



CN - CNI Pedestrian Stacker Truck

Tiller trucks in the CN CNI series

The product line

This line has been specifically designed for intensive stocking operations at medium height, and includes two models with a rated load capacity of 1400 kg and 2000 kg. The CNI version is equipped with initial lift.

The structure

■ The 4-point support with side tiller configuration provides a high degree of stability as well as perfect visibility when loading and unloading at greater heights.

■ The traction unit and castor wheel are completely enclosed within the frame, providing better protection for the operator's feet.

■ The CN and CNI models are available with two types of mast and chassis with a rated load capacity of 1400 kg or 2000 kg

■ The different battery compartments in the two basic models can accommodate a DIN battery in the CNI model and a battery with DIN elements in the CN model. The batteries are completely enclosed within the frame (i.e. they are not visible) and are easily accessed by means

of a polyethylene cover. The battery in the CN model can be removed from the side and from the top only in the CNI model.

■ The polyethylene battery covers – made from rotational technology – are very strong and flexible and have the ability to withstand damage without buckling.



CNI
battery removal

CN
battery removal

Tiller

■ The new one piece tiller made from a very resistant plastic material with an oval-shaped tubular arm that has been robotically welded.

■ The configuration and location of the tiller provides the best working position for operators of all sizes.

■ The lightness of the tiller and the easy controls greatly reduce operator fatigue even during long shifts. When released, the tiller accurately returns to the vertical position without bumping or bouncing and without compromising operator safety. Standard tiller-operated proportional control of the fork lift/lower functions.

Traction unit

■ The separately excited traction motor has a rated power of 1 kW

■ The castor wheel can be easily adjusted to provide excellent grip and stability

Lift unit

■ Masts with a rated load capacity of 1400 kg and 2000 kg

■ Simplex, Duplex and Triplex masts are available (the Simplex mast is not available on the CNI model) with ample visibility and lifting heights up to 5,000 mm

■ Masts with either low free lift (PAL) or high free lift (GAL) are available.

■ Two different lift motors are available (2.2 kW and 3 kW) to meet load capacity and lift height requirements

Braking

The truck features two separate braking systems:

■ Service brake – Inversion braking on the traction motor (regenerative braking) performed by the electronic control when the butterfly direction control is released.

■ Handbrake – Electromagnetic brake.

Electronic system

■ 24 V DC power.

■ High frequency static electronic control of the traction motor and pump on all models.

■ The hour meter signals any abnormal operation.

■ The new electronic systems ensure low energy consumption and quiet operations. The control system protects the motor and the battery from early wear by preventing high power spikes.

■ The electrical systems and wiring are protected to IP 54 and are waterproof and dustproof, ensuring greater reliability over time.

■ The SAAB terminal connectors are protected to IP 67.

■ Speed reduction when the forks are raised from a predetermined range.

■ Automatic lowering of arms when the fork lift unit is operated (CNI).

■ Lock-out of arm lift function when the forks are raised from a predetermined range (CNI).

Optional equipment

■ Cold store version (-30 °C).

■ Tandem load rollers (CN 14).

■ Rubber Drive wheel (CNI-14 only).

■ 50A On-Board Charger.

■ Load Backrest.

■ Tiller always active.

