



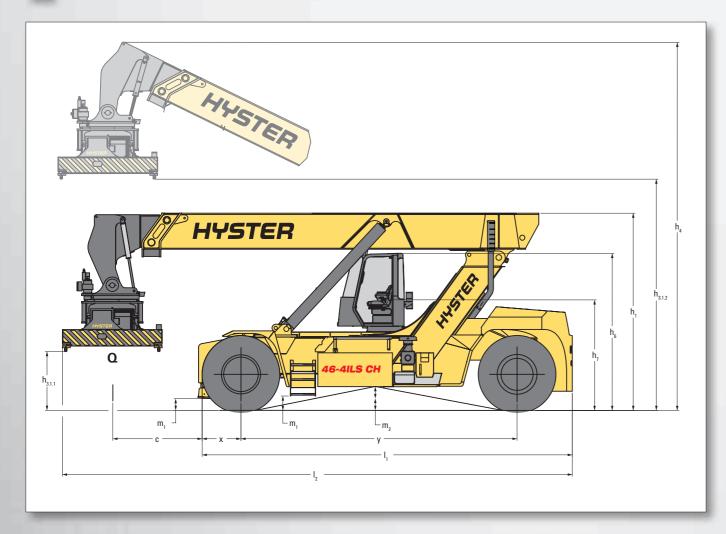




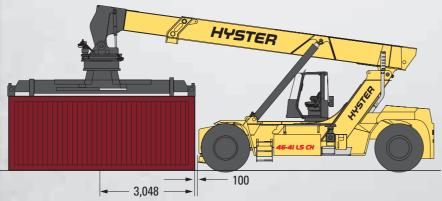
# RS46 SERIES TECHNICAL GUIDE

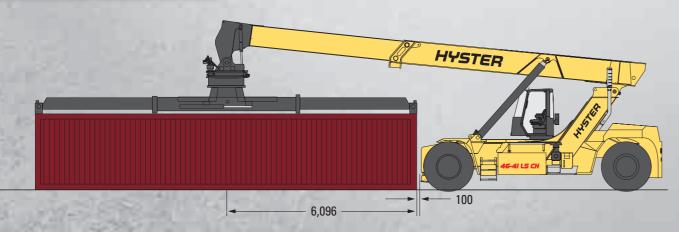
## > TRUCK DIMENSIONS

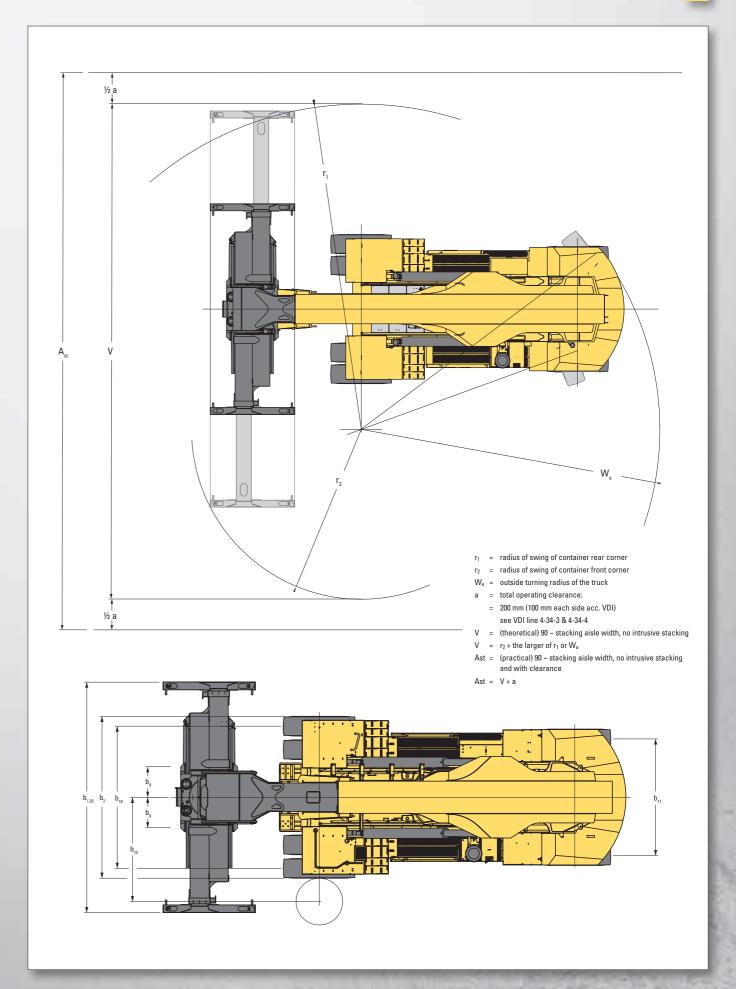
## TRUCK DIMENSIONS <



MAXIMUM CAPACITY PICKING LENGTHWISE											
MODEL	20′	40′									
MODEL	kg	kg									
RS46-29	32,000	14,000									
RS46-33	35,000	16,000									
RS46-36	42,000	20,000									
