

EP40N EP45N EP50CN EP50N EP50NH EP55NH

PRELIMINARY SPECIFICATIONS

ELECTRIC POWERED LIFT TRUCKS 80V, 4.0 - 5.5 TONNES



POWER UP YOUR DRIVER AND BOOST YOUR BUSINESS

WITH THE POWER AND EFFICIENCY TO CHALLENGE AN IC ENGINE FORKLIFT, BUT NO EMISSIONS, THIS RANGE MAXIMISES EVERY ELECTRIC ADVANTAGE. ENJOY QUIET COMFORT AND SAFER, FASTER, MORE AGILE PERFORMANCE, WHILE REDUCING YOUR OVERALL OPERATING COSTS.





These environmentally friendly trucks, emitting zero pollution in operation, are more energy-efficient – and quieter by far – than any other in their class. Built for demanding indoor and outdoor applications, they offer you uncompromising power, durability and a lower total cost of operation (TCO).



Their exceptional agility gives drivers the feeling of driving a much smaller truck. Dynamic aids include *OmniTurn* all-wheel steering, RDS (Responsive Drive System) and intelligent curve control. *PowerBurst* adds extra acceleration or climbing torque when needed, while electric differential locking helps in slippery conditions.



Materials handling is smoother, faster, safer and more precise, thanks to *SmoothFlow* and other hydraulic technologies which optimise mast and fork movements according to load weights and lift heights. Light yet responsive fingertip levers or joysticks give effortless control.



From the spacious, quiet, vibration-free, floating operator compartment, the driver enjoys clear all-round views. Standard equipment levels are generous and weatherproof cabin options are available with additional comforts like air conditioning.

LOWER COST OF OWNERSHIP

- Best-in-class energy efficiency extends working hours (runtime) per battery charge.
- ECO mode can be selected to lower electricity bills.
- Li-ion battery option adds even greater efficiency and runtime, along with minimal maintenance needs and much longer life, for lower longterm total cost of operation (TCO).
- Easy access to battery compartment enables quick on-truck servicing and sideways exchange.
- Battery inspection hatch option allows fast checking and water top-ups for lead-acid batteries.
- Multi-function display encourages correct use and maintenance of truck.
- Simple plug-in diagnostics and troubleshooting reduce downtime and maintain efficient performance.
- Robust construction reduces repair and replacement needs and helps maintain truck's high residual value.

UNMATCHED PRODUCTIVITY

- PowerBurst automatically delivers extra torque to maintain ramp speed or provide strong acceleration, even when carrying heavy loads.
- Responsive Drive System (RDS) adapts performance rapidly in reaction to speed of pedal and hydraulic control operation, and ensures all movements, stops and starts are smooth.
- OmniTurn all-wheel steering offers better grip, smoother turning and unbeatably agile manoeuvring, aided by a +100° rear turning axle which enables instant side turns with no initial backward movement.
- Electric differential lock maximises grip on slippery surfaces by locking front wheels to increase traction (activated automatically at small steering angles or manually via an optional pedal function).
- Adaptive steering varies steering ratio and force to optimise comfort, control and stability.
- Intelligent curve control maximises cornering safety by smoothly adjusting truck speed and minimising side forces.
- SmoothFlow hydraulic system automatically adjusts to load weight, ensuring fast but smooth and precise control of all mast and fork actions
 whether individual or simultaneous.
- Automatic hydraulic control tuning maintains steady mast and chassis movements when lifting above 2.5 metres*. (*Activation height depends on mast chosen.)

- Passive sway control allows mast tilting forces to be absorbed by chassis during higher lifts. (Applies mainly above 3.0 metres.)
- Quick-connect access point simplifies opportunity charging of Li-ion batteries and features automatic ventilation for lead-acid.
- Li-ion option enhances performance and permits fast opportunity charging for continuous operation without battery changes.
- Pre-set ECO and PRO modes can be selected for different drivers and tasks, while customised settings (including lifting and lowering) can be applied by service engineers.

