



FOUR-WHEEL ELECTRIC COUNTERBALANCED LIFT TRUCKS

E2.2-3.5XN

E2.2XN, E2.5XN, E3.0XN, E3.2XN, E3.5XN

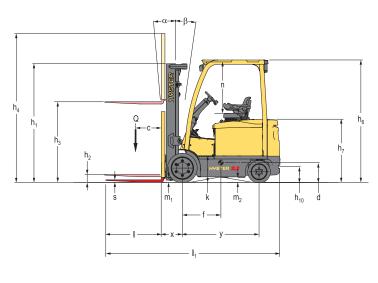
؞	1.1	Manufacturer (abbreviation)	Н	STER	HYS	TER
DISTINGUISHING MARKS	1.2	Manufacturer's type designition		N SWB		I MWB
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas Operator type: hand, pedestrian, standing, seated, order-picker		c (battery) eated		(battery)
	1.5	Rated capacity/rated load Q (t)		2.2		.2
	1.6	Load centre distance c (mm)		500		00
IĒ	1.8	Load distance, centre of drive axle to fork x (mm)	;	390	3:	90
	1.9	Wheelbase y (mm)	4	530	46	50
90	2.1	Service weight □ kg	4	530	46	50
WEIGHTS	2.2	Axle loading, laden front/rear □ kg	5574	1150	5601	1234
Ľ	2.3	Axle loading, unladen front/rear ☐ kg	1809	2715	2009	2632
_	3.1	Tyres: L = pneumatic, V = solid, SE = Pneumatic Shape Solid		V	Ι ,	/
Sis	3.2	Tyre size, front		8 x 15	21 x i	
	3.3	Tyre size, rear	16 x	6 x 10.5	16 x 6	x 10.5
IYRES / CHASSIS	3.5	Wheels, number front/rear (x = driven wheels)	2X	2	2X	2
₹	3.6	Tread, front * b ₁₀ (mm) Tread, rear b ₁₁ (mm)	905	1039	905	1039 10
	3.7	Tread, rear b ₁₁ (mm)		540	34	+0
	4.1	Tilt of mast / fork carriage forward / backward $$\alpha/\beta$$ (°)	5	5	5	5
	4.2	Height, mast lowered h ₁ (mm)		235		35
	4.3	Free lift ¶ h ₂ (mm)		100 452		52
	4.4	Lift ¶ h₃ (mm) Height, mast extended ■ h₄ (mm)		049		49
	4.7	Height of overhead guard (cabin) + h_6 (mm)		248		48
	4.7.1	Cab height (open cab) (mm)	2	286	22	86
	4.8	Seat height relating to SIP/stand height h, (mm)		280		30
	4.12 4.19			217 016	12	
	4.20	Length to face of forks I, (mm)		016		40
۵	4.21	Overall width b ₁ /b ₂ (mm)	1108	1242	1108	1242
DIMENSIONS	4.22	Fork dimensions ISO 2331 s/e/I (mm)	100	40 1000	100 4	0 1000
	4.23	Fork carriage ISO 2328, class/type A, B		2A		A
	4.24	Fork carriage width ● b ₃ (mm) Ground clearance, laden, below mast m, (mm)		977 85		5
	4.32	Ground clearance, centre of wheelbase m ₂ (mm)		92		2
	4.33	Load dimension $b_{12} \times I_g$ crossways $b_{12} \times I_g$ (mm)	1200	x 1000	1200	x 1000
	4.34			329		75
	4.34.1	Aisle width for pallets 1000 × 1200 crossways ◆ A _{st} (mm)		329 525		75 74
	4.34.2	Aisle width for pallets 800×1200 lengthways \blacklozenge A _{st} (mm) Turning radius W _s (mm)		735	18	
