



**STRONG PARTNERS.  
TOUGH TRUCKS.™**

**FORTENS™**

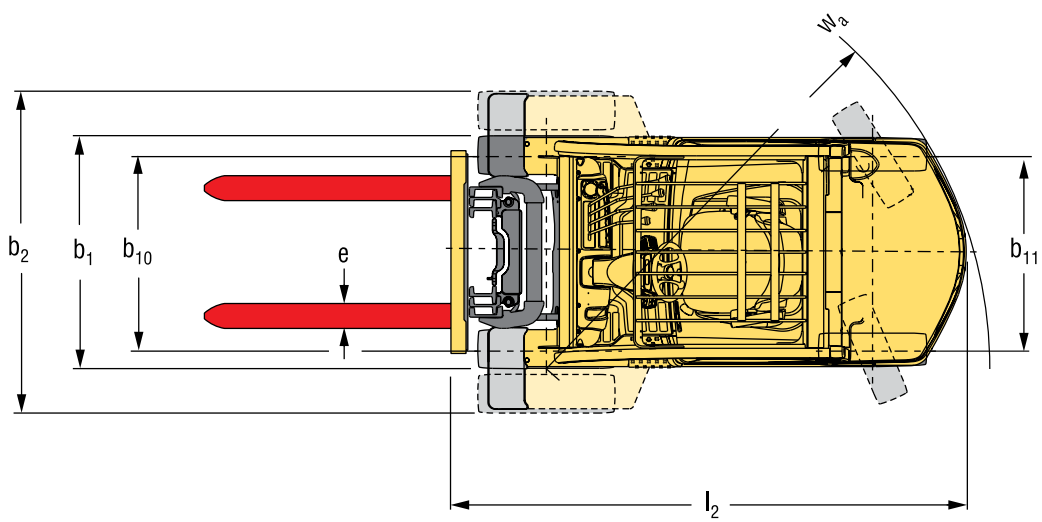
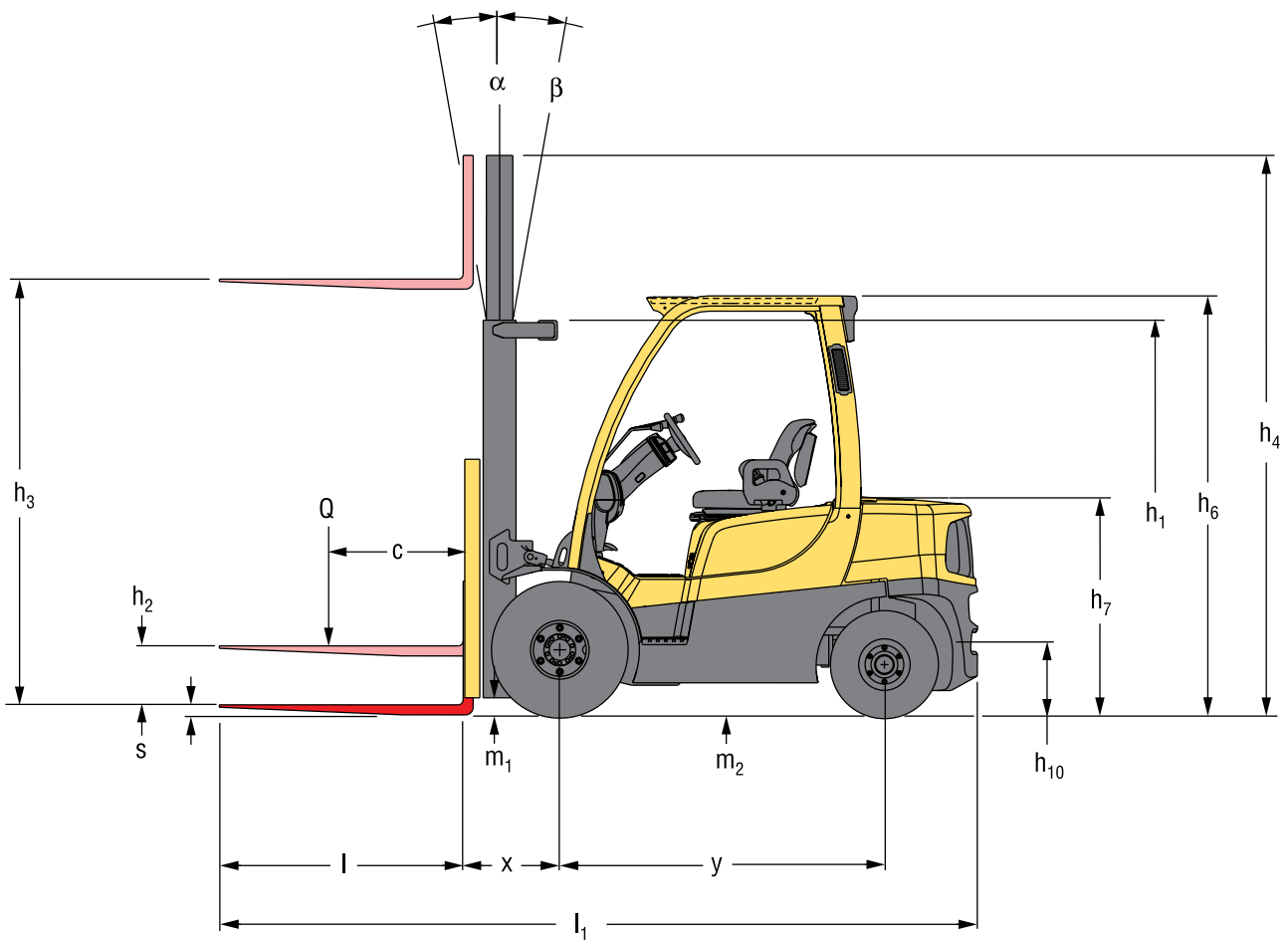


## **H2.0-3.5FT SERIES TECHNICAL GUIDE**



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## > TRUCK DIMENSIONS



# MAST AND CAPACITY INFORMATION



## H2.0FT / H2.5FT RATED CAPACITY KG@ 500 MM LOAD CENTRE

	Maximum fork height h <sub>3</sub> + s (mm)	Back tilt (°)	Lowered height h <sub>1</sub> (mm)	Extended height h <sub>4</sub> (mm) (1)	Free lift height h <sub>2</sub> + s (m) (2)	Pneumatic shaped solid tyres				Pneumatic radialtyres			
						Without sideshift (kg)		With ISS & FP (kg)		Without sideshift (kg)		With ISS & FP (kg)	
						H2.0FT	H2.5FT	H2.0FT	H2.5FT	H2.0FT	H2.5FT	H2.0FT	H2.5FT
2-STAGE LIMITED FREE LIFT	3290	5°	2170	4515	140	2000	2500	2000	2500	2000	2500	2000	2500
	3790	5°	2420	5015	140	2000	2500	2000	2500	2000	2500	2000	2500
	4330	5°	2770	5555	140	2000	2500	1990	2480	2000	2500	1990	2480
	4830	5°	3020	6055	140	1910	2400	1890	2370	1900	2390 (3)	1890	2360 (3)
2-STAGE FULL FREE LIFT	3300	5°	2170	4525	1555	2000	2500	2000	2500	2000	2500	2000	2500
3-STAGE FULL FREE LIFT	4350	5°	1970	5570	1380	2000	2500	1970	2500	2000	2500 (3)	1970	2500 (3)
	4950	5°	2170	6170	1580	1890	2370	1850	2370	1880 (3)	2370 (3)	1850 (3)	2370 (3)
	5550	5°	2420	6770	1830	1760	2240 (3)	1720	2220 (3)	1760 (3)	2240 (4)	1710 (3)	2220 (4)
	6000	5°	2620	7220	2030	1660	2120 (3)	1600	2090 (3)	1650 (3)	2130 (4)	1600 (3)	2100 (4)

