



TM

STRONG PARTNERS. TOUGH TRUCKS.

Four-wheel Electric Counterbalanced Lift Trucks J1.6-2.0XN

1 600 – 2 000 kg



J1.6XN, J1.8XN, J2.0XN

CHARACTERISTICS	1.1	Manufacturer
	1.2	Model designation
	1.3	Power: battery, diesel, LPG, electric mains
	1.4	Operation: manual, pedestrian, stand, seat, orderpicker
	1.5	Load capacity Q (kg)
	1.6	Load centre c (mm)
	1.8	Load distance x (mm)
	1.9	Wheelbase y (mm)

WEIGHT	2.1	Unladen weight (max. battery)	kg
	2.2	Axle loading, with load front/rear (max. battery)	kg
	2.3	Axle loading, without load front/rear (max. battery)	kg

WHEELS & TYRES	3.1	Tyres: L=Pneumatic, V=Cushion, SE=Pneumatic Shaped Solid
	3.2	Tyre size, front
	3.3	Tyre size, rear
	3.5	Number of wheels, front/rear (X = driven)
	3.6	Tread, front b ₁₀ (mm)
	3.7	Tread, rear b ₁₁ (mm)

DIMENSIONS	4.1	Mast tilt, α = forward/ β = back	degrees
	4.2	Height of mast, lowered	h ₁ (mm)
	4.3	Free lift $\uparrow$	h ₂ (mm)
	4.4	Lift height $\uparrow$	h ₃ (mm)
	4.5	Height of mast, extended $\star$	h ₄ (mm)
	4.7	Overhead guard height	h ₆ (mm)
	4.8	Seat height $\bigcirc$	h ₇ (mm)
	4.12	Towing coupling height	h ₁₀ (mm)
	4.19	Overall length	l ₁ (mm)
	4.20	Length to face of forks	l ₂ (mm)
	4.21	Overall width	b ₁ /b ₂ (mm)
	4.22	Fork dimensions	s/e/l (mm)
	4.23	Fork carriage DIN 15173. Class A/B	
	4.24	Fork carriage width $\bullet$	b ₃ (mm)
	4.31	Ground clearance under mast, with load	m ₁ (mm)
	4.32	Ground clearance, centre of wheelbase	m ₂ (mm)
	4.33	Aisle width with pallets 1 000 long x 1 200 wide $\blacklozenge$	Ast (mm)
	4.34	Aisle width with pallets 800 wide x 1 200 long $\blacklozenge$	Ast (mm)
	4.35	Outer turning radius	W _a (mm)
	4.36	Inner turning radius	b ₁₃ (mm)

PERFORMANCE	5.1	Travel speed with/without load $\clubsuit$	km/h
	5.2	Lifting speed with/without load	m/sec
	5.3	Lowering speed with/without load	m/sec
	5.5	Drawbar pull with/without load, 60 minute rating	N
	5.6	Max. drawbar pull with/without load, 5 minute rating	N
	5.7	Gradeability with/without load, 30 minute rating $\uparrow$	%
	5.8	Maximum gradeability with/without load, 5 minute rating $\uparrow$	%
	5.9	Acceleration time with/without load $\clubsuit$	Sec
	5.10	Service brake	

MOTOR	6.1	Drive Motor Rating, S2, 60min	kW
	6.2	Lifting motor, S3 15% rating	kW
	6.3	Battery DIN 43531/35/36 A, B, C, no	
	6.4	Battery voltage/capacity	V/Ah
	6.5	Battery weight (min./max.)	kg
	6.6	Power consumption in accordance with VDI cycle	kWh/h

OTHER	8.2	Working pressure for attachments $\diamond$	bar
	8.3	Oil flow for attachments	l/min
	8.4	Average noise level at operator's ear $\bullet$	dB(A)
	8.5	Towing coupling type	

HYSTER		HYSTER		HYSTER	
J1.6XN (642)		J1.6XN (750)		J1.8XN (642)	
Battery		Battery		Battery	
Seat		Seat		Seat	
1 600		1 600		1 800	
500		500		500	
326		326		321	
1 431		1 539		1 431	

3 190		3 210		3 260	
4 050	732	3 996	806	4 434	612
1 525	1 657	1 532	1 665	1 600	1 655