RS46-41S	44,900	26,300									
RS46-41L	44,900	26,300									
RS46-41LS	44,900	30,300									
RS46-41XLS	44,900	30,300									





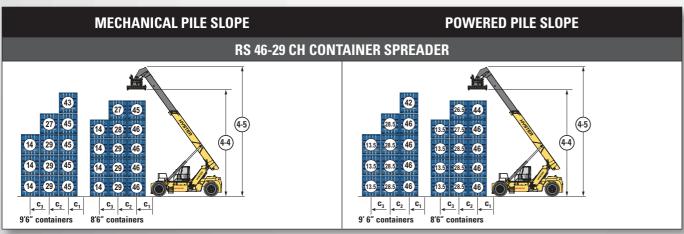


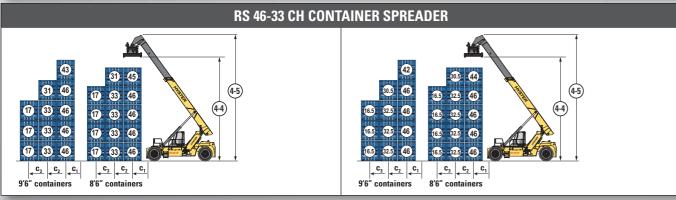
#### > RATED CAPACITIES AND STACKING HEIGHTS

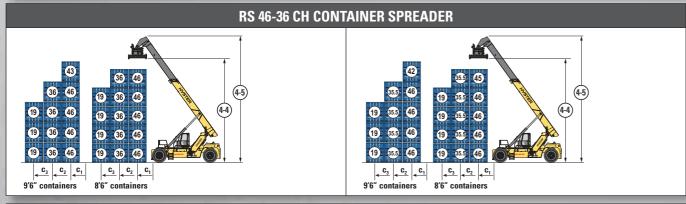
(shown in 1,000 kg.)

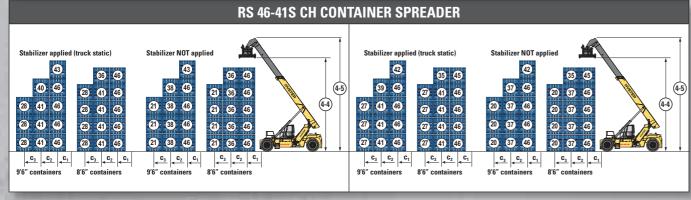
#### RATED CAPACITIES AND STACKING HEIGHTS

(shown in 1,000 kg.)

