HYSTER

STRONG PARTNERS.
TOUGH TRUCKS.™

RIDER STACKER

RS1.6

1 600 KG

RS1.6

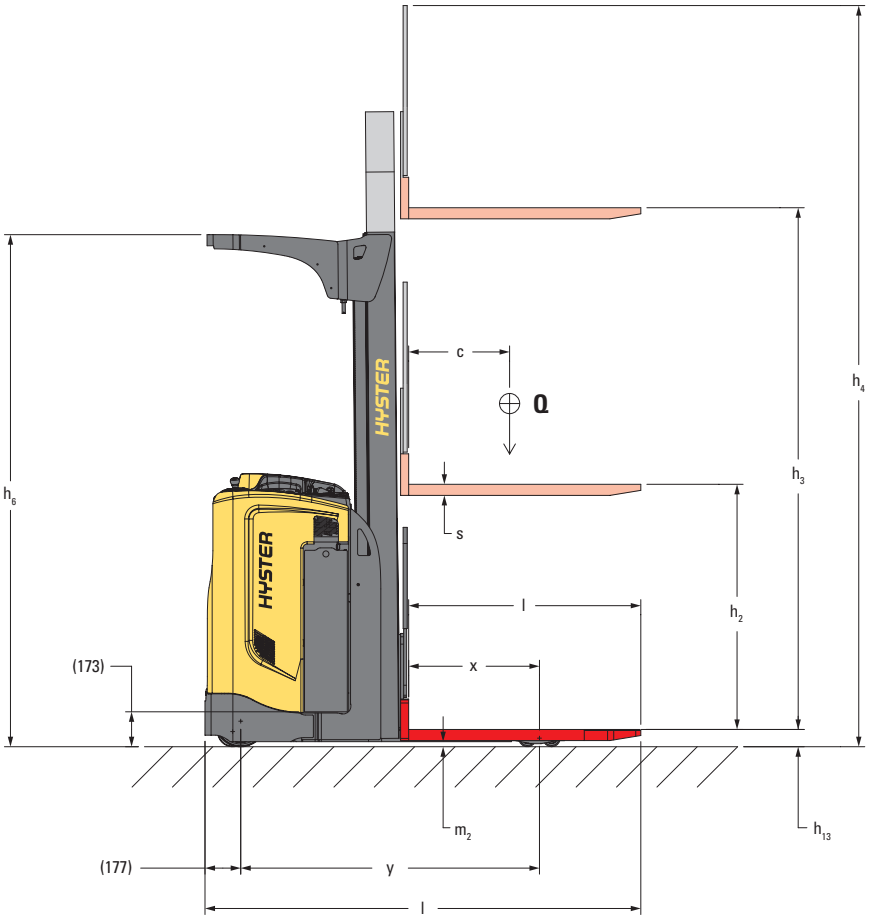
				HYSTER	
DISTINGUISHING MARKS	1.1	Manufacturer (abbreviation)			
	1.2	Manufacturer's type designation		RS1.6	
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Battery	
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Stand	
	1.5	Rated capacity/Rated load	Q (t)	1.6	
	1.6	Load centre distance ❖	c (mm)	600 ▲	
	1.8	Load distance, centre of drive axle to fork ❖	x (mm)	674	
	1.9	Wheelbase ❖	y (mm)	1463	
WEIGHTS	2.1	Service weight ❖	kg	1643	
	2.2	Axle loading, laden front/rear	kg	1153	2090
	2.3	Axle loading, unladen front/rear	kg	1088	555
TYRES / CHASSIS	3.1	Tyres: polyurethane, topthane, vulkollan, front/rear		Vulkollan/Vulkollan	
	3.2	Tyre size, front	ø (mm x mm)	254 x 90	
	3.3	Tyre size, rear	ø (mm x mm)	85 x 66	
	3.4	Additional wheels (dimensions)	ø (mm x mm)	150 x 79	
	3.5	Wheels, number front/rear (x = driven wheels)		1x + 1	4
	3.6	Tread, front	b_{10} (mm)	475	
	3.7	Tread, rear	b_{11} (mm)	400	
DIMENSIONS	4.2	Height, mast lowered ⇨	h_1 (mm)	2300	
	4.3	Free lift ⇨	h_2 (mm)	100	
	4.4	Lift ⇨	h_3 (mm)	3600	
	4.5	Height, mast extended ⇨	h_4 (mm)	4128	
	4.7	Height of overhead guard ⇨	h_8 (mm)	2245	
	4.8	Height of seat / platform	h_7 (mm)	935	297
	4.10	Height of wheel arms	h_8 (mm)	85	
	4.15	Height, lowered	h_{13} (mm)	90	
	4.19	Overall length ❖	l_1 (mm)	2159	
	4.20	Length to face of forks ❖	l_2 (mm)	993	
	4.21	Overall width	b1 (mm)	798	
	4.22	Fork dimensions DIN ISO 2331 ❖ ✱	s/e/l (mm)	55	185 / 1150
	4.24	Fork-carriage width	b_3 (mm)	673	
	4.25	Distance over fork-arms ❖	b_5 (mm)	570	
	4.31	Ground clearance, laden, below mast	m_1 (mm)	25	
	4.32	Ground clearance, centre of wheelbase	m_2 (mm)	25	
	4.33	Load dimension $b_{12} \times l_6$ crossways ❖	$b_{12} \times l_6$ (mm)	800 x 1200	
	4.34	Aisle width predetermined load dimensions ❖	A_{st} (mm)	2501	
	4.34.1	Aisle width for pallets 1000mm x 1200mm crossways ❖ ⇨	A_{st} (mm)	2523	
	4.34.2	Aisle width for pallets 800mm x 1200mm lengthwise ❖ ⇨	A_{st} (mm)	2501	
	4.35	Turning radius ❖	W_a (mm)	1640	
PERFORMANCE DATA	5.1	Travel speed, laden/unladen	km/h	9	9
	5.1.1	Travel speed, laden/unladen, backwards	km/h	9	9
	5.2	Lift speed, laden/unladen	m/s	0.14	0.28
	5.3	Lowering speed, laden/unladen	m/s	0.40	0.35
	5.7	Gradeability, laden/unladen	%	0.9	0.34
	5.8	Max. gradeability, laden/unladen	%	8.0	13.0
	5.9	Acceleration time, laden/unladen (forks trailing)	s	6.6	4.8
	5.10	Service brake		Electro Magnetic	
ELECTRIC ENGINE	6.1	Drive motor S2 60 minute rating	kW	2.6	
	6.2	Lift motor, S3 15% rating	kW	3.0 ↔	
	6.3	Battery according to DIN 43531/35/36 A,B,C, no		no	
	6.4	Battery voltage/nominal capacity K_5	V/Ah	24 V	465 Ah
	6.5	Battery weight ▼	kg	366 → ⬟	
	6.6	Energy consumption according to VDI cycle	kWh/h	1.26	
DRIVE/LIFT MECHANISM	8.1	Type of drive unit		AC Controller	
ADDITIONAL DATA	10.7	Sound pressure level at the driver's seat	dB (A)	72.14	