SE		SE		SE	
18 x 7 - 8		18 x 7 - 8		200/50 - 10	
140/55 - 9		140/55 - 9		140/55 - 9	
2X	2	2X	2	2X	2
892		892		906	
918		918		918	

5		5		5	
2 230		2 230		2 180	
100		100		100	
3 320		3 320		3 390	
3 868		3 868		4 006	
2 070		2 070		2 070	
919		919		919	
360		360		360	
2 981		3 088		2 975	
1 981		2 088		1 975	
1 076		1 076		1 146	
40	80	1 000	40	80	1 000
2A		2A		2A	
907		907		977	
88		88		88	
100		100		100	
3 309		3 417		3 305	
3 432		3 540		3 427	
1 654		1 762		1 654	
0		0		0	

16		16		16	
0,43		0,59		0,41	
0,50		0,47		0,46	
3 406		3 680		3 337	
11 415		11 690		11 355	
11,0		16,0		10,0	
25,0		34,0		23,0	
4,6		4,1		4,6	
Hydraulic		Hydraulic		Hydraulic	

2x 5.0		2x 5.0		2x 5.0	
12		12		12	
DIN 43531 A		DIN 43531 A		DIN 43531 A	
48	625	48	750	48	625
813	899	962	1 064	813	899
5,1		5,1		5,3	

180		180		180	
20-40		20-40		20-40	
65		65		65	
Pin		Pin		Pin	

Specification data is based on VDI 2198

Equipment and weight:

Weights (line 2.1) are based on the following specifications:

Complete truck with 3 320 mm Vista Plus mast 2-stage limited mast (J1.6XN) or 3 390 mm Vista (J1.8 – 2.0XN), 2-stage limited free lift mast, 910 mm hook type carriage with load backrest and 1 000 mm forks. Overhead guard and pneumatic shaped solid drive and steer tyres.

HYSTER			HYSTER			1.1	CHARACTERISTICS
J1.8XN (750)			J2.0XN (750)			1.2	
Battery			Battery			1.3	
Seat			Seat			1.4	
1 800			2 000			1.5	
500			500			1.6	
321			321			1.8	
1 539			1 539			1.9	
3 280			3 290			2.1	WEIGHT
4 372	703		4 700	590		2.2	
1 612	1 663		1 633	1 657		2.3	
SE			SE			3.1	WHEELS & TYRES
200/50 - 10			200/50 - 10			3.2	
140/55 - 9			140/55 - 9			3.3	
2X	2		2X	2		3.5	
906			906			3.6	
918			918			3.7	
5	5		5	5		4.1	DIMENSIONS
2 180			2 180			4.2	
100			100			4.3	
3 390			3 390			4.4	
4 006			4 006			4.5	
2 070			2 070			4.7	
919			919			4.8	
360			360			4.12	
3 083			3 083			4.19	
2 083			2 083			4.20	
1 146			1 146			4.21	
40	80	1 000	40	100	1 000	4.22	
2A			2A			4.23	
977			977			4.24	
88			88			4.31	
100			100			4.32	
3 413			3 413			4.33	
3 535			3 535			4.34	
1 762			1 762			4.35	
0			0			4.36	
16	16		16	16		5.1	PERFORMANCE
0,41	0,58		0,40	0,58		5.2	
0,46	0,40		0,47	0,40		5.3	
3 337	3 646		3 294	3 637		5.5	
11 346	11 655		11 304	11 647		5.6	
10,0	15,0		9,0	15,0		5.7	
23,0	36		22,0	36,0		5.8	
4,6	4,1		4,6	4,1		5.9	
Hydraulic			Hydraulic			5.10	
2x 5.0			2x 5.0			6.1	MOTOR
12			12			6.2	
DIN 43531 A			DIN 43531 A			6.3	
48	750		48	750		6.4	
962	1 064		962	1 064		6.5	
5,4			5,6			6.6	
180			180			8.2	OTHER
20-40			20-40			8.3	
65			65			8.4	
Pin			Pin			8.5	

Forks:

J1.6-J1.8XN:
80 x 40 x 1 000 to 1 200

J2.0XN:
100 x 40 x 1 000 to 1 200

Fork spacing:

Inside to inside, minimum:
30 mm

Outside to outside, maximum:
900 mm

Mast and Capacity Information

Values shown are for standard equipment. When using non-standard equipment these values may change. Please contact your Hyster dealer for information.