	4.36	Internal turning radius b ₁₃ (mm)		501	50	
	4.41	90° intersecting aisle (With pallet W = 1200mm, L = 1000mm) (mm)	1	774	18	24
	4.42	Step Height (from ground to running board) (mm)		772		72
	4.43	Step Height (mm)		475	4.	75
г	5.1	Travel speed, laden / unladen $ igtriangledown$ km/h	19.8	19.7	19.8	19.7
	5.2	Lift speed, laden / unladen m/sec	0.52	0.72	0.52	0.72
A	5.3	Lowering speed, laden / unladen m/sec	0.57	0.51	0.57	0.51
PERFORMANCE DATA	5.5 5.6	Drawbar pull, laden / unladen ** N Maximum drawbar pull laden / unladen *** N	13460 22100	14271 16785	13460 22100	14271 16785
S S	5.7	Gradeability laden/unladen **** † %	20	32	20	32
	5.8	Maximum gradeability laden / unladen † %	34	39	34	39
	5.9	Acceleration time, laden / unladen sec	4.9	4.9	4.9	4.9
	5.10	Service brake	Hyd	Iraulic	Hydr	aulic
	6.1	Drive motor rating S2 60 min kW		23.6	23	3.6
H	6.2	Lift motor rating at S3 15% kW		24.0		1.0
<u>=</u>	0.0	Battery according to DIN 43531/35/36 A, B, C, no		No aze		0
ic ENGI	6.3	Detter college / series series version version VE	80	375	80	450
ECTRIC ENGI	6.4	Battery voltage/nominal capacity K5 V/ah Rattery weight (min / max) kg	1050	1500	1370	
ELECTRIC ENGINE		$\begin{tabular}{lll} Battery voltage/nominal capacity K5 & V/ah \\ Battery weight (min / max) & kg \\ Energy consumption according to VDI cycle \triangle & kWh/h \\ \end{tabular}$	1050	1500 3.31	1320	1770 31
ELECTRIC ENGI	6.4 6.5 6.6	Battery weight (min / max) kg Energy consumption according to VDI cycle \triangle kWh/h	6	3.31	6.	31
-	6.4 6.5 6.6	Battery weight (min / max) kg Energy consumption according to VDI cycle \triangle kWh/h Type of drive unit	AC El	ectronic	6.	ctronic
-	6.4 6.5 6.6 8.1 10.1	Battery weight (min / max) kg Energy consumption according to VDI cycle △ kWh/h Type of drive unit Operating pressure for attachments bar	AC El	ectronic	AC Ele	ctronic
-	6.4 6.5 6.6	Battery weight (min / max) kg Energy consumption according to VDI cycle \triangle kWh/h Type of drive unit	AC El	ectronic	AC Ele 1! 20	ctronic
ADDITIONAL DATA ELECTRIC ENGIN	6.4 6.5 6.6 8.1 10.1 10.2	Battery weight (min / max) kg Energy consumption according to VDI cycle △ kWh/h Type of drive unit Operating pressure for attachments △ l/min	AC El	ectronic 155	6. AC Ele 1! 20	ctronic 55 - 40

