



Linde Material Handling

Linde



# ORDER PICKER N20 C LoL

**CAPACITY 1000 KG | SERIES 4589**

## Safety

The design of the order picker ensures that the operator remains within the truck contours at all time and the rounded shape of the cushioned backrest ensures his comfort. To ensure safety in operation, mast controls are located on both sides of the backrest to ensure that the operator has eyes on the forks at all time when using the lift commands. A pallet locking device ensures that the second pallet is safely stored vertically and can be used as a load support.

## Performance

The Linde drive system employs a powerful 3 kW AC motor and a 2.2 kW lift motor enabling the N20 C LoL to carry 2000 kg at a top speed of 9 km/h, and ensures safe starting on gradients without rollback. Finally, the N20 C LoL ensures that two pallets can be consecutively prepared in one picking cycle only, one after the other.

## Comfort

The height adjustable foldable seating support brings relief to the operator during long transfers. Moreover, the height adjustment of the Linde Steering Wheel guarantees that the operator can adjust the steering wheel to the most comfortable height position. The clever

design of the N20 C LoL ensures that the operator does not have to bend down to place load on the pallet lifted on the forks. The easy-to-use pallet locking device facilitates releasing of the second empty pallet to continue the picking.

## Reliability

The trucks are designed, built and tested for consistent reliability in demanding applications. The motor, sub-components and electronics are all protected within the robust chassis structure, which can be further reinforced by different front chassis protection options. These features guarantee a longer operating life, whilst delivering safe, efficient, and productive load handling.

## Service

Efficiency at work and when servicing with cost effective maintenance routines are important. With service intervals of up to 1000 hours and a computerized diagnostic system via CAN-bus, maintenance interventions are minimal and operating costs are reduced. Easy accessibility to all components thanks to the front panel and the maintenance free AC technology play an additional part in maximizing uptime.



Here you can find more content via your smartphone: [Linde Augmented Reality App](#)