## H2.0FT / H2.5FT RATED CAPACITY KG@ 600 MM LOAD CENTRE

	Maximum fork height h <sub>3</sub> + s (mm)	Back tilt (°)	Lowered height h <sub>1</sub> (mm)	Extended height h <sub>4</sub> (mm) (1)	Free lift height h <sub>2</sub> + s (m) (2)	Pneumatic shaped solid tyres				Pneumatic radialtyres			
						Without sideshift (kg)		With ISS & FP (kg)		Without sideshift (kg)		With ISS & FP (kg)	
						H2.0FT	H2.5FT	H2.0FT	H2.5FT	H2.0FT	H2.5FT	H2.0FT	H2.5FT
2-STAGE LIMITED FREE LIFT	3290	5°	2170	4515	140	1920	2370	1840	2280	1920	2370	1840	2280
	3790	5°	2420	5015	140	1910	2360	1830	2270	1910	2360	1830	2270
	4330	5°	2770	5555	140	1890	2350	1810	2250	1890	2350	1810	2250
	4830	5°	3020	6055	140	1800	2240	1720	2150	1790	2240 (3)	1720	2150 (3)
2-STAGE FULL FREE LIFT	3300	5°	2170	4525	1555	1920	2380	1840	2280	1920	2380	1840	2280
3-STAGE FULL FREE LIFT	4350	5°	1970	5570	1380	1880	2380	1790	2280	1880	2380 (3)	1790	2280 (3)
	4950	5°	2170	6170	1580	1760	2250	1690	2160	1760 (3)	2250 (3)	1680 (3)	2150 (3)
	5550	5°	2420	6770	1830	1630	2110 (3)	1570	2020 (3)	1630 (3)	2110 (4)	1560 (3)	2020 (4)
	6000	5°	2620	7220	2030	1530	1990 (3)	1460	1900 (3)	1520 (3)	1990 (4)	1450 (3)	1910 (4)

## H3.0FT / H3.5FT RATED CAPACITY KG@ 500 MM LOAD CENTRE

	Maximum fork height h <sub>3</sub> + s (mm)	Back tilt (°)	Lowered height h <sub>1</sub> (mm)	Extended height h <sub>4</sub> (mm) (1)	Free lift height h <sub>2</sub> + s (m) (2)	Pneumatic shaped solid tyres				Pneumatic radialtyres			
						Without sideshift (kg)		With ISS & FP (kg)		Without sideshift (kg)		With ISS & FP (kg)	
						H3.0FT	H3.5FT	H3.0FT	H3.5FT	H3.0FT	H3.5FT	H3.0FT	H3.5FT
2-STAGE LIMITED FREE LIFT	3105	5°	2195	4335	150	3000	3500	2970	3490	3000	3500	2970	3490
	3605	5°	2445	4835	150	3000	3500	2950	3480	3000	3500	2950	3480
	4105	5°	2795	5335	150	3000	3500	2940	3460	3000	3500	2940	3460
	4605	5°	3045	5835	150	2890	3390	2830	3340	2890	3340	2820	3340
2-STAGE FULL FREE LIFT	3300	5°	2195	4335	1495	3000	3500	3000	3500	3000	3500	3000	3500
3-STAGE FULL FREE LIFT	4015	5°	1995	5245	1315	3000	3500	2930	3460	3000	3500 (3)	2930	3430
	4615	5°	2195	5845	1515	2900	3400	2830	3350	2900 (3)	3400 (3)	2830 (3)	3350 (3)
	4915	5°	2345	6145	1665	2840	3320 (3)	2760	3260	2830 (3)	3330 (4)	2750 (3)	3270 (4)
	5215	5°	2445	6445	1765	2740	3250 (3)	2680	3180 (3)	2760 (3)	3250 (4)	2680 (3)	3190 (4)
	5815	5°	2695	7045	2015	2610 (3)	2950 (3)	2510 (3)	2970 (3)	2610 (4)	3080 (4)	2510 (4)	3000 (4)

## H3.0FT / H3.5FT RATED CAPACITY KG@ 600 MM LOAD CENTRE

	Maximum fork height h <sub>3</sub> + s (mm)	Back tilt (°)	Lowered height h <sub>1</sub> (mm)	Extended height h <sub>4</sub> (mm) (1)	Free lift height h <sub>2</sub> + s (m) (2)	Pneumatic shaped solid tyres				Pneumatic radialtyres			
						Without sideshift (kg)		With ISS & FP (kg)		Without sideshift (kg)		With ISS & FP (kg)	
						H3.0FT	H3.5FT	H3.0FT	H3.5FT	H3.0FT	H3.5FT	H3.0FT	H3.5FT
2-STAGE LIMITED FREE LIFT	3105	5°	2195	4335	150	2820	3310	2700	3180	2820	3310	2700	3180
	3605	5°	2445	4835	150	2810	3300	2690	3170	2810	3300	2690	3170
	4105	5°	2795	5335	150	2790	3290	2670	3150	2790	3290	2670	3150
	4605	5°	3045	5835	150	2690	3170	2570	3040	2690	3170	2570	3040
2-STAGE FULL FREE LIFT	3300	5°	2195	4335	1495	2820	3310	2700	3180	2820	3310	2700	3180
3-STAGE FULL FREE LIFT	4015	5°	1995	5245	1315	2800	3290	2670	3150	2800	3290 (3)	2670	3150
	4615	5°	2195	5845	1515	2700	3190	2580	3050	2700 (3)	3190 (3)	2580 (3)	3050 (3)
	4915	5°	2345	6145	1665	2630	3110 (3)	2510	2980	2630 (3)	3110 (4)	2510 (3)	2980 (4)
	5215	5°	2445	6445	1765	2560	3030 (3)	2440	2900 (3)	2550 (3)	3040 (4)	2440 (3)	2900 (4)
	5815	5°	2695	7045	2015	2400 (3)	2860 (3)	2290 (3)	2730 (3)	2400 (4)	2860 (4)	2290 (4)	2740 (4)