1.6t Vista Plus Mast

	Maximum fork height mm (h ₃ +s)	Back tilt	Overall lowered height mm	Overall extended height mm	Free lift (top of forks) mm (h ₂ +s)
2-Stage limited free lift	3 360	5°	2 230	3 868 ★	140
	3 860	5°	2 580	4 368 ★	140
	4 360	5°	2 830	4 868 ★	140
	4 860	5°	3 180	5 368 ★	140
3-Stage full free lift	4 600	5°	2 080	5 108 ★	1 665 ◀
	4 900	5°	2 180	5 408 ★	1 765 ◀
	5 200	5°	2 330	5 708 ★	1 915 ◀
	5 500	5°	2 430	6 008 ★	2 015 ◀

1.8-2.0t Vista Mast (or 1.6t with Attachment Use)

	Maximum fork height mm (h ₃ +s)	Back tilt	Overall lowered height mm	Overall extended height mm	Free lift (top of forks) mm (h ₂ +s)
2-Stage limited free lift	3 430	5°	2 180	4 006 ▶	140
	3 930	5°	2 530	4 506 ▶	140
	4 430	5°	2 780	5 006 ▶	140
	4 930	5°	3 130	5 506 ▶	140
2-Stage full free lift	3 215	5°	2 080	3 812 ▶	1 505 ■
	3 715	5°	2 330	4 312 ▶	1 755 ■
	4 335	5°	2 680	4 912 ▶	2 105 ■
3-Stage full free lift	4 600	5°	2 030	5 174 ▶	1 455 ■
	4 900	5°	2 130	5 474 ▶	1 555 ■
	5 200	5°	2 280	5 774 ▶	1 705 ■
	5 500	5°	2 380	6 074 ▶	1 805 ■

J1.6XN - Vista Plus Capacity Chart in kg @ 500 mm load centre

	Maximum fork height mm (h ₃ +s)	Pneumatic Shaped Solid Tyres			
		Without sideshift		With integral sideshift	
		J1.6XN (642)	J1.6XN (750)	J1.6XN (642)	J1.6XN (750)
Vista 2-Stage limited free lift	3 360	1 600	1 600	1 580	1 580
	3 860	1 600	1 600	1 570	1 570
	4 360	1 580	1 580	1 550	1 550
	4 860	1 500	1 500	1 460	1 460
Vista 3-Stage full free lift	4 600	1 550	1 550	1 520	1 520
	4 900	1 500	1 500	1 460	1 460
	5 200	1 420	1 410	1 380	1 370
	5 500	1 270	1 270	1 250	1 240

J1.6XN - Vista Plus Capacity chart in kg @ 600 mm load centre

	Maximum fork height mm (h ₃ +s)	Pneumatic Shaped Solid Tyres			
		Without sideshift		With integral sideshift	
		J1.6XN (642)	J1.6XN (750)	J1.6XN (642)	J1.6XN (750)
Vista 2-Stage limited free lift	3 360	1 450	1 450	1 410	1 410
	3 860	1 450	1 450	1 410	1 410
	4 360	1 430	1 430	1 390	1 390
	4 860	1 360	1 360	1 310	1 310
Vista 3-Stage full free lift	4 600	1 400	1 400	1 360	1 360
	4 900	1 360	1 360	1 310	1 310
	5 200	1 310	1 310	1 260	1 260
	5 500	1 250	1 250	1 210	1 210