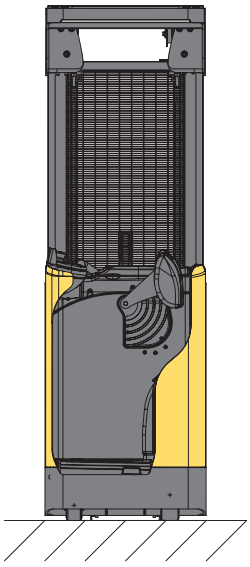
Specification data is based on VDI 2198

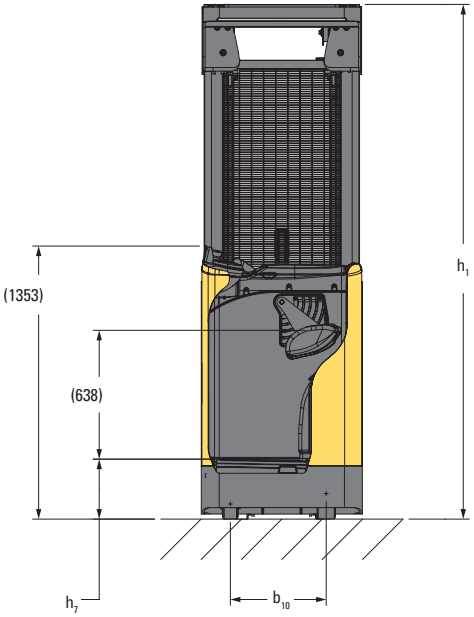
EQUIPMENT & WEIGHT: Weights (line 2.1) are based on the following specifications:

Complete truck with 2 stage NFL mast, 55 x 1150 mm forks, Vulkollan/Vulkollan driver and load wheels.