## > H2.0FT FORTENS / FORTENS ADVANCE

			HYSTER		HYSTER		HYSTER		HYSTER			
			H2.0FT		H2.0FT		H2.0FT		H2.0FT			
GENERAL	1-1	Manufacturer		Fortens		Fortens		Fortens Advance		Fortens Advance		
	1-2	Model designation		Fortens		Fortens		Fortens Advance		Fortens Advance		
		Model		Fortens		Fortens		Fortens Advance		Fortens Advance		
		Engine / transmission		Yanmar 2.6L Electronic Powershift 1-speed		Yanmar 3.3L Electronic Powershift 1-speed		Yanmar 2.6L DuraMatch™ 1-speed		Yanmar 3.3L DuraMatch™ 1-speed		
		Brake type		Drum		Drum		Drum or Oil-immersed		Drum or Oil-immersed		
	1-3	Drive		Diesel		Diesel		Diesel		Diesel		
	1-4	Operator type		Seated		Seated		Seated		Seated		
	1-5	Rated capacity/rated load	Q <sub>1</sub>	t	2.0		2.0		2.0		2.0	
	1-6	Load centre distance	c	mm	500		500		500		500	
	1-8	Load distance, centre of drive axle to fork	x	mm	471		471		471		471	
1-9	Wheelbase	y	mm	1623		1623		1623		1623		
WEIGHT	2-1	Service weight		3563		3563		3563		3563		
	2-2-1	Axle loading with load, front / rear		kg	5048	516	5048	516	5048	516	5048	516
	2-3-1	Axle loading without load, front / rear		kg	1851	1712	1851	1712	1851	1712	1851	1712
WHEELS	3-1	Tyre type		Superelastic		Superelastic		Superelastic		Superelastic		
	3-2	Tyre size, front		7.00 X 12 - 12		7.00 X 12 - 12		7.00 X 12 - 12		7.00 X 12 - 12		
	3-3	Tyre size, front		6.00 X 9		6.00 X 9		6.00 X 9		6.00 X 9		
	3-5	Wheels, number front / rear (x = driven wheels)		2x / 2		2x / 2		2x / 2		2x / 2		
	3-6	Tread, front	b <sub>10</sub>	mm	965		965		965		965	
	3-7	Tread, rear	b <sub>11</sub>	mm	967		967		967		967	
	DIMENSIONS	4-1	Tilt of mast / fork carriage forward / backward		(°)		6 / 5		6 / 5		6 / 5	
4-2		Height, mast lowered	h <sub>1</sub>	mm	2170		2170		2170		2170	
4-3		Free lift (1)	h <sub>2</sub>	mm	140		140		140		140	
4-4		Lift (1)	h <sub>3</sub>	mm	3250		3250		3250		3250	
4-5		Height, mast extended (2)	h <sub>4</sub>	mm	3900		3900		3900		3900	
4-7		Height of overhead guard (cabin) (3)	h <sub>6</sub>	mm	2160		2160		2160		2160	
4-7-1		Cab height (open cab)		mm	2181		2181		2181		2181	
4-8		Seat height relating to SIP (4)	h <sub>7</sub>	mm	1061		1061		1061		1061	
4-12		Coupling height	h <sub>10</sub>	mm	365		365		365		365	
4-19		Overall length	l <sub>1</sub>	mm	3486		3486		3486		3486	
4-20		Length to face of forks	l <sub>2</sub>	mm	2486		2486		2486		2486	
4-21		Overall width (5)	b <sub>1</sub> /b <sub>2</sub>	mm	1157 / 1317 / 1601		1157 / 1317 / 1601		1157 / 1317 / 1601		1157 / 1317 / 1601	
4-22		Fork dimensions DIN ISO 2331	s/e/l	mm	40 x 100 x 1000		40 X 100 X 1000		40 X 100 X 1000		40 X 100 X 1000	
4-23		Fork carriage ISO 2328, class/type A, B		mm	II A		II A		II A		II A	
4-24		Fork carriage width (6)	b <sub>3</sub>	mm	1070		1070		1070		1070	
4-31		Ground clearance, laden, below mast	m <sub>1</sub>	mm	107		107		107		107	
4-32		Ground clearance, centre of wheelbase	m <sub>2</sub>	mm	160		160		160		160	
4-34-1		Aisle width for pallets 1000 × 1200 crossways	Ast	mm	3820		3820		3820		3820	
4-34-4		Aisle width for pallets 800 × 1200 lengthways	Ast	mm	4020		4020		4020		4020	
4-35		Turning radius	W <sub>a</sub>	mm	2149		2149		2149		2149	
4-36		Internal turning radius	b <sub>13</sub>	mm	629		629		629		629	
PERFORMANCE	5-1	Travel speed with / without load		km/h	16.9	18.0	18.2	19.3	16.9	18.0	18.2	19.3
	5-1-1	Travel speed, laden/unladen, backwards		km/h	16.9	18.0	18.2	19.3	16.9	18.0	18.2	19.3
	5-2	Lifting speed with / without load		m/s	0.66	0.71	0.68	0.68	0.62	0.65	0.68	0.68
	5-3	Lowering speed with / without load		m/s	0.58	0.50	0.58	0.50	0.58	0.50	0.58	0.50
	5-5	Drawbar pull, laden/unladen (7)		N	17440	11570	19600	10800	17440	11570	19600	11570
	5-7	Gradeability - 1.6 km/h, with / without load (8)		%	21.3	34.2	27.3	34.2	21.3	34.2	27.3	34.2
	5-9	Acceleration time, laden/unladen		s	5.5	4.9	5.2	4.3	5.5	4.9	5.2	4.3
	5-10	Service brake			Hydraulic		Hydraulic		Hydraulic		Hydraulic	
	7-5	Fuel consumption according to VDI cycle (9)		l/h	2.7		2.7		2.7		2.8	