J1.6-2.0XN - Vista Mast Capacity chart in kg @ 500 mm load centre

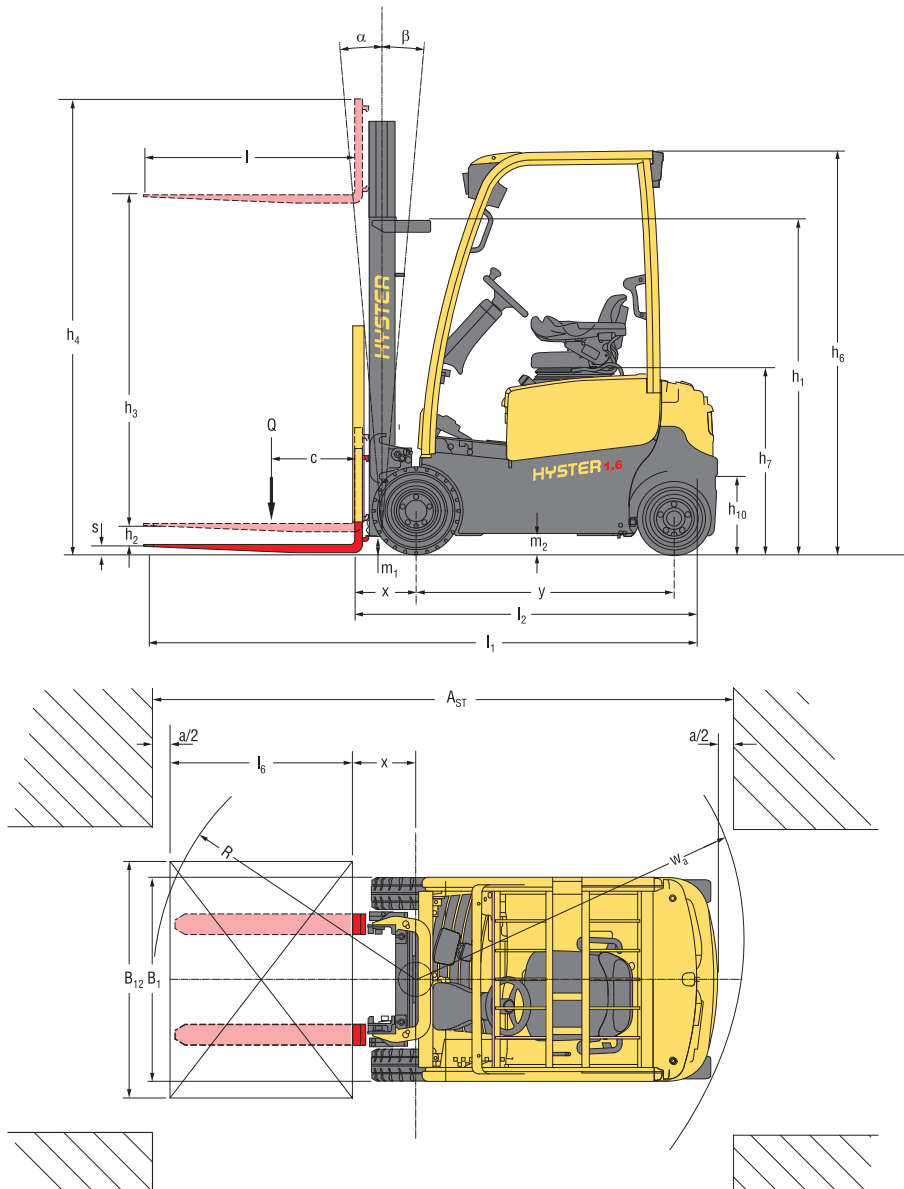
	Maximum fork height mm (h ₃ +s)	Pneumatic Shaped Solid Tyres								
		Without sideshift					With integral sideshift			
		J1.6XN (642)	J1.6XN (750)	J1.8XN (642)	J1.8XN (750)	J2.0XN (750)	J1.6XN (642)	J1.6XN (750)	J1.8XN (642)	J2.0XN (750)
Vista 2-Stage limited free lift	3 430	1 600	1 600	1 800	1 800	2 000	1 580	1 580	1 740	1 920
	3 930	1 600	1 600	1 800	1 800	2 000	1 570	1 570	1 740	1 910
	4 430	1 580	1 580	1 780	1 780	1 980	1 550	1 550	1 720	1 890
	4 930	1 500	1 500	1 580	1 580	1 570	1 460	1 460	1 540	1 520
Vista 2-Stage full free lift	3 215	1 600	1 600	1 800	1 800	2 000	1 570	1 570	1 750	1 930
	3 715	1 600	1 600	1 800	1 800	2 000	1 560	1 560	1 750	1 920
	4 335	1 600	1 600	1 800	1 800	2 000	1 550	1 550	1 740	1 910
Vista 3-Stage full free lift	4 600	1 570	1 570	1 770	1 770	1 960	1 540	1 540	1 710	1 880
	4 900	1 520	1 520	1 710	1 710	1 900	1 490	1 490	1 650	1 820
	5 200	1 470	1 470	1 650	1 650	1 780	1 430	1 430	1 580	1 750
	5 500	1 390	1 390	1 590	1 590	1 640	1 360	1 350	1 520	1 610