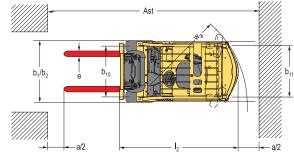
Specification data is based on VDI 2198. * Standard / Wide tread ** 60 minute rating *** 5 minute rating **** 30 minute rating

EQUIPMENT AND WEIGHT: Weights (line 2.1) are based on the following specifications: Complete truck with 3 492 mm (E2.2-2.5XN), 3 309 mm (E3.0-3.5XN) 2-stage limited free lift mast, 1 020 mm hook-type carriage with load backrest, 1 000 mm forks, overhead guard and standard cushion drive and steer tyres.

HYSTER	HYSTER	HYSTER	HYSTER	HYSTER	1.1
E2.5XN SWB	E2.5XN MWB	E3.0XN MWB	E3.2XN LWB	E3.5XN LWB	1.2 DISTINGUISHING MARKS
Electric (battery)	Electric (battery)	Electric (battery)	Electric (battery)	Electric (battery)	1.3
Seated	Seated	Seated	Seated	Seated	1.4
2.5	2.5	3.0	3.2	3.5	1.5
500 390	500 390	500 402	500 402	500 402	1.6 ARKS
1230	1377	1377	1545	1545	1.9
4710	4650	5090	5180	5390	2.1
6041 1168 1762 2947	6098 1043 2009 2632	6963 1126 2031 3059	7271 1108 2233 2946	7722 1166 2212 3176	2.1 2.2 2.3
1702 2947	2005 2032	2031 3039	2233 2340	2212 3170	2.5
V	V	V	V	V	3.1
21 x 8 x 15	21 x 8 x 15	21 x 8 x 15	21 x 8 x 15	21 x 9 x 15	3.2
16 x 6 x 10.5 2X 2	16 x 6 x 10.5 2X 2	16 x 6 x 10.5	16 x 6 x 10.5	16 x 7 x 10.5 2X 2	3.3 S/GH
905 1039	905 1039	905 1039	905 1039	929 1013	3.2 3.3 3.5 3.6
940	940	940	940	915	3.7
	5 5 5 5 5 2235 2235 100 100 2452				
		5 5 5	5 5 2235	5 5 5	4.1
		100	100	100	4.3
3452	3452	3259	3259	3259	4.4
4049	4049	3954	3954	3954	4.5
2248	2248	2248	2248	2248	4.7
2286 280	2286 280	2286	2286 280	2286 280	4.7.1
1217	1217	1217	1217	1217	4.12
3040	3143	3199	3343	3367	4.19
2040	2143	2199	2343	2367	4.20
1108 1242	1108 1242	1108 1242	1108 1242	1158 1242	4.21
100 40 1000 2A	100 40 1000 2A	125 50 1000 3A	125 50 1000 3A	125 50 1000 3A	4.22 4.23 4.24
977	977	977	977	977	4.24
85	85	85	85	85	4.31
92	92	92	92	92	4.32
1200 x 1000 3351	1200 x 1000 3475	1200 x 1000 3518	1200 x 1000 3676	1200 x 1000 3696	4.33
3351	3475	3518	3676	3696	4.34.1
3547	3674	3717	3876	3896	4.34.2
1757	1884	1915	2074	2094	4.35
501 1781	561 1824	561 1853	630 1931	630 1941	4.36
772	772	772	772	772	4.42
475	475	475	475	475	4.43
					-
19.9 19.7	19.9 19.7	19.4 19.7	19.0 19.7	19.1 19.7	5.1
0.52 0.72 0.57 0.51	0.49 0.72 0.57 0.51	0.42 0.63 0.56 0.46	0.40 0.63 0.57 0.46	0.37 0.63 0.58 0.46	5.2 5.3
13315 14271	13315 14271	12953 14150	12837 14129	12643 14078	5.5
21914 16785	21914 16785	21485 17272	21342 18165	21108 18651	5.6
19 32	19 32	16 29	16 28	14 27	5.3 5.5 5.6 5.7 5.8
33 39 4.9 4.9	33 39 4.9 4.9	28 36 4.9 4.9	26 37 4.9 4.9	25 37 4.9 4.9	5.8
Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	5.10
05.5					24
23.6	23.6 24.0	23.6	23.6	23.6 24.0	6.1
No No	No No	No No	No No	No No	6.2 6.3 6.4 6.5
80 375	80 450	80 450	80 600	80 600	6.4
1050 1500	1320 1770	1320 1770	1550 2000	1550 2000	6.5
6.31	6.31	6.70	7.89	8.58	6.6
AC Electronic	AC Electronic	AC Electronic	AC Electronic	AC Electronic	8.1
155	155	155	155	155	
20-40	20-40	20-40	20-40	20-40	10.1 10.2 10.3 10.7
29.7	29.7	29.7	29.7	29.7	10.3
67	67	67	67	£7	10.7
67 Pin	67 Pin	67 Pin	67 Pin	67 Pin	10.7