# H2.5FT FORTENS / FORTENS ADVANCE



					HYSTER		HYSTER		HYSTER		HYSTER	
					H2.5FT		H2.5FT		H2.5FT		H2.5FT	
GENERAL	1-1	Manufacturer			HYSTER		HYSTER		HYSTER		HYSTER	
	1-2	Model designation			H2.5FT		H2.5FT		H2.5FT		H2.5FT	
		Model			Fortens		Fortens		Fortens Advance		Fortens Advance	
		Engine / transmission			Yanmar 2.6L Electronic Powershift 1-speed		Yanmar 3.3L Electronic Powershift 1-speed		Yanmar 2.6L DuraMatch™ 1-speed		Yanmar 3.3L DuraMatch™ 1-speed	
		Brake type			Drum		Drum		Drum or Oil-immersed		Oil-immersed	
	1-3	Drive			Diesel		Diesel		Diesel		Diesel	
	1-4	Operator type			Seated		Seated		Seated		Seated	
	1-5	Rated capacity/rated load	Q <sub>1</sub>	t	2.5		2.5		2.5		2.5	
	1-6	Load centre distance	c	mm	500		500		500		500	
	1-8	Load distance, centre of drive axle to fork	x	mm	471		471		471		471	
1-9	Wheelbase	y	mm	1623		1623		1623		1623		
WEIGHT	2-1	Service weight		kg	3902		3902		3902		3902	
	2-2-1	Axle loading with load, front / rear		kg	5778	624	5778	624	5778	624	5048	516
	2-3-1	Axle loading without load, front / rear		kg	1782	2120	1782	2120	1782	2120	1851	1712
WHEELS	3-1	Tyre type			Superelastic		Superelastic		Superelastic		Superelastic	
	3-2	Tyre size, front			7.00 X 12 - 12		7.00 X 12 - 12		7.00 X 12 - 12		7.00 X 12 - 12	
	3-3	Tyre size, front			6.00 X 9		6.00 X 9		6.00 X 9		6.00 X 9	
	3-5	Wheels, number front / rear (x = driven wheels)			2x / 2		2x / 2		2x / 2		2x / 2	
	3-6	Tread, front	b <sub>10</sub>	mm	965		965		965		965	
	3-7	Tread, rear	b <sub>11</sub>	mm	967		967		967		967	
	DIMENSIONS	4-1	Tilt of mast / fork carriage forward / backward		(°)	6 / 5		6 / 5		6 / 5		6 / 5
4-2		Height, mast lowered	h <sub>1</sub>	mm	2170		2170		2170		2170	
4-3		Free lift (1)	h <sub>2</sub>	mm	140		140		140		140	
4-4		Lift (1)	h <sub>3</sub>	mm	3250		3250		3250		3250	
4-5		Height, mast extended (2)	h <sub>4</sub>	mm	3900		3900		3900		3900	
4-7		Height of overhead guard (cabin) (3)	h <sub>6</sub>	mm	2160		2160		2160		2160	
4-7-1		Cab height (open cab)		mm	2181		2181		2181		2181	
4-8		Seat height relating to SIP (4)	h <sub>7</sub>	mm	1061		1061		1061		1061	
4-12		Coupling height	h <sub>10</sub>	mm	365		365		365		365	
4-19		Overall length	l <sub>1</sub>	mm	3559		3559		3559		3559	
4-20		Length to face of forks	l <sub>2</sub>	mm	2559		2559		2559		2559	
4-21		Overall width (5)	b <sub>1</sub> /b <sub>2</sub>	mm	1157 / 1317 / 1601		1157 / 1317 / 1601		1157 / 1317 / 1601		1157 / 1317 / 1601	
4-22		Fork dimensions DIN ISO 2331	s/e/l	mm	40 X 100 X 1000		40 X 100 X 1000		40 X 100 X 1000		40 X 100 X 1000	
4-23		Fork carriage ISO 2328, class/type A, B		mm	II A		II A		II A		II A	
4-24		Fork carriage width (6)	b <sub>3</sub>	mm	1070		1070		1070		1070	
4-31		Ground clearance, laden, below mast	m <sub>1</sub>	mm	107		107		107		107	
4-32		Ground clearance, centre of wheelbase	m <sub>2</sub>	mm	160		160		160		160	
4-34-1		Aisle width for pallets 1000 × 1200 crossways	Ast	mm	3887		3887		3887		3887	
4-34-4		Aisle width for pallets 800 × 1200 lengthways	Ast	mm	4087		4087		4087		4087	
4-35		Turning radius	W <sub>a</sub>	mm	2216		2216		2216		2216	
4-36		Internal turning radius	b <sub>13</sub>	mm	629		629		629		629	
PERFORMANCE	5-1	Travel speed with / without load		km/h	16.9	18.0	18.2	19.3	16.9	18.0	18.2	19.3
	5-1-1	Travel speed, laden/unladen, backwards		km/h	16.9	18.0	18.2	19.3	16.9	18.0	18.2	19.3
	5-2	Lifting speed with / without load		m/s	0.61	0.71	0.68	0.68	0.59	0.65	0.68	0.68
	5-3	Lowering speed with / without load		m/s	0.58	0.50	0.58	0.50	0.58	0.50	0.58	0.50
	5-5	Drawbar pull, laden/unladen (7)		N	17440	11450	19650	10800	17440	11450	19500	11450
	5-7	Gradeability - 1.6 km/h, with / without load (8)		%	21.0	29.3	23.8	28.7	21.0	29.3	23.8	29.3
	5-9	Acceleration time, laden/unladen		s	6.0	5.0	5.5	4.4	6.0	5.0	5.5	4.4
	5-10	Service brake			Hydraulic		Hydraulic		Hydraulic		Hydraulic	
	7-5	Fuel consumption according to VDI cycle (9)		l/h	3.0		3.3		3.0		3.3	