# TECHNICAL DATA

## ACCORDING TO VDI 2198

Characteristics	1.1	Manufacturer		LINDE
	1.2	Manufacturer's type designation		<b>N20 C LoL</b>
	1.3	Drive		Electric
	1.4	Operator type		Stand-on
	1.5	Rated capacity / rated load	Q (t)	2.0 / 1.0 on main lift
	1.6	Load centre distance	c (mm)	1248 / 600 on main lift <sup>1)</sup>
	1.8	Load distance, centre of drive axle to fork	x (mm)	1910 / 1782 <sup>3)</sup>
	1.9	Wheelbase	y (mm)	3225 / 3097 <sup>3) 4) 5)</sup>
Weight	2.1	Service weight (including battery)	(kg)	1567
	2.2	Axle loading, laden front / rear	(kg)	1539 / 2028
	2.3	Axle loading, unladen front / rear	(kg)	1170 / 397
Wheels and tyres	3.1	Tyres		Polyurethane
	3.2	Tyre size, front		254 x 102
	3.3	Tyre size, rear		85 x 80
	3.4	Additional wheels (dimensions)		150 x 50
	3.5	Wheels, number front / rear (x=driven wheels)		1x - 1/4
	3.6	Tread, front	b <sub>10</sub> (mm)	474
	3.7	Tread, rear	b <sub>11</sub> (mm)	370
Dimensions	4.2	Height, mast lowered	h <sub>1</sub> (mm)	see table in Linde World
	4.3	Free lift	h <sub>2</sub> (mm)	see table in Linde World
	4.4	Lift	h <sub>3</sub> (mm)	800
	4.5	Height, mast extended	h <sub>4</sub> (mm)	see table in Linde World
	4.6	Initial lift	h <sub>5</sub> (mm)	130
	4.8	Stand height / Seat height (min / max)	h <sub>7</sub> (mm)	130 <sup>7)</sup>
	4.9	Height drawbar in driving position min / max.	h <sub>14</sub> (mm)	1258 <sup>8)</sup>
	4.10	Height of wheel arms	h <sub>8</sub> (mm)	85
	4.14	Stand height, elevated (with lifting platform)	h <sub>12</sub> (mm)	1182 / 1197 <sup>9)</sup>
	4.15	Forks height, lowered	h <sub>13</sub> (mm)	91
	4.17	Overhang	l <sub>5</sub> (mm)	-
	4.19	Overall length	l <sub>1</sub> (mm)	4005 <sup>4) 5)</sup>
	4.20	Length to face of forks	l <sub>2</sub> (mm)	1503 <sup>4) 5)</sup>
	4.21	Overall width	b <sub>1</sub> (mm)	800
	4.22	Fork dimensions	s / e / l	60 (72 max) / 200 / 1295
	4.24	Fork-carriage width	b <sub>2</sub> (mm)	711
	4.25	Distance between fork-arms	b <sub>3</sub> (mm)	570
	4.31	Ground clearance, laden, below mast	m <sub>1</sub> (mm)	13 / 100 <sup>3)</sup>
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm)	25 / 155 <sup>3)</sup>
	4.34	Aisle width for for pallets 800 x 16 lengthways (forks raised)	A <sub>31</sub> (mm)	see table in Linde World
4.34.1	Aisle width for pallets 1000 x 1200 crossways (forks raised)	A <sub>31</sub> (mm)	see table in Linde World	
4.34.2	Aisle width for pallets 800 x 1200 crossways (forks raised)	A <sub>31</sub> (mm)	-	
4.35	Turning radius	W <sub>9</sub> (mm)	3399 / 3271 <sup>3) 4) 5)</sup>	
Performance	5.1	Travel speed laden / unladen	(km/h)	9 / 12
	5.1.1	Travel speed laden / unladen, backwards	(km/h)	8 / 10
	5.2	Lift speed laden / unladen	(m/s)	0.159 / 0.253
	5.3	Lowering speed laden / unladen	(m/s)	0.218 / 0.240
	5.8	Max. gradeability laden / unladen	(%)	7 % / 12 % (6.6 %; 5.3 %) <sup>14)</sup>
	5.9	Acceleration time, laden / unladen	(s)	6.5 / 5.3
	5.10	Service brake		Electromagnetic
Drive	6.1	Drive motor, rating S2 = 60 min	(kW)	3
	6.2	Lift motor, rating at S3	(kW)	2.2 / 5 %
	6.3	Battery according to DIN 43531/35/36; A, B, C, no		no
	6.4	Battery voltage / nominal capacity K5	(V) / (Ah)	24 / 345 - 465
	6.5	Battery weight ± 5 %	(kg)	402
	6.6	Energy consumption according to VDI cycle	(kWh)	0.55 / 0.52 <sup>15)</sup>
	6.7	Turnover output	(t/h)	-
	6.8	Energy consumption at turnover output	(kWh/h)	-
Others	8.1	Drive control		AC control
	10.7	Sound level at driver's ear	(dB(A))	< 70

<sup>1)</sup> with holder for vertical pallet 1365 / 765 mm

<sup>3)</sup> with load arms or forks raised

<sup>4)</sup> with lifting platform + 50 mm

<sup>5)</sup> with tray 4 PzS or Li-ION + 114 mm

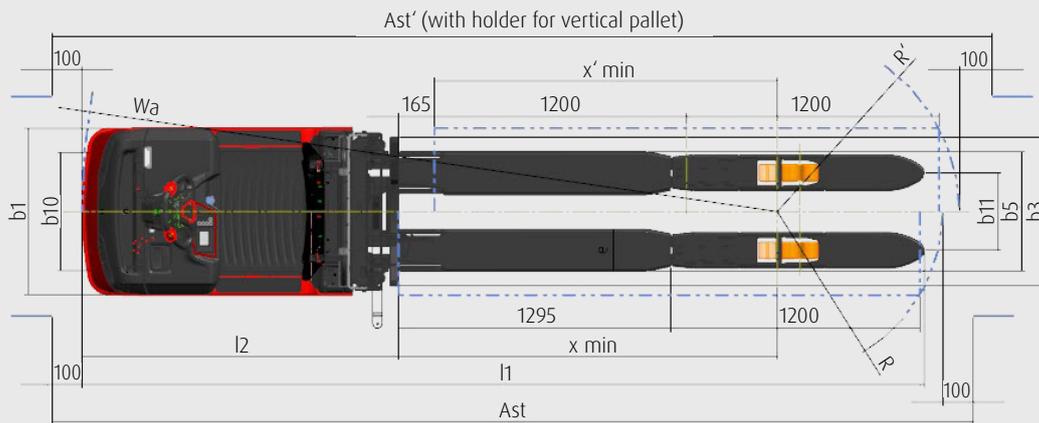
<sup>7)</sup> with lifting platform option standard version + 15 mm; with lifting platform option damped version + 30 mm