TRUCK DIMENSIONS



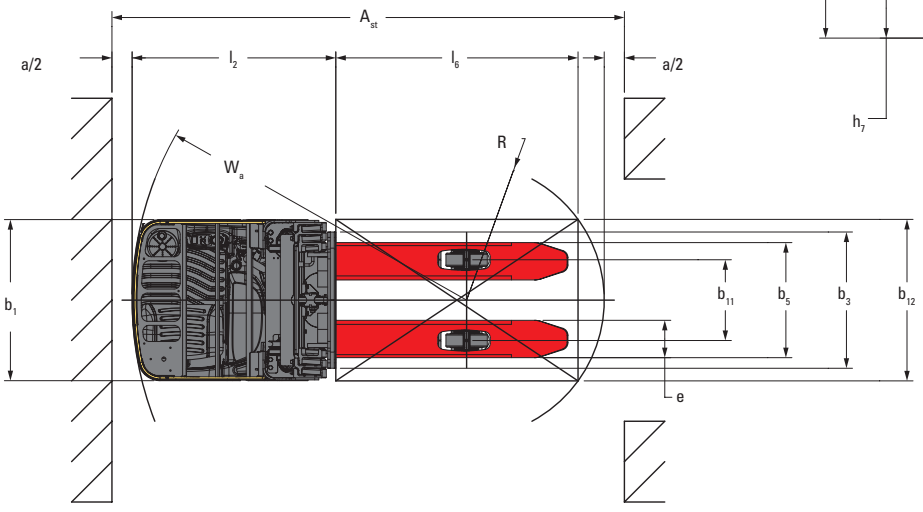




$A_{st} = W_a + R + a = W_a + \sqrt{(l_6 - x)^2 + (b_{12}/2)^2} + a$

(see lines 4.34.1 & 4.34.2)

a = 200 mm



FORKS TABLE

Mast Type	Fork length	Load centre distance	Wheel-base	Overall length	Length to face of forks	Load distance	Turning radius	Distance between fork-arms	Load dimensions		Aisle width
	l	c	y	l_1	l_2	x	W_a	b_5	l_6	b_{12}	A_{st}
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
2-stage	1000	500	1463	1966	966	674	1640	570	1200	800	2501
									1200	1000	2566
	1150	600	1463	2116	966	674	1640	570	1200	800	2501
									1200	1000	2566
3-stage	1000	500	1463	2009	1009	631	1640	570	1200	800	2536
									1200	1000	2597
	1150	575	1463	2159	1009	631	1640	570	1200	800	2536
									1200	1000	2597

MAST INFORMATION

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

2 STAGE NFL

Lift height	Free lift	Height, mast lowered	Height, mast extended	Overhead guard height	Weight ◤
h_3 (mm)	h_2 (mm)	h_1 (mm) ⊗	h_4 (mm)←	h_6 (mm)	kg
3400	100	2200	3928	2145	369
3600	100	2300	4128	2245	382
3800	100	2400	4328	2345	395
4000	100	2500	4528	2445	409
4200	100	2600	4728	2545	422

2 STAGE FFL

Lift height	Free lift	Height, mast lowered	Height, mast extended	Overhead guard height	Weight ◤
h_3 (mm)	h_2 (mm)	h_1 (mm) ⊗	h_4 (mm)←	h_6 (mm)	kg
3340	1718	2150	3868	2145	380
3540	1818	2250	4068	2245	393
3740	1918	2350	4268	2345	406
3940	2018	2450	4468	2445	419
4140	2118	2550	4668	2545	432

3 STAGE FFL

Lift height	Free lift	Height, mast lowered	Height, mast extended	Overhead guard height	Weight ◤
h_3 (mm)	h_2 (mm)	h_1 (mm) ⊗	h_4 (mm)←	h_6 (mm)	kg
4900	1618	2150	5466	2145	518
5180	1718	2250	5746	2245	537
5460	1818	2350	6026	2345	556
5740	1918	2450	6306	2445	575
6020	2018	2550	6586	2545	594

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. Inform your dealer of the nature and condition of the intended operating area when purchasing your Hyster Truck.