J1.6-2.0XN - Vista Capacity chart in kg @ 600 mm load centre

	Maximum fork height mm (h ₃ +s)	Pneumatic Shaped Solid Tyres								
		Without sideshift					With integral sideshift			
		J1.6XN (642)	J1.6XN (750)	J1.8XN (642)	J1.8XN (750)	J2.0XN (750)	J1.6XN (642)	J1.6XN (750)	J1.8XN (642)	J2.0XN (750)
Vista 2-Stage limited free lift	3 430	1 450	1 450	1 600	1 600	1 800	1 410	1 410	1 560	1 720
	3 930	1 450	1 450	1 600	1 600	1 800	1 410	1 410	1 560	1 720
	4 430	1 430	1 430	1 580	1 580	1 780	1 390	1 390	1 540	1 700
	4 930	1 350	1 360	1 500	1 500	1 570	1 310	1 310	1 450	1 520
Vista 2-Stage full free lift	3 215	1 450	1 450	1 600	1 600	1 800	1 410	1 410	1 570	1 730
	3 715	1 450	1 450	1 600	1 600	1 800	1 400	1 400	1 560	1 720
	4 335	1 450	1 450	1 600	1 600	1 800	1 390	1 390	1 560	1 720
Vista 3-Stage full free lift	4 600	1 420	1 420	1 570	1 570	1 770	1 380	1 380	1 530	1 690
	4 900	1 380	1 380	1 520	1 520	1 710	1 330	1 330	1 480	1 630
	5 200	1 330	1 330	1 470	1 470	1 650	1 280	1 280	1 420	1 570
	5 500	1 280	1 280	1 410	1 410	1 590	1 230	1 230	1 360	1 500

The rated capacities shown are for masts in a vertical position on trucks equipped with standard or sideshift carriage and nominal length forks. Masts above the maximum fork heights shown in the mast table are classified as high lift and, depending on the tyre/tread configuration may require reduced capacity, restricted back tilt or wide tread.

Truck dimensions

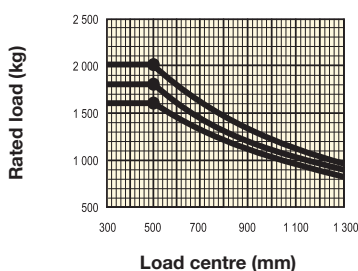


 = Centre of gravity of unladen truck

$$A_{st} = W_s + R + a \text{ (see lines 4.33 and 4.34)}$$

$$R = \sqrt{(l_6 + x)^2 + \left(\frac{b_{12} - b_{13}}{2}\right)^2}$$

Rated capacities



Load centre

Distance from front of forks to centre of gravity of load.

Rated load

Based on vertical masts up to 3 930 mm top of forks.

NOTE:

Specifications are affected by the condition of the vehicle and how it is equipped, as well as the nature and condition of the operating area. If these specifications are critical, the proposed application should be discussed with your dealer.

- ¶ Bottom of forks
- ✦ Without load backrest
- Full suspension seat (FLM80) specified.
- Subtract 32 mm without load backrest
- ◆ Stacking aisle width (lines 4.33 & 4.34) is based on the V.D.I. standard calculation as shown on illustration. The British Industrial Truck Association recommends the addition of 100 mm to the total clearance (dimension a) for extra operating margin at the rear of the truck.
- † Gradeability figures (lines 5.7 & 5.8) are provided for comparison of tractive performance, but are not intended to endorse the operation of the vehicle on the stated inclines. Follow instructions in the operating manual regarding operation on inclines.
- ❖ With e-hydraulics and 'HiP' high performance setting
- ◇ Variable
- ▲ Lpaz, measured according to the test cycles and based on the weighting values contained in EN12053

Tables key:

- ★ Add 721 mm with load backrest extension
- ◐ Deduct 721mm with load backrest extension
- ◑ Add 656 mm with load backrest extension
- Deduct 656 mm with load backrest extension

Notice

Care must be exercised when handling elevated loads. When the carriage and/or load is elevated, truck stability is reduced. It is important that mast tilt in either direction be kept to a minimum when loads are elevated. Operators must be trained and adhere to the instructions contained in the Operating Manual.

Hyster products are subject to change without notice. Lift trucks illustrated may feature optional equipment.



This truck conforms to the current EU requirements.