SAFETY AND ERGONOMICS

- Market-leading SilentRun+ hydraulic pumps, quiet drive units and other low-noise technologies keep driver comfortable and stressfree, increase awareness of surrounding activity and avoid disturbing neighbours and co-workers.
- Rubber-mounted operator compartment minimises vibration.
- Spacious operator compartment offers comfortable, adjustable seat, large, uncluttered floor and plenty of foot room, as well as easy, smooth entry/exit aided by long grab handle and non-slip step.
- Easy-to-read colour display keeps drivers fully informed.
- Obstacle-free design gives a clear all-round view of the truck's surroundings and outer dimensions – from both open and enclosed cabins – with no need to lean.
- Dark operator compartment materials minimise reflections on inside of windows, for clearer vision.
- Useful storage spaces include suitable pockets for tools, mobile devices, bottles, tape dispensers and pens.
- Panel cabin options include acrylic transparent roof, steel doors, windscreen, side and rear windows, and front/rear wipers/washers.
- Air conditioner option focuses ventilation on footwell and windscreen, and provides additional adjustable front and side vents, for welcome comfort in hot weather — without cold draughts around the neck. (Only with panel cabin.)
- Heater option keeps driver warm and windows demisted in cold conditions. (Only with panel cabin.)
- Window options are designed for panoramic vision, ventilation, emergency rear escape, and convenient reach (to operate warehouse door-opening string, for example). (Only with panel cabin.)
- Panel cabin interior package (optional) includes roof liner, radio, speakers and reading light.

- Ergonomic steering wheel has a widely adjustable column and a steering knob which automatically returns to the most convenient position after every turn.
- Palm Steering option offers enhanced forward view, relaxed driving position and operation with minimal effort – ideal if driver is seated for long periods.
- Spring-force-optimised fingertip hydraulic controls on adjustable, comfortable armrest ensure ergonomically perfect hand positioning, anatomical support and free movement.
- Dual joystick option separates functions such as clamp opening, to avoid accidental moves, and is especially useful if fingertip levers are too small for operation with gloves (or large hands).
- Pedal design, position and angles reduce fatigue for drivers of any height or foot size.
- Safety lights (optional) include red lines, highlighting exclusion boundary around truck, and red or blue spots (front and rear) warning pedestrians of truck's approach.
- Working lights include mast-mounted floodlights as standard, as well as
 optional front and rear driving light clusters and rooftop beacons.
- Standard safety features include hill hold, automatic park brake and wet disc brakes, for added confidence and control.

STANDARD EQUIPMENT AND OPTIONS

			4 WH	EEL 80V		
GENERAL	EP40N	EP45N	EP50CN	EP50N	EP50NH	EP55NH
4-wheel chassis, 80 volts, front wheel dual drive		•	•	•	•	•
Key pre-set economy or high performance mode (ECO / PRO)	0	0	0	0	0	0
3-valve hydraulic fingertip control mounted on an ergonomic armrest		•	•	•	•	•
Variable hydraulic speed control functions		•	•	•	•	•
Battery compartment side door		•	•	•		•
Multifunctional interactive full colour display		•	•	•	•	•
Intelligent curve control		•	•	•	•	•
Tiltable steering column			•	•		
TruckTool setup and diagnostics		•	•	•	•	•
Presence Detection System (PDS) disables all functions and switches truck to stop mode,					•	
with parking brake automatically applied, if driver is not seated						
Full-suspension vinyl Grammer MSG65 seat	•	•		•	•	
CE name plates - language markings	•	•	•	•	•	•
Operations and Maintenance Manual		•	•	•		
DIN battery connectors on frame		•	•	•		•
Reverse drive horn button	•	•		•	•	•
Battery door detection sensor	•	•	•	•	•	•
Fingertip control armrest		•	•	•		•
Manual control levers	0	0	0	0	0	0
Dual joysticks	0	0	0	0	0	0
Palm Steering	0	0	0	0	0	0
Air conditioner	0	0	0	0	0	0
Heater	0	0	0	0	0	0
POWER SOURCE						
Integrated Li-ion battery*	0	0	0	0	0	0
Lead-acid battery	0	0	0	0	0	0
FRAME				_		
Battery sideways exchange chassis	0	0	0	0	0	0
Battery roller bed	•	•	•	•	•	•
Battery tray	0	0	0	0	0	0
Battery sideways exchange tool	0	0	0	0	0	0
Battery inspection hatch	0	0	0	0	0	0
Easy charging	0	0	0	0	0	0
T-bar battery stand	0	0	0	0	0	0
LIGHTING						
LED work lights	•	•	•	•	•	•
Red side lines	0	0	0	0	0	0
Amber strobe	0	0	0	0	0	0
Amber strobe mounted low	0	0	0	0	0	0
'Blue point' rear light	0	0	0	0	0	_
'Blue point' rear light mounted low ELECTRICAL SYSTEM	0	0	0	0	0	0
Smart reversing alarm						
Smart reversing alarm Current output	0	0	0	0	0	0
12V connector	0	0	0	0	0	0
	_	_	_	_		_
Operator presence pedal Electronic differential lock	0	0	0	0	0	0
Dual pedal layout	0	0	0	0	0	0
. ,	0	0		0	0	0
Drive direction selection switch on ergonomic armrest (forward-backward) (only with fingertip controls)	_	•	•	_	•	_
Drive direction lever in steering column (forward-neutral-reverse) Road light kit	0	0	0	0	0	0
PIN code access with start switch	0	0	0	0	0	0
Automated lift controls	0	0	0	0	0	0
Automatic tilt centring via the F2 button with FC TILT/C		_	•		•	
Load weight indicator	0	0	0	0	0	0
Ludu weigiri iliuludui	0	0	0	0	0	O