- ✣ See Forks table.
- ▲ Applies to one pallet = 1200 mm.
- ↔ Value referred to S3 12%
- ⇨ See Mast Information.
- ⇨ Stacking aisle widths (lines 4.34.1 & 4.34.2) are 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
- ▼ These values may vary by +/- 5%.
- → The battery nominal weight may change according to supplier in the range 366-393 kg.
- ⬟ (7) The battery actual weight is nominal weight +/- 5%
- ✱ With 2stg mast and b5=570mm the s dimension increases 5mm for first 250mm at toe

MAST TABLES

- ⊗ With free lift of 100mm
- ← With load backrest (h=1000) for carriage h4 + 562mm (mast 2 stage), + 524 (mast 3 stage).
- ◤ All weights are: mast structures (weldment, cylinders, chain, pulley) + oil

EXCLUDED: forks, accessories

FORKS TABLE

- ¡ 2-Stage only: less 27mm with a load backrest fitted
- U 2-stage only: add 27mm with a load backrest fitted

STANDARD EQUIPMENT AND OPTIONS

- x Standard equipment
- o Optional equipment

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 must read, understand and follow the instructions contained in the Operating Manual.

All values are nominal values and they are subject to tolerances. For further information, please contact the manufacturer.

Hyster products might be subject to change without notice.

Lift trucks illustrated may feature optional equipment. Values may vary with alternative configurations.

CE Safety:

This truck conforms to the current EU requirements.

STANDARD EQUIPMENT AND OPTIONS

	FEATURE	RS1.6
OPERATOR COMPARTMENT	Grab handle	x
	Seat with seat/lean system	x
	Multifunctional display	x
	Keyless access	o
	Mini lever hydraulic control	x
	Foot rest	o
	Standard steering	x
	Reverse steering	o
TRAVEL	Travel speed 9 km/h reverse, forks trailing	x
	Travel speed 9 km/h, forks leading	x
	Speed slow down on cornering	x
LIFT PERFORMANCE	2 stage NFL mast	x
	2 stage FFL mast	o
	3 stage FFL mast	o
	Mast guard, Lexan	x
	Mast guard, wire mesh grid	o
	Overhead guard protection, Lexan	o
	Overhead guard protection, metal grid	o
	Audible alarm (choice of forks leading, forks trailing, both travel directions)	x
	Electrical horn	x
	Error codes on display	o
APPLICATION ENVIRONMENT	Multipurpose bar	o
	Multipurpose clamp (1 or 2 pcs.)	o
	Beverage holder and document tray	o
	A4 clipboard	o
	Stretch film roll holder	o
	Cold store protection - 30° C	o
	Single battery change station (fixed)	o
	Twin battery change station (fixed)	o
	Side battery change - include on board battery rollers	x
	Extension cable	o
	Tandem polyurethane load wheels	o
	Vullokolan drive tyre	x
	Topthane PU75 drive tyre	o
	Conductive drive tyre	o
	Castor wheel	x
	DC/DC converter 12V 2,5A	o
	Load backrest (H=1000 mm TOF)	o
	Hyster Tracker – Monitoring	o
	Hyster Tracker – Access	o
	Hyster Tracker – Verification	o
CHASSIS / BATTERY SIZES	Chassis width (max) 798 mm	x
	Fork Carriage widths (see Forks table) 570 mm	o
	Fork Carriage lenghts 1000 mm	o
	1150 mm	x
	Battery sizes 792x212x814 mm	x

Please, refer to Price List for full options configurations and compatibility.

PRODUCT FEATURES

The new Hyster Rider Stacker is designed for small warehouses with narrow aisles, block stacking, horizontal load transfer over short and longer travel distances, order picking. It has excellent manoeuvrability, control and visibility.

DEPENDABILITY

- Completely welded stiff and strong base frame is available in 798mm width, with choice of 2 different fork lengths to match demanding applications requirements.
- The bumper is a single piece 10 mm thick construction - no splits or bolted joints, to reduce potential service risk.
- The side panels made from 5mm pressed steel are built into the exterior of truck to reduce risk of damage.
- Parts commonality with other Hyster trucks, with proven reliability and durability.

PRODUCTIVITY

- The Hyster traction motor gives powerful acceleration and has an increased travel speed of up to 12km/h.
- Two different steering modes: Standard steering and Reverse steering as option.
- Full AC infrastructure on drive and steering motors allows seamless changes in direction of travel, increasing cycle speeds and the control of pallet handling operations.
- Adjustable speed reduction on cornering feature provides smooth load handling and precise direction control.
- Mini lever for hydraulic functions within finger reach position.
- The seat / lean arrangement enables the operator to either sit during long traction runs or lean when operating in back of the trailer.