# > H3.0FT FORTENS / FORTENS ADVANCE

			HYSTER		HYSTER		HYSTER		HYSTER			
			H3.0FT		H3.0FT		H3.0FT		H3.0FT			
GENERAL	1-1	Manufacturer		HYSTER		HYSTER		HYSTER		HYSTER		
	1-2	Model designation		H3.0FT		H3.0FT		H3.0FT		H3.0FT		
		Model		Fortens		Fortens		Fortens Advance		Fortens Advance		
		Engine / transmission		Yanmar 2.6L Electronic Powershift 1-speed		Yanmar 3.3L Electronic Powershift 1-speed		Yanmar 2.6L DuraMatch™ 1-speed		Yanmar 3.3L DuraMatch™ 1-speed		
		Brake type		Drum		Drum		Drum or Oil-immersed		Oil-immersed		
	1-3	Drive		Diesel		Diesel		Diesel		Diesel		
	1-4	Operator type		Seated		Seated		Seated		Seated		
	1-5	Rated capacity/rated load	Q <sub>1</sub>	t	3.0		3.0		3.0		3.0	
	1-6	Load centre distance	c	mm	500		500		500		500	
	1-8	Load distance, centre of drive axle to fork	x	mm	483		483		483		483	
1-9	Wheelbase	y	mm	1623		1623		1623		1623		
WEIGHT	2-1	Service weight		kg		4612		4612		4612		
	2-2-1	Axle loading with load, front / rear		kg	6640	972	6640	972	6640	972	5048 516	
	2-3-1	Axle loading without load, front / rear		kg	1823	2789	1823	2789	1823	2789	1851 1712	
WHEELS	3-1	Tyre type		Superelastic		Superelastic		Superelastic		Superelastic		
	3-2	Tyre size, front		28 X 9 - 15		28 X 9 - 15		28 X 9 - 15		28 X 9 - 15		
	3-3	Tyre size, front		6.50 X 10		6.50 X 10		6.50 X 10		6.50 X 10		
	3-5	Wheels, number front / rear (x = driven wheels)		2x / 2		2x / 2		2x / 2		2x / 2		
	3-6	Tread, front	b <sub>10</sub>	mm	965		965		965		965	
	3-7	Tread, rear	b <sub>11</sub>	mm	967		967		967		967	
	DIMENSIONS	4-1	Tilt of mast / fork carriage forward / backward		(°)		6 / 5		6 / 5		6 / 5	
4-2		Height, mast lowered		h <sub>1</sub>	mm	2195		2195		2195		
4-3		Free lift (1)		h <sub>2</sub>	mm	140		140		140		
4-4		Lift (1)		h <sub>3</sub>	mm	3055		3055		3055		
4-5		Height, mast extended (2)		h <sub>4</sub>	mm	3805		3805		3805		
4-7		Height of overhead guard (cabin) (3)		h <sub>6</sub>	mm	2185		2185		2185		
4-7-1		Cab height (open cab)			mm	2206		2206		2206		
4-8		Seat height relating to SIP (4)		h <sub>7</sub>	mm	1086		1086		1086		
4-12		Coupling height		h <sub>10</sub>	mm	390		390		390		
4-19		Overall length		l <sub>1</sub>	mm	3633		3633		3633		
4-20		Length to face of forks		l <sub>2</sub>	mm	2633		2633		2633		
4-21		Overall width (5)		b <sub>1</sub> /b <sub>2</sub>	mm	1186 / 1321 / 1601		1186 / 1321 / 1601		1186 / 1321 / 1601		
4-22		Fork dimensions DIN ISO 2331		s/e/l	mm	50 X 120 X 1000		50 X 120 X 1000		50 X 120 X 1000		
4-23		Fork carriage ISO 2328, class/type A, B			mm	III A		III A		III A		
4-24		Fork carriage width (6)		b <sub>3</sub>	mm	1070		1070		1070		
4-31		Ground clearance, laden, below mast		m <sub>1</sub>	mm	132		132		132		
4-32		Ground clearance, centre of wheelbase		m <sub>2</sub>	mm	185		185		185		
4-34-1		Aisle width for pallets 1000 × 1200 crossways		Ast	mm	3960		3960		3960		
4-34-4		Aisle width for pallets 800 × 1200 lengthways		Ast	mm	4160		4160		4160		
4-35		Turning radius		W <sub>a</sub>	mm	2277		2277		2277		
4-36		Internal turning radius		b <sub>13</sub>	mm	618		618		618		
PERFORMANCE	5-1	Travel speed with / without load		km/h	18.2	19.1	20.0	21.1	18.2	19.1	20.0 21.1	
	5-1-1	Travel speed, laden/unladen, backwards		km/h	18.2	19.1	20.0	21.1	18.2	19.1	20.0 21.1	
	5-2	Lifting speed with / without load		m/s	0.47	0.62	0.60	0.60	0.51	0.57	0.58 0.60	
	5-3	Lowering speed with / without load		m/s	0.53	0.47	0.53	0.47	0.53	0.47	0.53 0.47	
	5-5	Drawbar pull, laden/unladen (7)		N	16354	11708	17600	11100	16354	11708	17600 11708	
	5-7	Gradeability - 1.6 km/h, with / without load (8)		%	15.0	26.6	18.7	26.5	15.0	26.6	18.7 26.6	
	5-9	Acceleration time, laden/unladen		s	6.2	5.3	5.5	4.7	6.2	5.3	5.8 4.7	
	5-10	Service brake			Hydraulic		Hydraulic		Hydraulic		Hydraulic	
	7-5	Fuel consumption according to VDI cycle (9)		l/h	3.3		3.8		3.3		3.8	

# H3.5FT FORTENS / FORTENS ADVANCE



				HYSTER		HYSTER		
GENERAL	1-1	Manufacturer		HYSTER		HYSTER		
	1-2	Model designation		H3.5FT		H3.5FT		
		Model		Fortens		Fortens Advance		
		Engine / transmission		Yanmar 3.3L Electronic Powershift 1-speed		Yanmar 3.3L DuraMatch™ 1-speed		
		Brake type		Drum		Oil-immersed		
	1-3	Drive		Diesel		Diesel		
	1-4	Operator type		Seated		Seated		
	1-5	Rated capacity/rated load	Q <sub>1</sub>	t	3.5		3.5	
	1-6	Load centre distance	c	mm	500		500	
1-8	Load distance, centre of drive axle to fork	x	mm	483		483		
1-9	Wheelbase	y	mm	1700		1700		
WEIGHT	2-1	Service weight		4799		4799		
	2-2-1	Axle loading with load, front / rear		kg	7319	980	7319	980
	2-3-1	Axle loading without load, front / rear		kg	1797	3002	1797	3002
WHEELS	3-1	Tyre type		Superelastic		Superelastic		
	3-2	Tyre size, front		28 X 9 - 15		28 X 9 - 15		
	3-3	Tyre size, front		6.50 X 10		6.50 X 10		
	3-5	Wheels, number front / rear (x = driven wheels)		2x / 2		2x / 2		
	3-6	Tread, front	b <sub>10</sub>	mm	965		965	
	3-7	Tread, rear	b <sub>11</sub>	mm	967		967	
	DIMENSIONS	4-1	Tilt of mast / fork carriage forward / backward		(°)	6 / 5		6 / 5
4-2		Height, mast lowered	h <sub>1</sub>	mm	2195		2195	
4-3		Free lift (1)	h <sub>2</sub>	mm	140		140	
4-4		Lift (1)	h <sub>3</sub>	mm	3055		3055	
4-5		Height, mast extended (2)	h <sub>4</sub>	mm	3805		3805	
4-7		Height of overhead guard (cabin) (3)	h <sub>6</sub>	mm	2185		2185	
4-7-1		Cab height (open cab)		mm	2206		2206	
4-8		Seat height relating to SIP (4)	h <sub>7</sub>	mm	1086		1086	
4-12		Coupling height	h <sub>10</sub>	mm	390		390	
4-19		Overall length	l <sub>1</sub>	mm	3734		3734	
4-20		Length to face of forks	l <sub>2</sub>	mm	2734		2734	
4-21		Overall width (5)	b <sub>1</sub> /b <sub>2</sub>	mm	1186 / 1321 / 1601		1186 / 1321 / 1601	
4-22		Fork dimensions DIN ISO 2331	s/e/l	mm	50 X 120 X 1000		50 X 120 X 1000	
4-23		Fork carriage ISO 2328, class/type A, B		mm	III A		III A	
4-24		Fork carriage width (6)	b <sub>3</sub>	mm	1070		1070	
4-31		Ground clearance, laden, below mast	m <sub>1</sub>	mm	132		132	
4-32		Ground clearance, centre of wheelbase	m <sub>2</sub>	mm	185		185	
4-34-1		Aisle width for pallets 1000 × 1200 crossways	Ast	mm	4063		4063	
4-34-4		Aisle width for pallets 800 × 1200 lengthways	Ast	mm	4263		4263	
4-35		Turning radius	W <sub>a</sub>	mm	2380		2380	
4-36		Internal turning radius	b <sub>13</sub>	mm	647		647	
PERFORMANCE	5-1	Travel speed with / without load		km/h	20.0	21.1	20.0	21.1
	5-1-1	Travel speed, laden/unladen, backwards		km/h	20.0	21.1	20.0	21.1
	5-2	Lifting speed with / without load		m/s	0.60	0.60	0.58	0.60
	5-3	Lowering speed with / without load		m/s	0.53	0.47	0.53	0.47
	5-5	Drawbar pull, laden/unladen (7)		N	17450	11000	17450	11000
	5-7	Gradeability - 1.6 km/h, with / without load (8)		%	16.5	24.3	16.5	24.3
	5-9	Acceleration time, laden/unladen		s	6.0	4.8	6.0	4.8
	5-10	Service brake			Hydraulic		Hydraulic	
	7-5	Fuel consumption according to VDI cycle (9)		l/h	4.3		4.3	