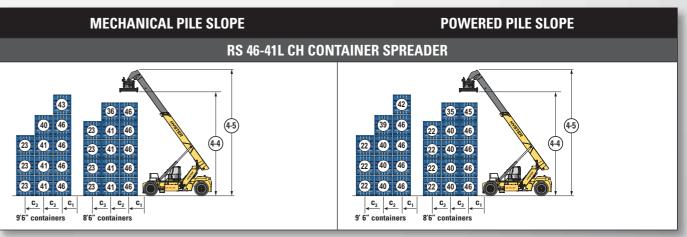


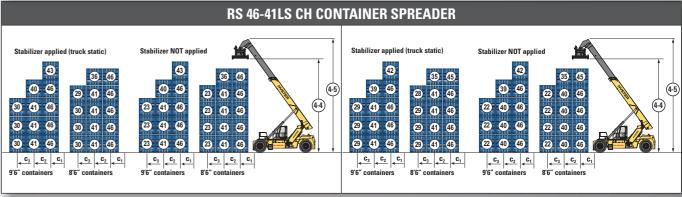


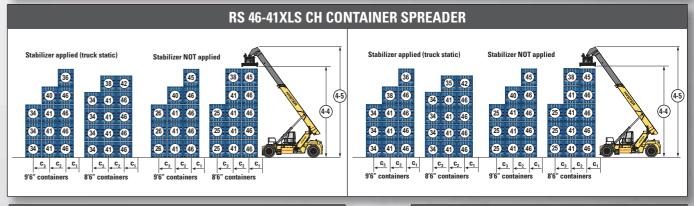


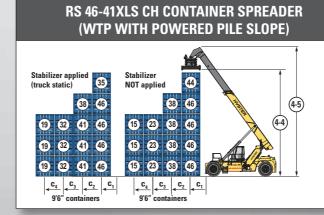


ı	C1	U²2	(Fo	
	1865mm	3815mm	6315mm	Note: All load centres c1, c2, c3 are taken from the front face of the (front) tyre.









(MECHANICAL PILE SLOPE)
Stabilizer applied (truck static)  HVSTER
33 46
r <sub>2</sub> r <sub>1</sub>

**HANDLING IN SECOND RAIL** 

C1 C2		C3	C4		
1865mm	3815mm	6315mm	8750mm		

Note: All load centres c1, c2, c3, c4 are taken from the front face of the (front) tyres.

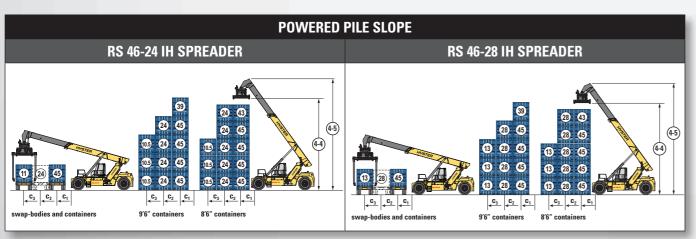
r1	r2
1865mm	6400mm

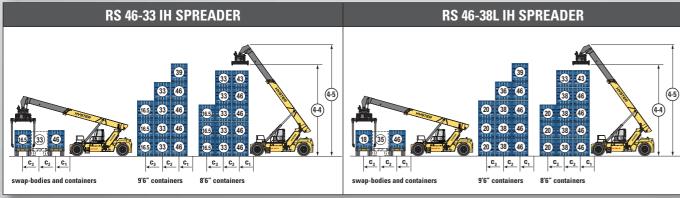
#### RATED CAPACITIES AND STACKING HEIGHTS

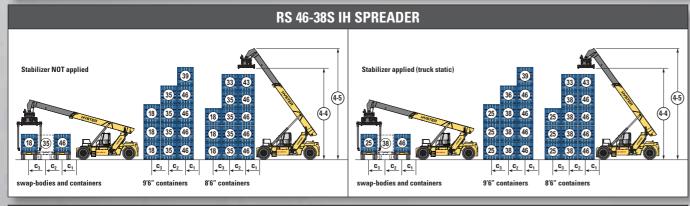
(shown in 1,000 kg.)