ERGONOMICS

- Operator compartment layout is optimised for ergonomics and operator space. The low 297mm height and industry widest 470mm entry provides improved ingress / egress.
- The new seat design with seat / lean system combines swinging seat cushion with fixed back rest, housed on side panel enabling the adjustment of the seat position between the horizontal seat and vertical lean / stand by push of a button.
- The driver comfort is enhanced through large floor area (0.217m^2) allowing operators to take up various comfortable positions reducing fatigue over long shifts.
- Suspended floorplate reduces shocks felt by driver and cushioned floor mat improves comfort for the driver.
- The operator presence switch, incorporated in floorplate, is designed to ensure that the driver's foot is always within the driver compartment.
- Left hand steering with accelerator finger / thumb operation provides option on how driver operates control. Usefull for different hand dimmensions and limits fatigue by allowing operator to change position throught the shift.
- The hand grip is fixed directly to the frame and does not include any controls ensuring a strong and solid grip.
- Position of display in front of operator allows for easy reading without disturbing visibility.
- Storage is available below armrest and in front of drivers legs (optional).
- The drive wheel automatically moves to centre position when truck is switched on.

LOW COST OF OWNERSHIP

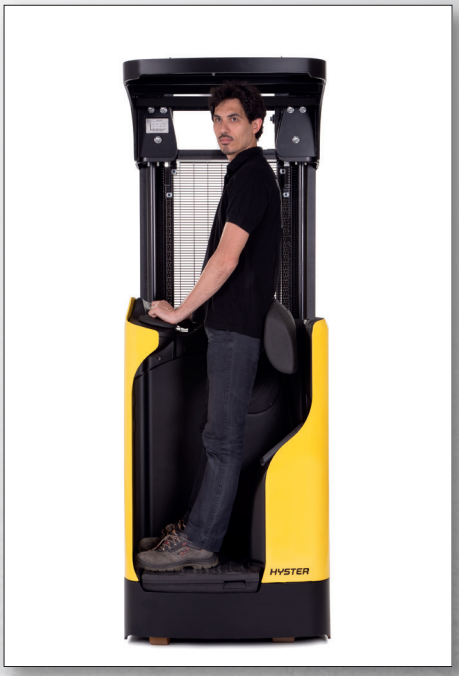
- Traction motor and controllers are fitted with forced air cooling as standard to reduce thermal effects on parts and maintain high performance and efficiency.
- Regenerative braking recovers energy and increases breaking effect to help reduce maintenance costs.
- Controllers are rated to IP65 standard, for protection against ingress of particles and liquids.
- High level of parts commonality with other Hyster products with proven reliability and durability for ease of maintenance.

SERVICEABILITY

- Side panels are bolted to the frame enabling removal for service or replacements.
- Hinged floor plate, with gas strut stay enables quick access to caster wheel and hydraulic unit for inspection or top up of fluids.
- Two diagnostic points within operator compartment are conviently located for easy connection and all fuses are easily accessible.
- Service interval for hydraulic oil and filter - 3000h.
- Standard warranty – 24 month (2000 hours), extended warranty – 36 month (4000 hours).

Tall operator in sitting position

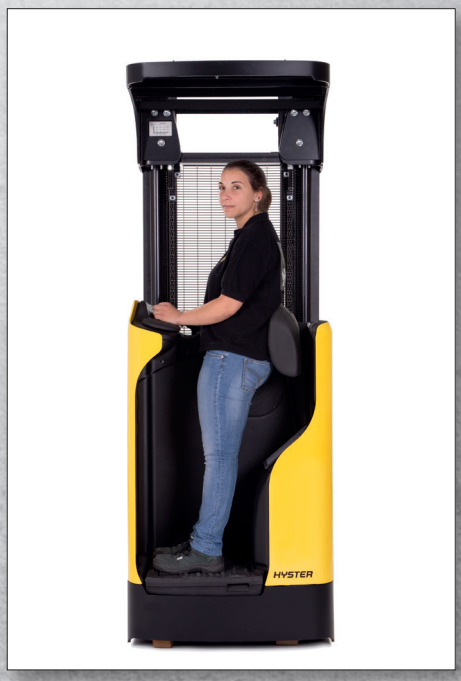
Tall operator in leaning position



Tall operator in standing position

Short operator in sitting position

Short operator in leaning position



Short operator in standing position

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.

HYSTER EUROPE
Centennial House, Frimley Business Park, Frimley, Surrey, GU16 7SG, England.
Tel: +44 (0) 1276 538500, Fax: +44 (0) 1276 538559

www.hyster.eu **infoeurope@hyster.com** **/HysterEurope** **@HysterEurope** **/HysterEurope**

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