<sup>8)</sup> with lifting platform option standard version + 72 mm; with lifting platform option damped version + 87 mm; with tiller adjustment option, h14 setting range = + 89 mm / - 19 mm

<sup>9)</sup> with lifting platform option standard / damped version

<sup>15)</sup> in bracket: minimum geometric limit on unrounded edge slope without or with foot guard (if different); due to manufacturing and assembly tolerances, it is recommended to foresee a decrease in the nominal values of not less than 1 %

<sup>16)</sup> with 1000 kg on mast and 1000 kg on initial lift at max initial lift height



## MAST TABLES

	800S	1580S
$h_3$	800	1580
$h_3 + h_{13}$	891	1671
$h_1$	1276	1276
$H_1$	1351	1351
$h_4$	1676	2066
$h_2$	150	150

# STANDARD EQUIPMENT / OPTIONAL EQUIPMENT

## STANDARD EQUIPMENT

Chassis width 800 mm
Rubber platform mat
Anti-slip stripes
Fixed cushioned and roundly shaped backrest equipped with handle
Power assisted steering, adjustable steering resistance
Polyurethane drive wheel
Single polyurethane load wheel greaseable
Tandem polyurethane castor wheels
Workstation with A4 clip integrated
Key switch or PIN code access
Multifunction colored display incl. hour meter, maintenance indication, battery discharge indicator and internal fault code indication
Mast controls integrated on backrest
3 kW AC drive motor (maintenance free)
2.2 kW (5 % rating output) lift motor
CAN-bus technology
Automatic speed reduction in curves
Initial lift electrical stop sensor
Mast lift pressure stop sensor
Speed reduction depending on mast lift height and load
Automatic breaking on releasing butterfly switch
Electromagnetic emergency brake acting proportionally to the load weight
Electric horn
Initial lift of 130 mm
Vertical battery change in 3 and 4 PzS
Protection -10° C

## OPTIONAL EQUIPMENT

Drive wheels: cushion rubber, synthetic cushion rubber non marking, wet grip
Load wheels: tandem polyurethane greaseable
Castor wheels: tandem polyurethane and tandem polyurethane greaseable
Raising platform
Pneumatic damping of foot platform
Cushioned knee protection and foldable leg rest step
Height adjustable Linde Steering Wheel
Height adjustable cushioned backrest with foldable seating support
Dashboard with incorporated storage compartments
Inching control (forward only or forward/backward) and initial lift
Accessory supports
Support Clipboard DIN A4 and panoramic mirror
Support data terminal and power supply cable 24 V
Support for scanner and shrink wrap holder
Electric socket 12 V or USB plug
Other options available on request

### Masts / Forks:

Width over fork carriage 570 mm with fork length 1295 mm
Load arms 2500 mm
Standard masts with lift height of 800 mm or 1580 mm
Speed reduction if forks lowered and soft landing on forks

### Safety:

Front chassis protections
Load Backrest 1450 mm
Pallet Locking device
Linde BlueSpot™, Front LED-stripes, Flashing Beacon

### Environment:

Cold store protection - 35° C
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### Linde Connected Solutions:

ac: access control (PIN or RFID Dual), an: usage analysis, dt: crash detection, tr: trouble code and hr: operating hours
Data transfer online and data transfer WiFi
Bluetooth USB Stick