TRUCK DIMENSIONS





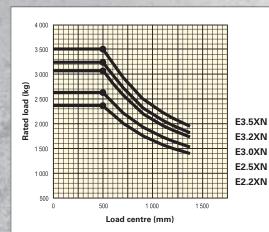
Ast = Wa + x + 16 + a (see lines 4.34.1 & 4.34.2)

a = Minimum operating clearance (VDI standard = 200 mm BITA recommendation = 300 mm)

I₆ = Load length

Dimensions (mm)	E2.2XN SWB	E2.2XN MWB	E2.5XN SWB	E2.5XN MWB	E3.0XN SWB	E3.2XN LWB	E3.5XN LWB
d	613	618	615	618	616	618	617
f	728	773	764	774	825	869	905
k	458	458	458	458	458	458	458
n	993	993	993	993	993	993	993

RATED CAPACITIES



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

Rated load: Based on vertical 3-stage full free lift mast up to 4 310 mm for E2.2-2.5XN and 4 120 mm for E3.0-3.5XN and 977 mm Standard Carriage with Load Backrest.

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.

- Max battery
- ¶ Bottom of forks
- Without load backrest
- + h6 subject to +/- 5 mm tolerance
- Full Suspension specified. Compressed condition, add 40 mm for nominal position
- Add 43 mm with load backrest
- ∇ With 'HiP' high performance settings
- \triangle eLo performance setting
- Maximum flow set through dash display.
- Stacking aisle width (lines 4.34.1 & 4.34.2) is based on the VDI 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 sideshift carriage add 38mm for E2.2XNSWB, 37mm for E2.2XN MWB-E2.5XN MWB,31mm for E3.0XN-E3.2XN, 30mm for E3.5XN

MAST TABLES KEY:

- ★ Add 666mm with load backrest extension.
- O Deduct 666mm with load backrest extension.
- ❖ Add 684mm with load backrest extension.
- ▲ Deduct 684mm with load backrest extension.
- Add 583mm with load backrest extension.

Deduct 583mm with load backrest extension.

- * Add 601mm with load backrest extension.
- Deduct 601 mm with load backrest extension.
- Wide tread required. Standard tread possible but with reduced capacity. Contact your Hyster dealer.

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.

C € Safety:

This truck conforms to the current EU requirements.

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

VISTA MASTS E2.2-2.5XN

	Maximum Fork Height h ₃ (mm) + s	Back Tilt	Overall Lowered Height (mm)	Overall Extended Height (mm)	Free lift (top of forks) h ₂ (mm)
Vista 2-Stage limited free lift	3 492 4 132 4 832	5 5 5	2 235 2 635 2 985	4 049 ★ 4 689 ★ 5 389 ★	140 140 140
Vista 2-Stage full free lift	3 502	5	2 235	4 059 ★	1 678 🔾
Vista 3-Stage full free lift	E EEO		2 235 2 385 2 585	5 639 * 6 089 * 6 539 *	1 696 ▲ 1 845 ▲ 2 046 ▲

VISTA MASTS E3.0-3.5XN

	Maximum Fork Height h ₃ (mm) + s	Back Tilt	Overall Lowered Height (mm)	Overall Extended Height (mm)	Free lift (top of forks) h₂ (mm) □
Vista 2-Stage limited free lift	3 309 3 709 4 209	5 5 5	2 235 2 535 2 785	3 954 * 4 354 * 4 854 *	150 150 150
Vista 2-Stage full free lift	3 502	5	2 235	3 955 ★	1 590 ×
Vista 3-Stage full free lift	4 768 5 218 5 968	5 5 5	2 235 2 385 2 735	5 395 * 5 218 * 5 968 *	1 608 D 1 758 D 2 108 D