^{*} Li-ion battery option is available in selected regions.





STANDARD EQUIPMENT AND OPTIONS CONTINUED

			4 WH	EEL 80V		
OPERATOR'S CABIN	EP40N	EP45N	EP50CN	EP50N	EP50NH	EP55NH
Grammer MSG65 seat		•	•	•	•	•
Grammer MSG65 with heater	0	0	0	0	0	0
Grammer MSG65 with cloth upholstery	0	0	0	0	0	0
Grammer MSG65 with cloth upholstery and heater	0	0	0	0	0	0
Grammer MSG75	0	0	0	0	0	0
Grammer MSG75 with heater	0	0	0	0	0	0
Grammer MSG75 with cloth upholstery	0	0	0	0	0	0
Grammer MSG75 with cloth upholstery and heater	0	0	0	0	0	0
Backrest extension		•	•	•	•	•
ACCESSORIES						
Rear view mirror	0	0	0	0	0	0
External rear view mirror	0	0	0	0	0	0
Dead angle mirror	0	0	0	0	0	0
Wide view mirror	0	0	0	0	0	0
A4 size paper holder	0	0	0	0	0	0
Camera	0	0	0	0	0	0
Accessory clamp	0	0	0	0	0	0
Fire extinguisher	0	0	0	0	0	0
CABIN						
Default OHG		•	•	•	•	•
Low OHG	0	0	0	0	0	0
Battery inspection OHG	0	0	0	0	0	0
Front screen and roof with wiper/washer	0	0	0	0	0	0
Low front screen and roof with wiper/washer	0	0	0	0	0	0
Front screen and roof with wiper/washer and battery inspection	0	0	0	0	0	0
Safety doors	0	0	0	0	0	0
Deluxe cabin	0	0	0	0	0	0
EXTERIOR						
Special colour (RAL) for the frame and counterweight	0	0	0	0	0	0
FORKS & CARRIAGE						
Various fork lengths (1000 - 2400 mm) as well as fork deletion	0	0	0	0	0	0
Side shifter W1000 mm	0	0	0	0	0	0
Integrated side shift W1000 mm	0	0	0	0	0	0
Fork positioner + integrated side shift	0	0	0	0	0	0
Load backrest		•	•	•	•	•
HYDRAULIC SYSTEM						
3/4/5-way valve armrest-mounted fingertip control	0	0	0	0	0	0
3/4-way valve manual control	0	0	0	0	0	0
Lift control	•	•	•	•	•	•
Double action FC 3 v, for clamp usage	0	0	0	0	0	0
Double action FC 4 v, for clamp usage	0	0	0	0	0	0
Double action MC 3 v, for clamp usage	0	0	0	0	0	0
Double action MC 4 v, for clamp usage	0	0	0	0	0	0
Hydraulic accumulator	0	0	0	0	0	0
Adjustable hydraulic pressure (for 3rd and 4th valve)	0	0	0	0	0	0
Food grade hydraulic oil	0	0	0	0	0	0
Biodegradable hydraulic oil	0	0	0	0	0	0
Cold area hydraulic oil VG15	0	0	0	0	0	0
Hot area hydraulic oil VG46	0	0	0	0	0	0
3-way piping	0	0	0	0	0	0
4-way piping	0	0	0	0	0	0
TYRES						
Solid pneumatic tyres	•	•	•	•	•	•
Pneumatic tyres	0	0	0	0	0	0
Non-marking solid tyres	0	0	0	0	0	0
Cushion tyres	0	0	0	0	0	0