### Battery:

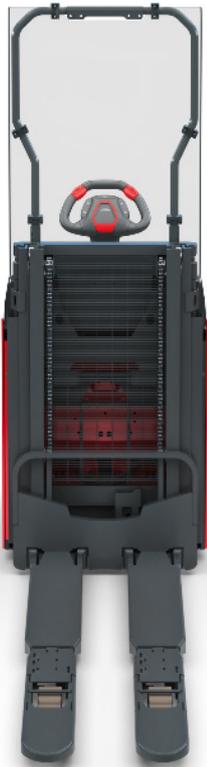
Lateral battery change 3 PzS/4 PzS low available with an ergonomic battery un/locking with lever and rollers
Lateral battery change 3 PzS/4 PzS high available with a simple battery un/locking system
Lateral battery change 3 PzS/4 PzS for competitor batteries
Built-in charger for lead acid batteries

### Li-ION technology:

4 PzS compartment with 4.5 kWh - 9 kWh (205 Ah - 410 Ah)
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### Li-ION charger:

24 V-Charger v255: 4.5 kWh (full charging time 1 h 30 min) - 9.0 kWh (2 h 40 min)
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# FEATURES

## Optimal load handling

- 2000 kg total load capacity, to handle two EUR pallets of 1000 kg each
- Up to 1000 kg on main lift
- High performance 2.2 kW lift motor
- Mast controls located on both sides of backrest
- Four points contact configuration for maximum stability on ground
- Traction speed of 9 km/h loaded and 12 km/h unloaded
- Electromagnetic braking initiated by the emergency stop button acts on the drive motor, proportional



## Productivity at the second level

- Raising platform option to optimize occasional first and second level picking
- Optional pneumatic damper for optimum comfort on platform
- Wide access of 428 mm
- OptiLift® systems ensures proportional lift and lowering of platform and quiet operation
- Platform lifting command intuitively placed on Linde Steering Wheel for single-hand operation
- Platform lowering with foot switch

## Easy manoeuvring

- Intuitive Linde Steering Wheel, with all functions (horn, initial lift, traction butterflies) easily accessible without losing grip ensures one-hand operation
- Ergonomic and safe driving position
- Self centering steering for faster picking cycles



## Workstation

- Wide, easy access, from either side
- Numerous storage compartments, maximized with optional dashboard for increased storage
- Various optional accessories designed to streamline picking
- Pedestrian command for traction and initial lift



## Work in comfort

- Wide platform access of 418 mm and low step in height of 130 mm
- Damped mat or pneumatic damper for reduced vibration levels
- Height adjustable Linde Steering Wheel
- Cushioned, rounded-shape backrest, also available with height adjustment with foldable seating support



## Service Efficiency

- Integrated CAN-bus diagnostic system for faster analysis and shorter service intervals
- All truck parameters are configurable by service technician to suit each individual application
- Rapid and convenient access to main components via front service panel
- Electronic management of all components permitting quick and easy diagnosis

## Efficient drive system

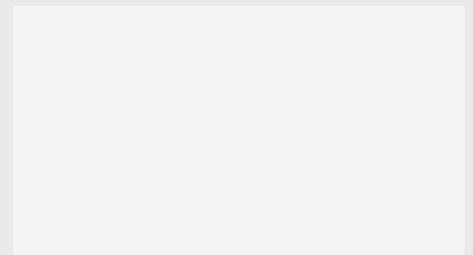
- Powerful, high-torque and 3 kW AC drive motor
- Moisture and dust-proof maintenance-free motor with up to 7 % gradeability performance fully loaded
- Safe starting on gradients without rollback
- Effortless proportional electric power steering with positive feedback
- Automatic speed reduction when cornering

## Energy for your activity

- Vertical change as standard, optional side change
- Wide range of batteries (low and high) from 345 Ah (3 PzS) to 620 Ah (4 PzS)
- Battery compartments dedicated for competitor batteries
- Ergonomic lever on low batteries

Subject to modification in the interest of progress. Illustrations and technical details could include options and not binding for actual constructions. All dimensions subject to usual tolerances.

Presented by:



Linde Material Handling

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