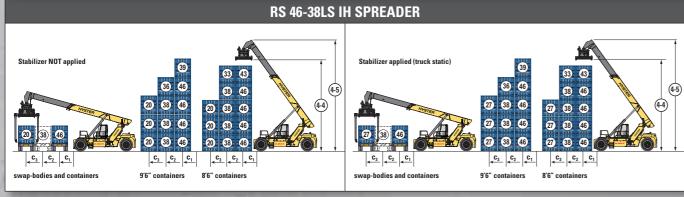
#### RATED CAPACITIES AND STACKING HEIGHTS <

(shown in 1,000 kg.)



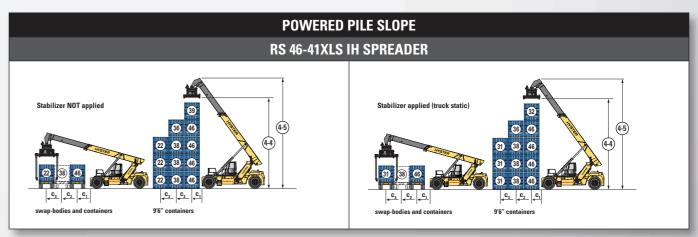




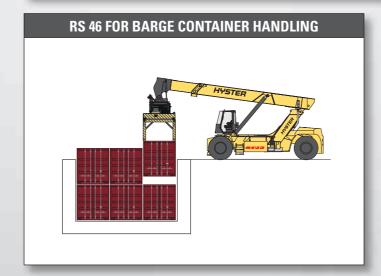


i	<b>C</b> 1	C2	<b>C</b> 3
1	1865mm	3815mm	6315mm

Note: All load centres c1, c2, c3 are taken from the front face of the (front) tyres.



RS 46 FOR STEEL LOAD HANDLING									
RS 46 FOR COIL HANDLING	RS 46 FOR SLAB HANDLING								
HVSTER HVSTER	HVSTER								



C1	C <sup>2</sup>	C3
1865mm	3815mm	6315mm

Note: All load centres c1, c2, c3 are taken from the front face of the (front) tyres.