E2.2-3.5XN - capacity chart in kg @ 500 mm load centres

		Cushion Tyres														
	Maximum	Without sideshift				With integral sideshift				Maximum	Without sideshift			With integral sideshift		
	fork height (mm) + s	E2.2XN (700)	E2.2XN (847)	E2.5XN (700)	E2.5XN (847)	E2.2XN (700)	E2.2XN (847)	E2.5XN (700)	E2.5XN (847)	fork height (mm) + s	E3.0XN (847)	E3.2XN (1 015)	E3.5XN (1 015)	E3.0XN (847)	E3.2XN (1 015)	E3.5XN (1 015)
Vista 2-Stage limited free lift	3 492 4 132 4 832	2 200 2 200 2 120	2 200 2 200 2 130	2 500 2 500 2 420	2 500 2 500 2 420	2 160 2 150 2 070	2 160 2 160 2 070	2 450 2 450 2 350	2 450 2 450 2 350	3 309 3 709 4 209	3 000 3 000 3 000	3 200 3 200 3 200	3 500 3 500 3 500	2 930 2 920 2 190	3 120 3 110 3 100	3 410 3 400 3 390
Vista 2-Stage full free lift	3 502	2 200	2 200	2 500	2 500	2 160	2 160	2 450	2 450	3 310	3 000	3 200	3 500	2 930	3 120	3 410
Vista 3-Stage full free lift	5 100 5 550 6 000	2 080 2 000 1 920	2 080 2 010 1 930	2 370 2 290 2 200 \square	2 370 2 280 2 190	2 020 1 940 1 850	2 030 1 950 1 860	2 300 2 220 2 120 \square	2 300 2 210 2 110	4 768 5 218 5 968	2 890 2 810 2 650 \square	3 090 3 000 2 840 □	3 390 3 290 3 120 🗆	2 800 2 710 2 540 \square	2 990 2 900 2 720 🗆	3 280 3 180 3 000 \square

E2.2-3.5XN - capacity chart in kg @ 600 mm load centres

		Cushion Tyres														
	Maximum		Without sideshift				With integral sideshift				Without sideshift			With integral sideshi		
	fork height (mm) + s	E2.2XN (700)	E2.2XN (847)	E2.5XN (700)	E2.5XN (847)	E2.2XN (700)	E2.2XN (847)	E2.5XN (700)	E2.5XN (847)	fork height (mm) + s	E3.0XN (847)	E3.2XN (1 015)	E3.5XN (1 015)	E3.0XN (847)	E3.2XN (1 015)	E3.5XN (1 015)
Vista 2-Stage limited free lift	3 492 4 132 4 832	2 030 2 020 1 940	2 030 2 020 1 950	2 300 2 2900 2 210	2 300 2 290 2 210	1 950 1 940 1 860	1 950 1 940 1 870	2 210 2 200 2 120	2 210 2 200 2 120	3 309 3 709 4 209	2 760 2 760 2 750	2 940 2 940 2 930	3 210 3 210 3 200	2 640 2 640 2 630	2 810 2 810 2 800	3 070 3 070 3 060
Vista 2-Stage full free lift	3 502	2 030	2 030	2 300	2 300	1 950	1 950	2 210	2 210	3 310	2 760	2 940	3 210	2 640	2 810	3 070
Vista 3-Stage full free lift	5 100 5 550 6 000	1 900 1 820 1 740	1 900 1 830 1 750	2 160 2 080 1 900 \square	2 160 2 080 1 980	1 820 1 750 1 670	1 830 1 750 1 680	2 080 2 000 1 910 \Box	2 070 1 990 1 900	4 768 5 218 5 968	2 650 2 560 2 400 \square	2 820 2 740 2 570 \square	3 090 3 000 2 830 🗆	2 530 2 450 2 300 \square	2 700 2 620 2 460 \square	2 960 2 870 2 710 \square

NOTE: To calculate truck capacities with alternative truck specifications to the ones shown in the above tables, please consult your Hyster dealer.

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.

PRODUCT FEATURES

DEPENDABILITY

- Redesigned mast incorporates new chain placement and hose routings that maximise fork visibility for the driver and reliable, high performance lifting.
- New robust mast design provides excellent visibility and reliable, high performance lifting.
- Strong chassis construction and reliable, long-lasting components deliver excellent durability and stability, increasing driver confidence and enhancing productivity.
- AC motor technology on traction and hoist, with built in thermal management system, allows the truck to work reliably over long runs and in demanding work cycles, reducing downtime significantly.
- The electrical system features a CANbus communications network and Hall Effect sensors for increased reliability.
- IP54 enclosed traction motors and IP65 protection of controls prevents ingress of water and dust particles, reducing the probability of truck downtime.