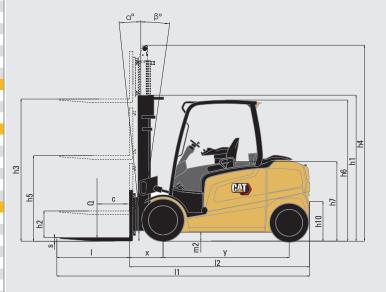


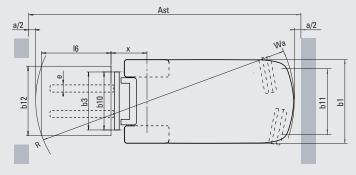
Solid pneumatic twin tyres



	Characteristics	
1.1	Manufacturer (abbreviation)	
1.2	Manufacturer's model designation	
.3	Power source: (battery, diesel, LPG, petrol)	
.4	Operator type: pedestrian, (operator) - standing, - seated	
		Q (kg)
.5	Load capacity	1 3
.6	Load centre distance	c (mm)
1.8	Load distance, axle to fork face	x (mm)
1.9	Wheelbase	y (mm)
	Weight	
2.1	Truck weight, without load / including battery (simplex mast, lowest lift height)	kg
2.2	Axle loading with maximum load, front/rear (simplex mast, lowest lift height)	kg
2.3	Axle loading without load, front/rear (simplex mast, lowest lift height)	kg
	Wheels, Drive Train	
3.1	Tyres: V = solid, L = pneumatic, SE = solid pneumatic - front/rear	
3.2	Tyre dimensions, front	
3.3	Tyre dimensions, rear	
3.5	Number of wheels, front/rear (x = driven)	
3.6	Track width (centre of tyres), front	b10 (mm)
3.7	Track width (centre of tyres), rear	b11 (mm)
,.,	Dimensions	211 (1111)
l.1	Mast tilt, forwards/backwards	9/ß °
		h1 (mm)
1.2	Height with mast lowered (see tables)	h2 (mm)
1.3	Free lift (see tables)	
1.4	Lift height (see tables)	h3 (mm)
1.5	Overall height with mast raised	h4 (mm)
1.7	Height to top of overhead guard	h6 (mm)
1.8	Seat height	h7 (mm)
1.12	Tow coupling height	h10 (mm)
1.19	Overall length	l1 (mm)
1.20	Length to fork face (includes fork thickness)	l2 (mm)
4.21	Overall width	b1 / b2 (mm)
4.22	Fork dimensions (thickness, width, length)	s/e/I (mm)
4.23	Fork carriage to DIN 15 173 A / B / no	
4.24	Fork carriage width	b3 (mm)
		m1 (mm)
4.31	Ground clearance under mast, with load	
4.32	Ground clearance at centre of wheelbase, with load (forks lowered)	m2 (mm)
4.33	Working aisle width with 1000 x 1200 mm pallets, crosswise	Ast (mm)
4.34a	Working aisle width with 800 x 1200 mm pallets, crosswise	Ast (mm)
4.34b	Working aisle width with 800 x 1200 mm pallets, lengthwise	Ast (mm)
1.35	Turning circle radius	Wa (mm)
1.36	Minimum distance between centres of rotation	b13 (mm)
	Performance	
5.1	Travel speed, with/without load	km/h
5.2	Lifting speed, with/without load	m/s
5.3	Lowering speed, with/without load	m/s
5.5	Rated drawbar pull, with/without load	N.
5.6	Maximum drawbar pull, with/without load (5 min short duty)	N N
5.7		%
	Gradeability, with/without load	
5.8	Maximum gradeability with/without load	%
5.9	Acceleration time (10 metres) with/without load	S
5.10	Service brakes (mechanical/hydraulic/electric/pneumatic)	
	Eletric motor	
6.1	Drive motor capacity (60 min short duty)	kW
3.2	Lift motor output at 15% duty factor	kW
3.3	Battery to DIN 43 531 / 35 / 36 A / B / C / no	
6.4	Battery voltage/capacity at 5-hour discharge	V/Ah
6.5	Battery weight	kg
6.6a	Energy consumption according to EN 16796	kWh/h
	Miscellaneous	
3.1	Type of drive control	
10.1	Maximum operating pressure for attachments	bar
	Oil flow for attachments	I / min
10.2	Noise level, value at operator's ear (EN 12053)	dB (A)
10.7		