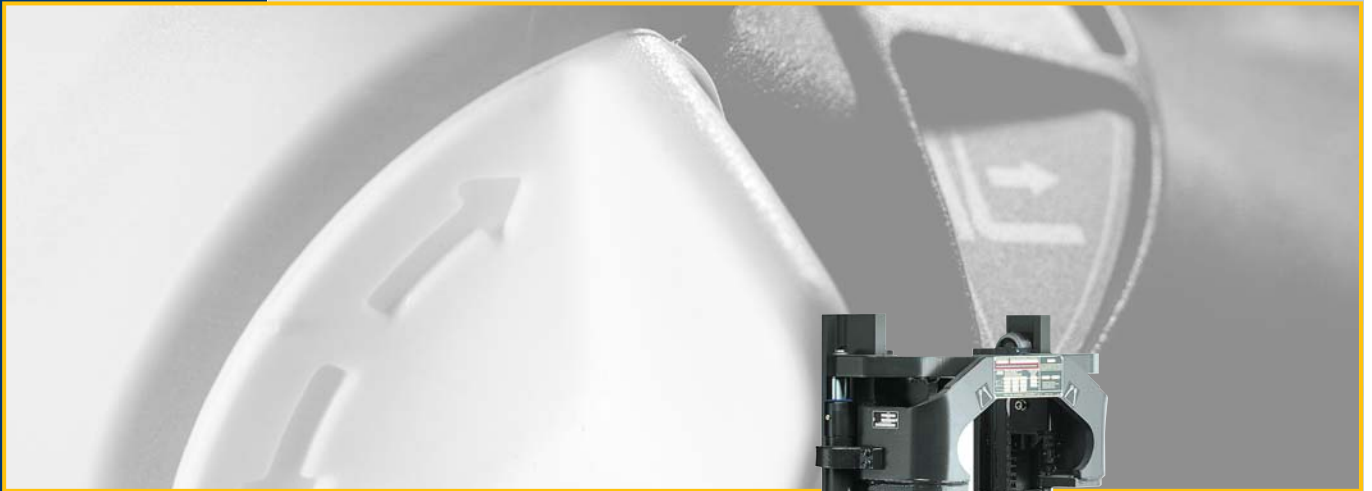
■ Adjustable forks with FEM attachment and angled section (CN 14 only).

■ Battery replacement stand (CN).

Information and data reported here are not intended as binding in any way and refer to standard truck specification.

CN - CNI

Technical data



designed to work



CN - CNi Technical data

VDI 2198

			OM PIMESPO	OM PIMESPO
Characteristics	1.1	Manufacturer		
	1.2	Manufacturer type designation	CN 14	CN 20
	1.3	Drive unit: electric (battery or mains), diesel, petrol, fuel gas	Electric	Electric
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Pedestrian	Pedestrian
Weight	1.5	Load capacity	Q (t)	1,4
	1.6	Load center	c (mm)	600
	1.8	Load distance, centre of drive axle to fork face	x (mm)	711 ⁽²⁾
Wheels, Tyres	1.9	Wheelbase	y (mm)	1323
	2.1	Truck weight (without battery)	kg	880 ⁽⁴⁾
	2.2	Axle loading, loaded (front/ rear)	kg	888 / 1652 ⁽⁴⁾
Dimensions	2.3	Axle loading, unloaded (front/ rear)	kg	770 / 369 ⁽⁴⁾
	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Polyurethane
	3.2	Tyre size (front)	mm	230 / 120
Dimensions	3.3	Tyre size (rear)	mm	85 x 90
	3.5	Wheels number, front / rear (x= driven wheels)		1x-1 / 2
	3.6	Tread, front	b ₁₀ (mm)	574
	3.7	Tread, rear	b ₁₁ (mm)	380
	4.2	Height, mast lowered	h ₁ (mm)	2327
	4.3	Free lift	h ₂ (mm)	140
	4.4	Lift height	h ₃ (mm)	3580
	4.5	Height, mast extended	h ₄ (mm)	4066 ⁽⁵⁾
	4.6	Initial lift	h ₅ (mm)	/
	4.9	Height of tiller in drive position min / max	h ₁₄ (mm)	762 / 1232
	4.15	Forks height, lowered	h ₁₃ (mm)	86
	4.19	Overall length	l ₁ (mm)	1951
	4.20	Length to face of forks	l ₂ (mm)	789
	4.21	Overall width	b ₁ (mm)	860
	Performance	4.22	Fork dimensions	s/e/l (mm)
4.24		Fork carriage width	b ₃ (mm)	680
4.25		Maximum forks width	b ₅ (mm)	570
4.31		Ground clearance, laden, below mast	m ₁ (mm)	/
4.32		Ground clearance, centre of wheelbase	m ₂ (mm)	30
4.33		Aisle width for pallets 1000x1200 crossways (1200 forking side)	A _{st} (mm)	2485 ⁽⁷⁾
4.34		Aisle width pallets 800x1200 lengthways (800 forking side)	A _{st} (mm)	2451 ⁽⁷⁾
4.35		Turning radius	W _a (mm)	1619 ⁽⁷⁾
5.1		Travel speed: Loaded / unloaded	km/h	5,5 / 6
5.2		Lift speed: Loaded / unloaded	m/s	0,16 / 0,26 ⁽⁸⁾
5.3		Lowering speed: Loaded / unloaded	m/s	0,40 / 0,36
5.7		Gradeability KB 15': Loaded / unloaded	%	1,4% ⁽⁴⁾ / 6,7% ⁽⁴⁾
5.8		Max gradeability KB 5': Loaded / unloaded	%	4,1% ⁽⁴⁾ / 9,1% ⁽⁴⁾⁽¹³⁾
5.10		Service brake		Electric
Electric Motors		6.1	Drive motor rating S2 60min	kW
	6.2	Lift motor rating at S3 15%	kW	2,2 ⁽⁹⁾ / 3
	6.3	Battery according to British Standard / DIN 43531/35/36 A, B, C		DIN
	6.4	Battery voltage / nominal capacity k5	V / Ah	24 / 240 (315 - 375)
	6.5	Battery weight (± 5%)	kg	260 (295 - 304)
Other	8.1	Control unit type		Electronic
	8.4	Sound level at the driver's ear according to DIN 12 053	dB (A)	< 70