# > POWERTRAINS

GENERAL	1-1	Manufacturer			HYSTER	HYSTER
	1-2	Model designation			H2.0-3.5FT	H2.0-3.5FT
	1-3	Powertrain / drivetrain			Diesel	Diesel

ENGINE	7-1	Engine manufacturer / model			Yanmar / 4TNE92	Yanmar / 4TNE98
	7-2	Engine power output according to ISO 1585		kW	33.9	43.0
	7-3	Rated speed		rpm	2700	2600
	7-3-1	Engine torque @rpm (1/min)		N-m	143 @ 1400	189 @ 1700
	7-4	Number of cylinders / displacement		# / cm <sup>3</sup>	4 / 2659	4 / 3319
	7-8	Alternator output		A	120	120
	7-10	Battery voltage, rated capacity		V / Ah	24 / 200	24 / 200

DRIVE	8-1	Drive control / transmission		Type / #	Automatic Powershift	Automatic Powershift
	8-11	Service brake		Type	Drum or Oil immersed	Drum or Oil immersed
	8-12	Parking brake		Type	Mechanical	Mechanical

MISC	10-1	Operating pressure for attachments		bar	0 - 155	0 - 155
	10-2	Oil volume for attachments (10)		l/min	75	75
	10-3	Hydraulic oil tank, capacity		l	45.8	45.8
	10-4	Fuel tank, capacity		l	52.8	52.8
	10-7	Sound pressure level at the driver's seat (11)	Lpaz	dB(A)	79	79
	10-7-1	Guaranteed sound power 2001/14/EC	Lwaz	dB	102	102
	10-8	Towing coupling, type DIN 15170			Yes/Pin	Yes/Pin

## MODEL TABLE NOTES:

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.


- (1) Top of forks
- (2) Without load backrest
- (3) h<sub>6</sub> subject to +/- 5 mm tolerance. H2.0FT - H2.5FT add 25mm when front tyre size 28X9-15 is selected
- (4) Full suspension seat in depressed position.
- (5) Standard/Wide/Dual. When wet axle selected values are (1186 / 1321 / 1601) for all capacities
- (6) add 32mm with load backrest
- (7) At 1.6km/h
- (8) At 4.8km/h
- (9) With Load Sensing Hydraulics
- (10) Variable
- (11) L<sub>PAZ</sub>, measured according to the test cycles and based on the weighting values contained in EN12053

## MAST CAPACITY TABLE NOTES:

- (1) With load backrest
- (2) Without load backrest
- (3) Wide tread or Dual Drive Wheels required for this rating
- (4) Dual Drive Wheels required for this rating

## NOTICE:

Care must be exercised when handling elevated loads. 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 are subject to change without notice. Lift trucks illustrated may feature optional equipment. Values may vary with alternative configurations.

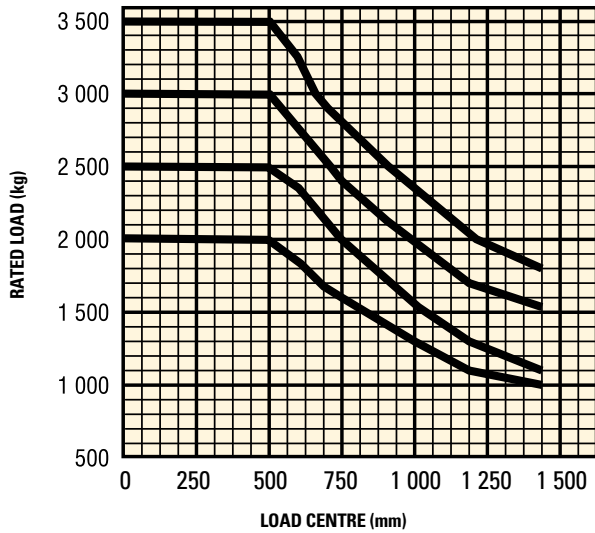
 **Safety:** This truck conforms to the current EU requirements.

Specification data is based on VDI 2198.



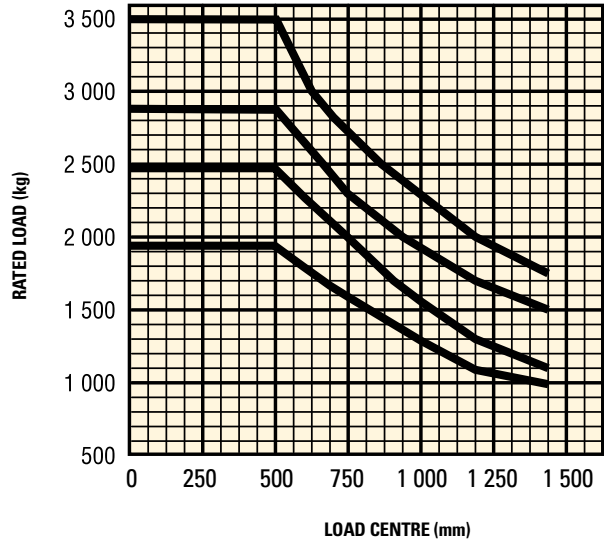
# RATED CAPACITIES <

**STANDARD CARRIAGE**



**Load centre** - distance from front of forks to centre of gravity of load.

**SIDESHIFT CARRIAGE**



**Rated load** - based on vertical mast.

# STANDARD AND OPTIONAL EQUIPMENT <

PERFORMANCE	STD	OPT
Hyster Fortens	X	
Hyster Fortens Advance		X
Yanmar 2.6L diesel engine	X	
Yanmar 3.3L diesel engine	X	
Anti-Clog Radiator	X	
Radiator Screen		X
Upswept Exhaust	X	
Horizontal Exhaust		X
Exhaust Wraps		X
Powertrain Protection System with Engine Shutdown	X	
High Air Intake	X	
High Air Intake with Precleaner		X
Heavy Duty Air Filter		X
Electronic Powershift - 1 Speed Transmission	X	
DuraMatch™ - 1 Speed Transmission		X
Drum brakes	X	
Oilimmersed brakes		X
DRIVE		
Traction Speed Limiter pre-set to 13km/h (Adjustable)*	X	
Multiple Traction Speed Limit 13/6 km/h (Adjustable)*		X
Indoor Speed Reduction*		X
Standard Tread	X	
Wide Tread		X
Dual Tread		X
7.00 x 12 Pneumatic Shaped Solid Drive Tyres - H2.0-2.5FT	X	