## **RS 46-29, RS 46-33, RS 46-36, RS 46-41S CONTAINER HANDLERS**

		1-1	Manufacturer			нус	TER	нус	TER	нуѕ	TER	нус	TER
ı	ŀ	1-2	Model designation			RS 46-		RS 46-		RS 46-36 CH		RS 46-41S CH	
	ŀ	1-3	Drive			Die			sel	Diesel		Diesel	
	i	1-4	Operator type			Seated		Seated		Seated		Seated	
1	ŀ	1-5-1	Load capacity at load centre distance c <sub>1</sub> without/with stabiliser	$Q_1$	kg	46,000	n/a	46,000	n/a	46,000	n/a	46,000	46,000
1	ا بـ	1-5-2	Load capacity at load centre distance c <sub>2</sub> without/with stabiliser	$\Omega_2$	kg	29,000	n/a	33,000	n/a	36,000	n/a	38,000	41,000
1	GENERAL	1-5-3	Load capacity at load centre distance c <sub>3</sub> without/with stabiliser	$\Omega_3$	kg	14,000	n/a	17,000	n/a	19,000	n/a	21,000	28,000
1	흥	1-6-1	Load centre distance c <sub>1</sub> (1)	C <sub>1</sub>	mm	1,8	65	1,8	865	1,8	865	1,8	865
1	Ī	1-6-2	Load centre distance c <sub>2</sub> (1)	C <sub>2</sub>	mm	3,8	15	3,8	315	3,8	315	3,8	315
	Ì	1-6-3	Load centre distance c <sub>3</sub> (1)	C3	mm	6,3	115	6,3	315	6,3	315	6,3	315
	Ī	1-8	Load distance, ctr of drive axle to face of front Tyres/front of stabiliser	х	mm	835	n/a	835	n/a	930	n/a	930	1030
1		1-9	Wheelbase	у	mm	6,2	.00	6,2	200	6,2	200	6,2	200
1	Ī	1-10	Stacking height at first row (number x container height)		#	5 x 9	9′ 6″	5 x 9	9′ 6″	5 x 9	9′ 6″	5 x 9	9′ 6″
	╘	2-1	Service weight		kg	68,	500	72,	200	79,	300	83,	600
П	WEIGHT	2-2-1	Axle loading $% \left( 1\right) =\left( 1\right) +\left( 1\right$		kg	101,350	13,150	101,100	17,100	103,200	22,100	105,400	24,200
	>	2-3-1	Axle loading $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$		kg	35,300	33,200	35,000	37,200	36,500	42,800	38,700	44,900
н		3-1	Tyre type			Pneui	matic	Pneu	matic	Pneu	matic	Pneu	matic
1	Į	3-2	Tyre size, front			18.00-25 40PR		18.00-2	5 40PR	18.00-3	3 36PR	18.00-33 36PR	
1	WHEELS	3-3	Tyre size, rear			18.00-25 40PR		18.00-25 40PR		18.00-33 36PR		18.00-33 36PR	
1	ੋਂ	3-5	Wheels, number front / rear (X = driven wheels)			x4 / 2		x4/2		x4 / 2		x4/2	
н	ļ	3-6	Tread, front	b <sub>10</sub>	mm	3,7	03	3,7	703	3,7	'03	3,7	03
ш	4	3-7	Tread, rear	b <sub>11</sub>	mm	3,0	160	3,0	060	3,0	160	3,0	160
1		4-1	Boom angle minimum / maximum		(°)	0/	59	0 / 59		0 / 59		0 / 59	
1	ļ	4-2	Height of boom lowered	h <sub>1</sub>	mm	4,700		4,700		4,795		4,795	
1	ļ	4-4-1	Lift height at load centre c <sub>1</sub> (2)	h <sub>3.1</sub>	mm	15,260		15,260		15,	355	15,	355
ı	-	4-4-2	Lift height at load centre c <sub>2</sub> (2)	h <sub>3.2</sub>	mm	13,850			850		945		945
1	-	4-5	Height, boom extended	h <sub>4</sub>	mm	18,110		18,110		18,205			205
н	-	4-7	Height of overhead guard (cabin)	h <sub>6</sub>	mm	3,7		3,720			315		315
1	}	4-8	Seat height to SIP (3)	h <sub>7</sub>	mm	2,5		2,555		2,650		2,650	
1	ွှ	4-15	Height under Twistlock - lowered (2)	h <sub>13</sub>	mm	1,3		1,345					140
н	MENSIONS	4-19	Overall length	l <sub>1</sub>	mm	8,3		8,360		8,650		-	750
1		4-20 4-21-2	Overall length including boom retracted  Overall width across all of truck	l <sub>2</sub>	mm	11,8		11,873		12,			073
П	ੂ	4-21-3	Overall width across spreader 20'	b <sub>2</sub>	mm	4,2 6,1		4,2 6,1		4,2	00	4,2	00
ш	ŀ	4-21-4	Overall width across spreader 40'	b <sub>1.20</sub>	mm	12,2			200		200	12,	
п	ŀ	4-31	Ground clearance, lowest point	m <sub>1</sub>	mm	28		-	35		)4		50
н	}	4-32	Ground clearance, centre or wheelbase	m <sub>2</sub>	mm	43			37		32		32
н	ŀ	4-34-3	Aisle width: 20' container (5) (6)	Ast <sub>20</sub>	mm	12,0			639		330	13,	
н	-	4-34-4	Aisle width: 40' container (5) (6)	Ast <sub>40</sub>	mm	14,4			403		620		620
П	ŀ	4-35	Outside turning radius	Wa	mm	8,4		8,4			200		200
		4-36	Internal turning radius	b <sub>13</sub>	mm	1,5			1,500 2,000			-	100
	병	5-1	Travel speed with / without load		km/h	20	22	20			23	21	23
	A N	5-2	Lifting speed with / without load		m/s	0.28	0.48	0.28	0.48	0.28	0.48	0.28	0.48
	PERFORMANCE	5-3	Lowering speed with / without load		m/s	0.46	0.45	0.46	0.45	0.46	0.45	0.46	0.45
	뿝	5-7	Gradeability - 1.6 km/h, with / without load (7)		%	26	35	25	35	23	33	21	32