PRODUCTIVITY

- AC traction motor delivers smooth acceleration, fast travel and rapid direction changes with excellent torque performance. This is combined with regenerative braking to deliver efficient load handling in the toughest of applications.
- Compact dimensions deliver tight turning circles and class leading manoeuvrability when working in aisles or congested loading/unloading bays.
- Powerful 80 V battery, offering extended battery shift life and optional side battery removal, delivers superb traction and hoist performance, for fast, efficient, uninterrupted load handling and simple fast recharging keeps trucks on the move.
- Advanced design drive axle with self-adjusting powerassisted drum brakes - and new steer axle, - featuring HSM™ (Hyster Stability Mechanism) - give the driver confidence, which increases his productivity.

ERGONOMICS

- The ergonomically designed operator compartment provides a comfortable and highly productive environment for the operator, offering generous foot space and easy on/off access.
- Low noise and whole body vibration combined with a full suspension seat with 80 mm suspension travel and a range of adjustments ensures the operator remains comfortable over long shifts.
- The fully adjustable tilt steering column with telescopic and memory tilt options - allows the operator to get on and off the truck quickly and easily throughout the shift, ensuring maximum comfort and increased productivity.
- The TouchPoint™ mini-lever module armrest with built in hydraulic controls, integrated directional control, emergency off switch and horn, offers the ultimate in comfort and control. Alternatively, seat-side manual levers also deliver easy load handling.
- A 'heads-up' display keeps the driver's field of vision clear but provides him with 'at a glance' information on truck operating conditions or performance settings.
- A rear grab handle with integrated horn for frequent reverse travel and an automatic park brake also contribute to ease of operation and excellent driver comfort.

LOW COST OF OWNERSHIP

- A wide choice of truck capacity, battery size and wheelbase options offers customers the best combination of battery shift life, performance and manoeuvrability to match their application needs.
- Customisable performance settings allow energy efficiency to be ideally balanced with productivity, delivering high throughput at lower operating cost.
- Extended shift life reduces the need for battery recharging, saving time and money and increasing uptime.
- The Vehicle System Manager (VSM) allows adjustment of truck performance parameters and monitors key functions, leading to application matched performance and minimum downtime.
- Fast delivery of diagnostic information enables precise troubleshooting, optional service remainder, easy maintenance planning and leads to lower operating costs.

SERVICEABILITY

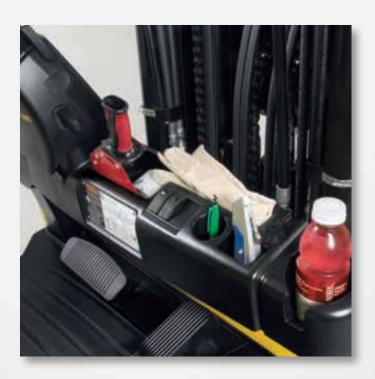
- Standard 1 000 hour service interval.
- Service access is fast and unrestricted, with an easily removable two-piece floor plate providing access to brake fluid, hydraulic filter and valves, VSM, tilt cylinders and automatic park brake release.
- Battery is easily accessible thanks to the well designed hood, which opens to a wide angle with minimum effort.
- Access to diagnostic information via dash display with or plug-in port and laptop. This functionality saves technician time when setting up multiple items.
- LED master, indicator, brake and back-up lights are designed to last the lifetime of the truck. Combined with the approved LED work lights truck is bulb less.

STRONG PARTNERS. TOUGH TRUCKS." FOR DEMANDING OPERATIONS, EVERYWHERE,

Hyster supplies a complete range of warehouse equipment, 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 material 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 material handling needs so you can focus on the success of your business today and in the future.





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