DRIVE (continued)		
7.00 x 12 Non-Marking Pneumatic Shaped Solid Drive Tyres		X
7.00 R12 Pneumatic Radial Drive Tyres		X
28 x 9 Pneumatic Shaped Solid Drive Tyres - H3.0-3.5FT	X	
28 x 9 Non-Marking Pneumatic Shaped Solid Drive Tyres		X
28 x 9-15 Pneumatic Shaped Solid Special Wide Rim Drive Tyres		X
225/75 R15 Pneumatic Radial Drive Tyres		X
6.00 x 9 Pneumatic Shaped Solid Steer Tyres - H2.0-2.5FT	X	
6.00 x 9 Pneumatic Radial Steer Tyres		X
6.00 x 9 Non-Marking Pneumatic Shaped Solid Steer Tyres		X
6.50 x 10 Pneumatic Shaped Solid Steer Tyres - H3.0-3.5FT	X	
6.50 x 10 Pneumatic Radial Steer Tyres		X
6.50 x 10 Non-Marking Pneumatic Shaped Solid Steer Tyres		X
LIFT	STD	OPT
2 Stage Limited Free Lift	X	
2 Stage Full Free Lift		X
3 Stage Full Free Lift		X
4 Stage Full Free Lift		X
Lift Height - 3290mm (2170mm Lowered Height) - H2.0-2.5FT	X	
Lift Height - 3105mm (2195mm Lowered Height) - H3.0-3.5FT	X	
Various other Lift Heights		X
Mast tilt - 10° Forward / 6° Back		X
Mast tilt - 6° Forward / 10° Back		X
Mast tilt - 6° Forward / 6° Back		X
Mast tilt - 6° Forward / 5° Back	X	
Mast tilt - 6° Forward / 4° Back		X

## ➤ STANDARD AND OPTIONAL EQUIPMENT

<b>LIFT (continued)</b>	<b>STD</b>	<b>OPT</b>			
Mast tilt - 10° Forward / 5° Back		X			X
Tilt Speed Restrictor - 1 degree per second (Mechanical)		X			X
Tilt Speed Restrictor - 1 degree per second (Electronically Adjusted)		X			X
Hydraulic Accumulator		X			X
Auxiliary Hydraulic System Cooler		X			X
High Temperature Hydraulic Fluid		X			X
<b>HANDLING</b>	<b>STD</b>	<b>OPT</b>			
Hydraulic controls, designed for clamping applications		X			X
Hydraulic Control with Return to Set Tilt		X			X
3 Hydraulic Functions (1 Auxiliary)	X				
4 Hydraulic Functions (2 Auxiliary)		X			X
5 Hydraulic Functions (3 Auxiliary)		X			X
Without Hose Group	X				
3 Functions Hose Group (1 Auxiliary)		X			X
4 Functions Hose Group (2 Auxiliary)		X			X
Attachment Extension Tubes - 1 Pair		X			X
Attachment Extension Tubes - 2 Pair		X			X
1070mm Hook Type Carriage (Class 2) - H2.0-2.5FT	X				
1070mm Carriage (Class 3) - H3.0-3.5FT	X				
1070mm Integral Sideshift Carriage		X			X
1070mm Integral Sideshift Carriage with Fork Positioner		X			X
1220mm Carriage		X			X
1220mm Integral Sideshift Carriage		X			X
MEYER Double Pallet Handler : 6-5204G a (EURO PALLETS)		X			X
MEYER Double Pallet Handler : 21PH22B-56SG-2A (CHEP/UK PALLETS)		X			X
MEYER Double Pallet Handler : 6-5206G a (EURO PALLETS)		X			X
MEYER Double Pallet Handler : 21PH26B-56SG-3A (CHEP/UK PALLETS)		X			X
Bolzoni Auramo Rotator RC 20 10A		X			X
Bolzoni Auramo Rotator RC 25 10A		X			X
Bolzoni Auramo Rotator RC 25 107A		X			X
Bolzoni Auramo Rotator RC 35 11B		X			X
1220mm High load backrest	X				
1000mm x 100mm x 40mm Hook Type Standard Taper Forks (Class 2) - H2.0-2.5FT	X				
1000mm x 120mm x 50mm Forks (Class 3) - H3.0-3.5FT	X				
1200mm x 100mm x 40mm Hook Type Standard Taper Forks - Class 2		X			X
Other various fork sizes		X			X
<b>CAB</b>	<b>STD</b>	<b>OPT</b>			
Full Steel Modular Cab		X			X
Steel Modular Cab with PVC Doors		X			X
Top Sun Blind for Cab Trucks		X			X
Front Sun Blind for Cab Trucks		X			X
Auxiliary Equipment Mounting Bar		X			X
Air conditioning		X			X
PVC Top Screen		X			X
Glass Top Screen		X			X
Laminated Glass Front and Rear Screen		X			X
Laminated Glass Front and Rear Screen and Fixed Door Windows		X			X
Laminated Glass Front Screen		X			X
Solid Top Screen + Front Screen with Washer/Wiper		X			X
Solid Top Screen + Front & Rear Screen with Washer/Wipers		X			X
Solid Top Screen + Front & Rear Screen with Washer/Wipers + PVC Doors		X			X
<b>ERGONOMICS</b>	<b>STD</b>	<b>OPT</b>			
2160mm High Overhead Guard - H2.0-2.5FT	X				
2185mm Overhead Guard - H3.0-3.5FT	X				
2185mm Drive In Racking Overhead Guard (Grid Style)		X			X
Raised Operator Compartment					X
Load Weight Display					X
Operator Password			X		
Operator Pre-Shift Electronic Checklist					X
Panoramic Mirror					X
Dual Mirrors Side View					X
Rear Drive Handle with Horn Button			X		
Semi Suspension Vinyl					X
Semi Suspension Cloth					X
Full Suspension Vinyl Seat					X
Full Suspension Cloth					X
Full Suspension Swivel Vinyl					X
Full Suspension Swivel Cloth					X
Air Ride Full Suspension Vinyl			X		
Air Ride Full Suspension Cloth					X
Heated Full Suspension Cloth					X
High Backrest Lumbar Support Vinyl					X
High Backrest Lumbar Support Cloth					X
Grammer Air Suspension Vinyl					X
Grammer Air Suspension Cloth					X
Air-Suspension Seat FLA Vinyl					X
Air-Suspension Seat FLA Cloth					X
Standard Seat Belt			X		
Hi-Vis Red Seat Belt					X
Hi-Vis Red Seat Belt with Sequential Interlock					X
Manual lever hydraulic controls			X		
TouchPoint™, mini lever hydraulic controls					X
Joystick hydraulic controls					X
Steering wheel with spinner knob					X
Directional Lever			X		
Monotrol					X
Directional Control Switch (Integrated in Arm rest)					X
Dash Mounted 12V Auxiliary Power Outlet					X
<b>VISIBILITY</b>	<b>STD</b>	<b>OPT</b>			
Work Light Package - 2 Front and 1 Rear LED Work Lights with Side, Stop, Tail, Indicator & Reverse Lights - H3.0-3.5FT			X		
Work Light Package - 2 Front and 1 Rear Halogen Work Lights with Side, Stop, Tail, Indicator & Reverse Lights - H2.0-2.5FT					X
Automatic Lights					X
Mast Mounted LED Lights					X
LED Work Light Protection					X
<b>OPERATION</b>	<b>STD</b>	<b>OPT</b>			
Impact Monitor with 30 Second Shutdown					X
Impact Monitor with Immediate Shutdown					X
System Monitoring Package			X		
Premium Monitoring Package					X
Vented Hood					X
Non-Vented Hood			X		
Belly Pan					X
Full underbody mesh belly pan					X
Visible alarm – Amber strobe light					X
Audible alarm – Reverse direction activated					X
Audible alarm – Reverse direction white noise					X
Audible alarm – Motion Alarm					X
Hazard Warning Lights - Switch Activated					X
Pedestrian Awareness Light (P.A.L.)					X
Front Pedestrian Awareness Light (P.A.L.)					X
Red Line (Side) Pedestrian Awareness Lights (P.A.L.)					X
Seat Switch Activated Engine, Lights and Display Shutdown System					X
Signal Activated Engine Shutdown System					X
Battery Disconnect					X