| Cat Lift Trucks |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| EP40N | EP45N | EP50CN | EP50N | EP50NH | EP55NH |
| Electric | Electric | Electric | Electric | Electric | Electric |
| Seated | Seated | Seated | Seated | Seated | Seated |
| 4000 | 4500 | 4990 | 4990 | 5000 | 5500 |
| 500 | 500 | 500 | 500 | 600 | 600 |
| 540 | 540 | 540 | 540 | 560 | 560 |
| 1946 | 1946 | 1946 | 2090 | 2090 | 2090 |
| 1940 | 1940 | 1940 | 2090 | 2090 | 2090 |
| 7290 | 7648 | 7991 | 8347 | 8472 | 8711 |
| 10040 / 1250 | 10795 / 1353 | 11574 / 1417 | 11563 / 1784 | 12009 / 1463 | 12799 / 1412 |
| | 3890 / 3758 | | | | |
| 3902 / 3388 | 3890 / 3758 | 3902 / 4089 | 4075 / 4272 | 4234 / 4238 | 4246 / 4465 |
| SE | SE | SE | SE | SE | SE |
| | | - | - | - | - |
| 250x15 (710) | 250x15 (710) | 355/50-15 (710) | 355/50-15 (710) | 355/50-15 (710) | 355/50-15 (710) |
| 7.00x12 (650) |
| 2X / 2 |
1143	1143	1154	1154	1154	1154
1169	1169	1169	1169	1169	1169
6/8	6/8	6/8	6/8	6/8	6/8
2420	2420	2420	2420	2420	2420
150	150	150	150	160	160
3300	3300	3300	3300	3300	3300
4205	4205	4205	4205	4345	4345
2340	2340	2340	2340	2340	2340
1320	1320	1320	1320	1320	1320
675	675	675	675	675	675
4025	4025	4025	4170	4190	4190
2825	2825	2825	2970	2990	2990
1370	1370	1450	1450	1450	1450
50 / 150 / 1200	50 / 150 / 1200	50 / 150 / 1200	50 / 150 / 1200	60 / 150 / 1200	60 / 150 / 1200
3A	3A	3A	3A	4A	4A
1190	1190	1190	1190	1190	1190
150	150	150	150	150	150
150	150	150	150	150	150
4125	4125	4125	4273	4291	4291
3938	3938	3938	4086	4104	4104
4264	4264	4264	4412	4439	4439
2289	2289	2289	2434	2434	2434
49	49	49	49	49	49
18 / 20	18 / 20	18 / 20	18 / 20	18 / 20	18 / 20
0.41 / 0.53	0.38 / 0.53	0.35 / 0.53	0.35 / 0.53	0.35 / 0.53	0.32 / 0.53
0.53 / 0.51	0.50 / 0.53	0.52 / 0.51	0.52 / 0.51	0.52 / 0.51	0.51 / 0.51
16000 / 16400	16800 / 17700	16800 / 17700	17600 / 18100	17500 / 17700	17600 / 18000
17300 / 18400	17300 / 18400	17300 / 18400	21500 / 22600	21500 / 22600	21500 / 22600
				13.5 / 21.5	
15 / 23	15 / 23	14 / 22	14 / 22		13 / 21
15.8 / 26.6	15.6 / 23.7	14.6 / 22.6	16.6 / 28.7	16.5 / 28.2	16.4 / 27.3
4.6 / 3.9	4.7 / 3.9	4.8 / 4.0	4.6 / 4.1	4.7 / 4.1	4.8 / 4.1
Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic
2x16	2x16	2x16	2x16	2x16	2x16
34	34	34	34	34	34
DIN 43 536/A					
80 / 775	80 / 775	80 / 775	80 / 930	80 / 930	80 / 930
1863	1863	1863	2178	2178	2178
10.21)	10.61)	11.01)	11.21)	7.82)	8.22)
AC	AC	AC	AC	AC	AC
210	210	210	210	210	210
45	45	45	45	45	45
65	65	65	65	65	65
15 170	15 170	15 170	15 170	15 170	15 170
10 1/0	10 170	10 1/0	10 170	10 1/0	10 1/0





