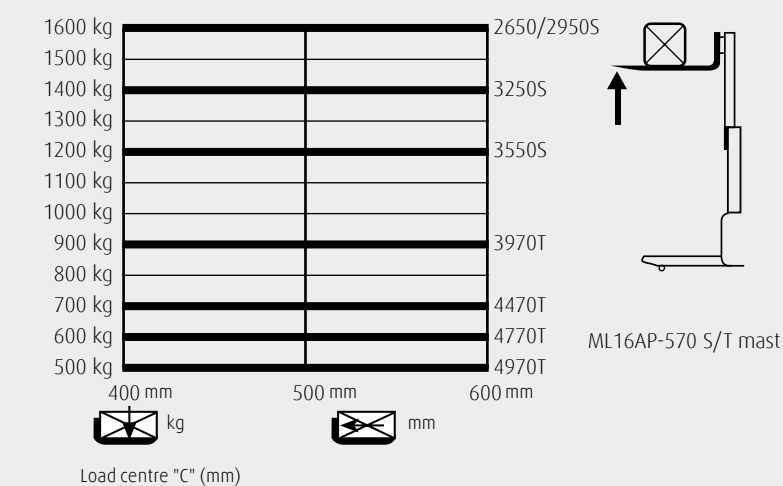
Figures for standard version may vary when options equipment is fitted  
 1) Including battery weight stated in Line 6.4 /6.5  
 2) (±5%)  
 3) With platform folded/lowered  
 The definition of parameters mentioned above see VDI 2198

## Lifting Capacity Diagrams



$$Ast = Wa + \sqrt{(L_6 - x)^2 + (b_{12}/2)^2} + a$$

Safety clearance a = 200 mm



## Mast Datasheet (in: mm)

Masts (in mm)	ML16AP		2650 S	2950 S	3250 S	3550 S	3970 T	4470 T	4770 T	4970 T	
Lift		h3	mm	2650	2950	3250	3550	3970	4470	4770	4970
Lift+fork height		h3+h13	mm	2738	3038	3338	3638	4058	4558	4858	5058
Height,mast lowered		h1	mm	1895	2045	2195	2345	1822	2022	2122	2187
Height,mast extended		h4	mm	3165	3465	3765	4065	4460	4960	5260	5460
Free lift		h2	mm	150	150	150	150	1390	1590	1690	1790