(1) Used like transpallet

(2) -20 mm with TPX Full free lift mast

(3) Value referred in condition with legs extended (h5=135 mm)

(4) with DPX LFL mast h3= 3580 & min. nominal battery capacity (see weight, line 6.5)

(5) h4 + 490 mm with load back rest

(6) + 52 mm with battery 330 - 375 Ah

(7) With tiller active arm in vertical position -45mm

(8) Performance obtained with lift motor 3 Kw

(9) Value for masts with height till h3=3580 mm included

(10) Mast not available for model CNi

(11) + 5 mm for model CNi

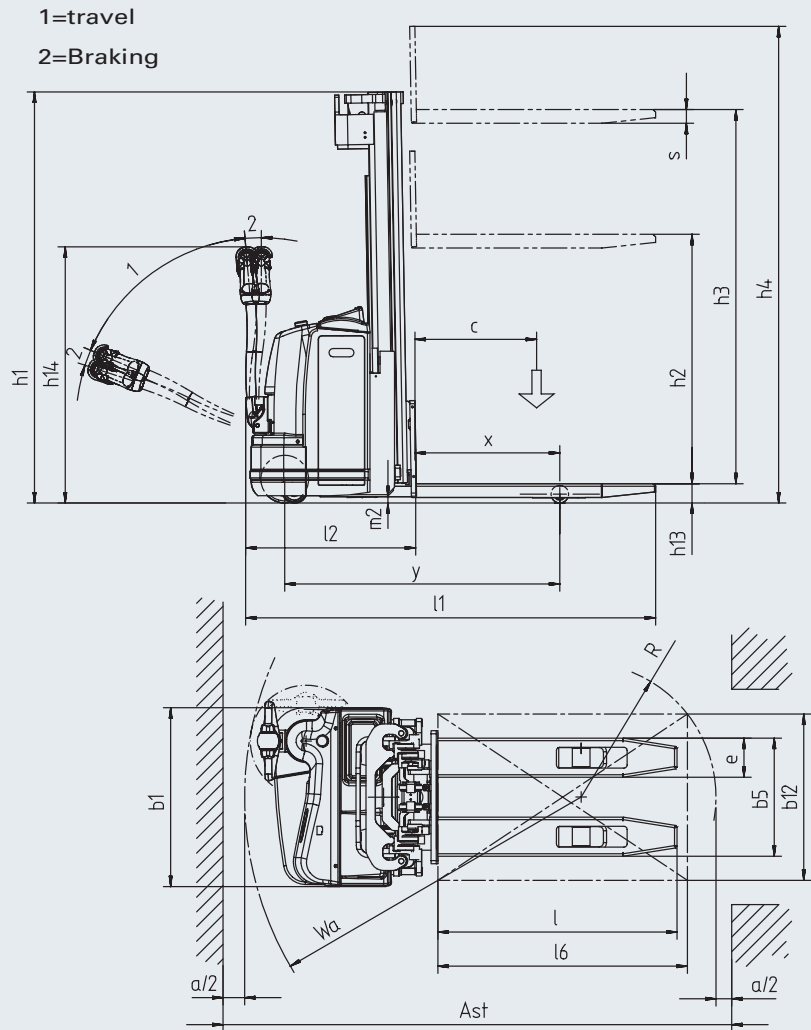
(12) Max gradeability due to overall dimension 18,3%