Ast = Working aisle width with load

Ast = Wa +
$$\sqrt{(16 + x)^2 + \left(\frac{b12}{2} - b13\right)^2} + a$$

Wa = Turning radius

x = Load distance, axle to fork face

I6 = Pallet length (800 or 1000 mm)

a = Safety clearance

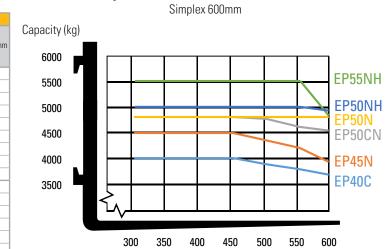
b12 = Pallet width

1) Measured with 60 cycles test 2) Measured with 45 cycles test

Standard lifting carriage, forks L1000, L1100, L1150 and L1200

							EP	40N
Mast Type	h3	h1	h4	degrees			0.@ c=500mm	
	mm	mm	mm	mm	Standard	Cabin	kg	kg
Simplex	3050	2270*	3905	150	6 - 8	6 - 8	4000	3875
	3350	2420	4205	150	6 - 8	6 - 8	4000	3875
	3550	2520	4405	150	6 - 8	6 - 8	4000	3850
	3750	2620	4605	150	6 - 8	6 - 8	4000	3850
	4050	2870	4905	150	6 - 8	6 - 8	4000	3850
	4550	3120	5405	150	6 - 8	6 - 8	4000	3750
	5050	3370	5905	150	6 - 8	6 - 8	3925	3625
	5550	3620	6405	150	6 - 8	6 - 8	3800	3525
	6050	3870	6905	150	6 - 8	6 - 8	3650	3400
Triplex	3750	2070*	4627	1193	6 - 8	6 - 6	3975	3675
F -	4090	2190*	4967	1313	6 - 8	6 - 6	3975	3675
	4360	2280*	5237	1403	6 - 8	6 - 8	4000	3775
	4550	2340*	5427	1463	6 - 8	6 - 8	4000	3725
	4800	2420	5677	1543	6 - 8	6 - 8	3950	3675
	5100	2520	5977	1643	6 - 8	6 - 8	3875	3600
	5550	2670	6427	1793	6 - 8	6 - 8	3750	3475
	6050	2870	6927	1993	6 - 8	6 - 8	3600	3350
	6550	3070	7427	2193	6 - 8	6 - 8	3475	3225
	7050	3270	7927	2393	6 - 8	6 - 8	2750	2725

EP4	15N	EP5	OCN .	EP50N		
0.@ c=500mm kg	Q.@ c=600mm kg	0.@ c=500mm kg	0.@ c=600mm kg		0.@ c=500mm kg	c = 600mi kg
4500	4325	4990	4750		4990	4825
4500	4325	4990	4725		4990	4825
4500	4325	4990	4725		4990	4825
4500	4325	4990	4725		4990	4825
4500	4300	4990	4725		4990	4825
4500	4225	4990	4650		4990	4825
4425	4100	4850	4500		4990	4825
4275	3975	4700	4375		4990	4825
3800	3775	4550	4225		4875	4825
4475	4125	4925	4550		4990	4825
4475	4125	4925	4550		4990	4825
4500	4250	4990	4675		4990	4825
4500	4200	4975	4600		4990	4825
4450	4125	4900	4550		4990	4825
4350	4050	4825	4475		4990	4825
4225	3950	4675	4325		4990	4825
3925	3800	4500	4175		4990	4800
2975	2975	3675	3650		3825	3800
2325	2325	2825	2775		3000	2975



Capacities at various load centres

Load Centre (mm)