# STANDARD AND OPTIONAL EQUIPMENT



Key switch start	X	
Push Button with Operator Password		X
Single Pedal Inch Brake	X	
Hyster Tracker wireless asset management system		X
Hyster Tracker wireless asset management - Access		X
Hyster Tracker wireless asset management - Verification		X
Hyster Tracker wireless asset management - Monitoring		X
4 Point Lifting Eyes		X
<b>APPEARANCE</b>	<b>STD</b>	<b>OPT</b>
Hyster yellow paint base truck	x	
Special paint base truck		x
Special Paint for Truck and Cab		x

<b>PACKAGES</b>	<b>STD</b>	<b>OPT</b>
Cool Truck Package which includes High Air Intake with Precleaner, Exhaust Wraps, Powertain Protection System with Engine Shutdown, Premium Monitoring, Hydraulic Accumulator, High Temperature Hydraulic Fluid and Vented Hood		X
Paper Applications Kit		X
<b>SUPPLEMENTAL</b>	<b>STD</b>	<b>OPT</b>
Literature package	X	
Warranty: 24 Months / 4,000 Hours manufacturer's warranty	X	
Warranty: 36 Months / 6,000 Hours extended warranty		X

*Please refer to the Price List for full option configurations. Other options available through Special Products Engineering Department (SPED). Contact Hyster for details.*

# PRODUCT FEATURES



**As the first choice materials handling partner for the world's demanding operations, Hyster delivers value added solutions and dependable products through the strongest distribution network in the industry.**

The Fortens™ range offers a highly configurable truck from the dependable Fortens with a Powershift transmission to the extremely productive Fortens™ Advance+ truck which combines the unique and patented DuraMatch™ transmission with quiet and efficient Kubota engines. Quiet roomy cabs with air suspension seats, TouchPoint™ mini levers and a host of operator support features make Fortens the right choice to keep operators comfortable and productive over long shifts, its low fuel consumption, reliability and serviceability make it the right business choice. **Hyster Fortens™ - the solution to your application needs.**

## Protected Powertrain

The durable powertrain is computer controlled, protected and managed by the Pacesetter™ VSM electronic management system, featuring a CANbus communications network. The VSM ensures maximum uptime and dependability, as it allows for fast and accurate trouble-shooting, facilitates first-time fixes and can help to minimise costly "parts swapping".

## DuraMatch™ - The World's Most Advanced Powershift Transmission

The electronically controlled DuraMatch™ transmissions provide smoother directional changes to eliminate shock loading and extend the life of the clutch packs. These transmissions offer unique and patented features, managed by the VSM, such as the Auto Deceleration System, which contributes to extending brake and tyre life and so reduces the frequency of required changes and ultimately your overall operating costs.

## Autospeed Hydraulics

If the Autospeed Hydraulics option is selected when lifting a load the engine speed is automatically increased to provide full hydraulic power. The Pacesetter VSM maintains the current travel speed (or prevents travel) until the operator steps on the accelerator.

No operator inching is required and productivity and efficiency is increased by simplifying operator actions.

## Hassle-Free Electrical & Hydraulic Systems

The CANbus system ensures reliable operation of the truck, providing reduced wiring complexity and keeps them away from heat sources. Nonmechanical, Hall-Effect sensors and switches are environmentally sealed to IP66 standards to keep out water and debris (allowing the truck to be pressure washable) and are designed to outlast the life of the truck. The Hyster Fortens™ is equipped with hassle-free hydraulic systems, featuring Leak-free O-ring face seal fittings which reduce leaks for enhanced reliability.

## More Dependable in Demanding Applications

A choice of aluminium core radiators and a superior counterweight tunnel design coupled with a "pusher" type fan provide the industry's best cooling, ensuring that the truck operates at lower temperatures, which results in increased component life and limits the risk of overheating, particularly in heavy duty applications. In addition, the long term durability of the truck is enhanced by the available powertrain protection systems.

## High-performance In-tank Hydraulic Filter

Superior filtration system increases life span of all hydraulic components such as hoses and pumps.

## Significant savings in ownership costs per lift truck – each year

The Hyster Fortens™ has been designed to help you lower your ownership costs in all types of applications, through offering a wide range of engine and transmission options to suit the application need. In head-to-head comparisons with the leading competitors' comparable trucks, the Fortens™ range was shown to offer significant annual savings in operating consumable costs, such as fuel efficiency, longer tyre life, reduced brake wear and decreased service time, which results in the lowest cost per load moved.

# 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

 [www.hyster.eu](http://www.hyster.eu)  [infoeurope@hyster.com](mailto:infoeurope@hyster.com)  [/HysterEurope](https://www.facebook.com/HysterEurope)  [@HysterEurope](https://twitter.com/HysterEurope)  [/HysterEurope](https://www.youtube.com/HysterEurope)  [www.hyster-bigtrucks.com](http://www.hyster-bigtrucks.com)



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