(13) Max gradeability due to overall dimension 9,1%

(14) Value referred in condition with legs lowered (h5=0 mm)

(15) Value referred in condition with legs extended (h5=135 mm)

OM PIMESPO	OM PIMESPO
CNi 14	CNi 20
Electric	Electric
Pedestrian	Pedestrian
1,4 (2 ⁽¹⁾)	2 (2 ⁽¹⁾)
600	600
637 ^{(2) (15)}	637 ^{(2) (15)}
1305 ^{(3) (8) (15)}	1359 ^{(3) (15)}
975 ⁽⁴⁾	1039 ⁽⁴⁾
990 / 1597 ^{(4) (14)}	1092 / 2235 ^{(4) (14)}
830 / 357 ^{(4) (14)}	904 / 423 ^{(4) (14)}
Polyurethane	Polyurethane
230/120	230/120
85 x 70	85 x 70
1x-1 / 4	1x-1 / 4
574	574
380	380
2332	2332
140	90
3580	3580
4070 ⁽⁵⁾	4092 ⁽⁵⁾
135	135
762 / 1232	762 / 1232
91	91
1999	2053
844 ⁽⁶⁾	903
860	860
66 / 190 / 1150	61 / 200 / 1150
680	680
570	570
/	/
25 / 160 ⁽¹⁵⁾	25 / 160 ⁽¹⁵⁾
2505 ⁽⁷⁾	2559 ⁽⁷⁾
2493 ^{(6) (7)}	2550 ⁽⁷⁾
1602 ^{(7) (15)}	1655 ^{(7) (15)}
5,5 / 6	5 / 6
0,16 / 0,26	0,10 / 0,17
0,40 / 0,36	0,30 / 0,23
1,3% ⁽⁴⁾ / 6,3% ⁽⁴⁾	0,3% ⁽⁴⁾ / 5,3% ⁽⁴⁾
3,9% ⁽⁴⁾ / 12,2% ^{(4) (12)}	2,4% ⁽⁴⁾ / 10,6% ^{(4) (12)}
Electric	Electric
1	1
3	3
DIN 43535 B	DIN 43535 B
24 / 220 (250-330-375)	24 / 330 (375)
212 (220-288-305)	288 (305)
Electronic	Electronic
<70	<70



1.4 t MAST TYPE		SPX ⁽¹⁰⁾	Simplex				Duplex		Triplex			
Lift height	h_3 (mm)	1510 ⁽¹⁰⁾	2900	3580	3980	4480	2990	3600	4170	4470	4940	5390
Height, mast lowered ⁽¹¹⁾	h_1 (mm)	1977	1977	2327	2527	2777	1977	2327	1877	1977	2177	2327
Free lift	h_2 (mm)	1491	140	140	140	140	1491	1810	1391	1491	1660	1810
Height, mast extended ⁽¹¹⁾	h_4 (mm)	1996	3386	4066	4466	4966	3476	4086	4656	4956	5426	5876

2.0 t MAST TYPE		Simplex		Triplex
Lift height	h_3 (mm)	2900	3580	4380
Height, mast lowered ⁽¹¹⁾	h_1 (mm)	1977	2327	1977
Free lift	h_2 (mm)	90	90	1469
Height, mast extended ⁽¹¹⁾	h_4 (mm)	3408	4088	4888

	CNi load capacity	
	Stacker	Transpallet
CNi 14	1400 kg	2000 kg
CNi 20	2000 kg	2000 kg