			EP50NH	EP55NH				
Mast Type	h3	h1	h4	h4 h2/h5 Tilt angle (fwd-rev) degrees		0.@ c=600mm	0.@ c=600mm	
	mm	mm	mm	mm	Standard	Cabin	kg	kg
Simplex	3060	2270*	4045	160	6 - 8	6 - 8	5000	5450
'	3360	2420	4345	160	6 - 8	6 - 8	5000	5450
	3560	2520	4545	160	6 - 8	6 - 8	5000	5450
	3760	2620	4745	160	6 - 8	6 - 8	5000	5450
	4060	2870	5045	160	6 - 8	6 - 8	5000	5425
	4560	3120	5545	160	6 - 8	6 - 8	5000	5425
	5060	3370	6045	160	6 - 8	6 - 8	5000	5400
	5560	3620	6545	160	6 - 8	6 - 8	4950	5250
	6060	3870	7045	160	6 - 8	6 - 8	4800	4625
Triplex	3760	2070*	4757	1073	6 - 8	6 - 6	4975	5275
·	4100	2190*	5097	1193	6 - 8	6 - 6	4975	5275
	4370	2280*	5367	1283	6 - 8	6 - 8	5000	5400
	4560	2340*	5557	1343	6 - 8	6 - 8	5000	5375
	4810	2420	5807	1423	6 - 8	6 - 8	5000	5375
	5110	2520	6107	1523	6 - 8	6 - 8	5000	5350
	5560	2670	6557	1673	6 - 8	6 - 8	4900	5200
	6060	2870	7057	1873	6 - 8	6 - 8	4750	4675
	6560	3070	7557	2073	6 - 8	6 - 8	3700	3525
	7060	3270	8057	2273	6 - 8	6 - 8	2900	2750

Mast Performance and Capacity

- h1 Height with mast lowered
- h2 Standard free lift
- h3 Lift height
- h4 Height with mast raised
- h5 Full free lift
- Q Lifting capacity, rated load
- c Load centre (distance)

Battery Dimensions

		EP40N	EP45N
Battery voltage	V	80	80
Capacity at a 5-hour discharge	Ah	775	775
Battery weight, min	kg	1760	1760
Battery weight, max	kg	1960	1960

EP40N	EP45N	EP50CN	EP50N	EP50NH	EP55NH
80	80	80	80	80	80
775	775	775	775	930	930
1760	1760	1760	1760	2060	2060
1960	1960	1960	1960	2290	2290

^{*} Lower than overhead guard

^{**} h5 does not include load backrest (with load backrest it is 207mm smaller).

CAT® LI-ION BATTERIES

TIME TO SWITCH?



Lithium-ion (Li-ion) battery technology is now available as an option in almost all Cat® electric counterbalance and warehouse truck ranges. While lead-acid batteries remain a popular choice for our customers, and still have much to offer, they present various challenges which Li-ion can overcome.

Perhaps the most noticeable change when switching to Li-ion is the use of opportunity charging. Instead of exchanging batteries between shifts, you can simply plug into a fast charger during short breaks and keep the same battery going 24/7. This, together with other efficiency, environmental and safety benefits, makes Li-ion a very appealing alternative.



LONGER LIFE



HIGHER EFFICIENCY



LONGER RUNTIME



CONSISTENT PERFORMANCE



FASTER CHARGING



NO BATTERY CHANGING



NO DAILY MAINTENANCE



INBUILT PROTECTION

Cat Li-ion advantages over lead-acid

Switching to Li-ion requires a higher initial investment, but this should be viewed against Li-ion's ongoing savings on energy, equipment, labour and downtime.

- Longer life 3 to 4 times lead-acid lifespan reduces overall battery investment
- Higher efficiency energy losses during charging and discharging are up to 30% lower, so electricity consumption is reduced
- Longer runtime thanks to more efficient battery performance and use of opportunity charges, which can be given at any time without damaging the battery or shortening its lifespan
- **Consistently high performance** with a more constant voltage curve maintains greater truck productivity, even toward the end of a shift
- Faster charging enables full charge in as little as 1 hour with the fastest chargers
- **No battery changing** fast opportunity charges 15 minutes for several hours of extra runtime enable continuous operation with just one battery and minimise the need to buy, store and maintain spares
- **No daily maintenance** the battery stays on board the truck for charging and there is no need for water top-ups or electrolyte checks
- No gas or acid spills avoids the space, equipment and running costs of a battery room and ventilation system
- **Inbuilt protection** intelligent battery management system (BMS) automatically prevents excessive discharge, charge, voltage and temperature, as well as virtually eliminating misuse

Batteries and chargers with different capacities are available. Your dealer will identify the best combination for your needs. You should also ask your dealer about optional 5-year warranties, subject to annual checkups, which give extra peace of mind.

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VIDEOS