Product Features

Dependability

- New robust mast design for high visibility and reliable, high performance lifting.
- Steel hoods and durable side covers provide increased resistance to impact damage and general wear and tear.
- AC motor technology on traction and hoist allows the truck to work more reliably and for longer shifts, reducing downtime significantly.
- Hall-Effect sensors on transmission replace internal encoder bearing, making the truck more reliable and decreasing downtime.
- Strong chassis construction provides excellent durability and stability, boosting driver confidence and enhancing productivity.
- IP54 enclosed traction motors and IP65 protection of controls, prevent ingress of water and dust particles, reducing the probability of truck breakdown.

Productivity

- AC front wheel drive provides smooth acceleration and excellent travel and torque performance. This is combined with regenerative braking to deliver efficient load handling.
- Zero Turn Radius (ZTR) axle allows faster manoeuvring in working aisles, speeding up throughput.
- Compact chassis length and robust steer axle allow tight turning circles for excellent manoeuvrability in working aisles or congested loading/unloading bays.
- Battery capacity and truck wheel base can be matched to the application, optimising performance, manoeuvrability and battery shift life.
- Extended battery shift life and side extraction battery removal, allow more uninterrupted uptime with a fast, simple recharging process to keep trucks on the move.
- The maintenance-free mechanical Hyster Stability Mechanism (HSM) reduces truck lean when travelling over obstacles, increasing driver confidence and productivity.

Ergonomics

- Generous footspace, intuitive pedal arrangement and low step height offer a comfortable working space for the driver. This means on/off access and driving in reverse cause less fatigue over long shifts.
- Driver compartment with 80 mm full suspension seat reduces truck vibrations, creating a smoother ride for the operator. Swivel seat option for operations requiring frequent reversing.
- The latest adjustable mini-lever module armrest with built in hydraulic controls, integrated directional control, emergency off switch and horn offers the ultimate in comfort and control. There is also a choice of new design manual levers for superb handling productivity.
- The synchronised steering mechanism ensures that the steering knob is always positioned in a pre-defined ergonomic position of the operator's choice when travelling in a straight line. This increases operator comfort and reduces fatigue.
- The memory tilt option allows the steering column to be released to the most vertical position to allow the operator to get off the truck easily. When getting back on the truck, the operator simply pulls the steer column back to the preset position.
- A choice of weather protection options promotes a comfortable working environment, whatever the conditions.

Low Cost of Ownership

- The right balance of performance, manoeuvrability and battery shift life, matched to the application, provides productivity and throughput at less cost.
- The Vehicle System Manager (VSM) allows adjustment of truck performance parameters as well as monitoring key functions, leading to application matched performance and low maintenance.
- Durable, quality components mean long term reliability and lower maintenance costs. Virtually maintenance free components such as wet disc brakes and brushless AC motors mean that Hyster Electrics require a full service check only after 1 000 hours.
- In-built thermal protection on traction motors and advanced cooling system protect truck components, leading to reduced maintenance costs.
- Fast delivery of diagnostic information allows precise troubleshooting, easy maintenance planning and lower costs.
- Oil immersed brakes reduce wear and tear on parts and protect from ingress of dirt and floor debris, reducing maintenance costs.

Serviceability

- Access to diagnostic information via the display or plug-in point on the steering column allows engineers to monitor truck conditions and plan maintenance requirements.
- Easily removable 2 piece floor plate provides easy access to power contactor, fuses and relays.
- Automatic park brake system can be released manually by activating lever arrangement underneath floor plates, reducing downtime.
- Motor, pump, controller and oil tank are located in the counterweight and are easily accessible, requiring only 2 thumb screws to be removed.



Strong Partners, Tough Trucks, for Demanding Operations Everywhere.

Hyster supplies a complete product range, including Warehouse trucks, IC and Electric Counterbalanced trucks, Container Handlers and Reach Stackers.

Hyster is committed to being much more than a lift truck supplier. Our aim is to offer a complete partnership capable of responding to the full spectrum of materials handling issues:

Whether you need professional consultancy on your fleet management, fully qualified service support, or reliable parts supply, you can depend on Hyster. Our network of highly trained dealers provides expert, responsive local support.

They can offer cost-effective finance packages and introduce effectively managed maintenance programmes to ensure that you get the best possible value. Our business is dealing with your materials handling needs so you can focus on the success of your business today and in the future.



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