<sup>(1)</sup> From face of front tyres. Deduct 100 mm for loadcentre from front side of Stabilizer when applicable

## RS 46-41L, RS 46-41LS, RS46-41XLS CONTAINER HANDLERS

<

	1-1	Manufacturer			пло	TER	пло	TER	HYS	TED
	1-2									
	1-3	Model designation			RS 46-41L CH Diesel		RS 46-41LS CH Diesel		RS 46-41XLS CH Diesel	
	1-4	Drive								ted
	1-5-1	Operator type	0	lea.	Seated		Seated		46,000	
	1-5-2	Load capacity at load centre distance c <sub>1</sub> without/with stabiliser	Q <sub>1</sub>	kg	46,000	n/a	46,000 41,000	46,000 41,000	41,000	46,000
ERAL	1-5-3	Load capacity at load centre distance c <sub>2</sub> without/with stabiliser	Q <sub>2</sub>	kg	41,000	n/a n/a	,		26,000	41,000
GENERAL	1-6-1	Load capacity at load centre distance c <sub>3</sub> without/with stabiliser  Load centre distance c <sub>1</sub> (1)	Ω <sub>3</sub>	kg	23,000		23,000 30,000 1,865			
	1-6-2	Load centre distance c; (1)	C <sub>1</sub>	mm				315	1,865 3,815	
	1-6-3	Load centre distance c <sub>3</sub> (1)	C <sub>3</sub>	mm	3,815 6,315		6,3		-	15
	1-8	Load distance, ctr of drive axle to face of front Tyres/front of stabiliser	X	mm	930	n/a	930	1030	930	1030
	1-9	Wheelbase	у	mm	6,7		6,7		7,5	
	1-10	Stacking height at first row (number x container height)	7	#	5 x 9		5 x 9			3′ 6″
	2-1	Service weight		kg	82,		84,		84,	
WEIGHT	2-2-1	Axle loading with load, front / rear at c <sub>1</sub>		kg	103,400	25,200	105,600	25,000	103,350	27,300
Š	2-3-1	Axle loading without load, front / rear at c <sub>1</sub>		kg	38,200	44,400	40,400	44,200	41,300	43,350
	3-1	Tyre type		3	Pneu	-		matic	Pneu	
	3-2	Tyre size, front			18.00-3	3 36PR	18.00-33 36PR		18.00-3	3 36PR
ELS	3-3	Tyre size, rear			18.00-3	3 36PR	18.00-33 36PR		18.00-33 36PR	
WHEELS	3-5	Wheels, number front / rear (X = driven wheels)			x4/2		x4/2		x4 / 2	
	3-6	Tread, front	b <sub>10</sub>	mm	3,703		3,703		3,703	
	3-7	Tread, rear	b <sub>11</sub>	mm	3,0	160	3,0	060	3,0	60
	4-1	Boom angle minimum / maximum		(°)	0 /	59	0 /	59	3/	58
	4-2	Height of boom lowered	h <sub>1</sub>	mm	4,7	95	4,795		5,4	57
	4-4-1	Lift height at load centre c <sub>1</sub> (2)	h <sub>3.1</sub>	mm	15,355		15,355		15,	225
	4-4-2	Lift height at load centre c <sub>2</sub> (2)	h <sub>3.2</sub>	mm	13,	13,945		945	14,	158
	4-5	Height, boom extended	h <sub>4</sub>	mm	18,205		18,205		18,	420
	4-7	Height of overhead guard (cabin)	h <sub>6</sub>	mm	3,815		3,815		3,815	
	4-8	Seat height to SIP (3)	h <sub>7</sub>	mm	2,650		2,650		2,650	
	4-15	Height under Twistlock - lowered (2)	h <sub>13</sub>	mm	1,4	140	1,440		1,835	
ONS	4-19	Overall length	l <sub>1</sub>	mm	9,1	50	9,250		10,050	
IMENSIONS	4-20	Overall length including boom retracted	l <sub>2</sub>	mm	12,	573	12,	573	13,613	
	4-21-2	Overall width across all of truck	b <sub>2</sub>	mm	4,2	200	4,2	200	4,2	:00
	4-21-3	Overall width across spreader 20'	b <sub>1.20</sub>	mm	6,1	00	6,1	00	6,100	
	4-21-4	Overall width across spreader 40'	b <sub>1.40</sub>	mm	12,			200		200
	4-31	Ground clearance, lowest point	m <sub>1</sub>	mm	30			50		50
	4-32	Ground clearance, centre or wheelbase	m <sub>2</sub>	mm		32		32		32
	4-34-3	Aisle width: 20' container (5) (6)	Ast <sub>20</sub>	mm	13,			430	14,	
	4-34-4	Aisle width: 40' container (5) (6)	Ast <sub>40</sub>	mm	14,		14,		15,	
	4-35	Outside turning radius	W <sub>a</sub>	mm	9,3			800	10,	
	4-36	Internal turning radius	b <sub>13</sub>	mm		2,400		100	2,975	
PERFORMANCE	5-1	Travel speed with / without load		km/h	21	23	21	23	21	23
RMA	5-2	Lifting speed with / without load		m/s	0.28	0.48	0.28	0.48	0.28	0.48
ERF	5-3	Lowering speed with / without load		m/s	0.46	0.45	0.46	0.45	0.46	0.45
	5-7	Gradeability - 1.6 km/h, with / without load (7)		%	21	32	21	32	21	32

<sup>(1)</sup> From face of front tyres. Deduct 100 mm for loadcentre from front side of Stabilizer when applicable

<sup>(2)</sup> For CH models only: With optional P(owered) P(ile) S(lope) function: deduct 310 mm

<sup>(3)</sup> Full suspension seat in depressed position

<sup>(5)</sup> These data are with the container carried 500 mm in front of the wheels (loadcenter 1720 mm)

<sup>(6)</sup> Stacking aisle width 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 truck.

<sup>(7)</sup> Gradeability figures are provided for comparison of tractive performance, but are not intended to endorse the operation of vehicle on the stated inclines.

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<sup>(7)</sup> Gradeability figures are provided for comparison of tractive performance, but are not intended to endorse the operation of vehicle on the stated inclines.

## **RS** 46-24, RS 46-28, RS 46-33, RS 46-38L INTERMODAL HANDLERS

			ī									
	1-1	Manufacturer			HYS			TER		TER	HYS	
ı	1-2	Model designation			RS 46-		RS 46		RS 46-33 IH		RS 46-38L IH	
	1-3	Drive				Diesel		sel	Diesel		Diesel	
	1-4	Operator type			Sea	Seated		ted	Sea	ted	Seated	
	1-5-1	Load capacity at load centre distance c <sub>1</sub> without/with stabiliser	Q <sub>1</sub>	kg	45,000	n/a	45,000	n/a	46,000	n/a	46,000	n/a
¥	1-5-2	Load capacity at load centre distance c <sub>2</sub> without/with stabiliser	Q <sub>2</sub>	kg	24,000	n/a	28,000	n/a	33,000	n/a	38,000	n/a
GENERAL	1-5-3	Load capacity at load centre distance c <sub>3</sub> without/with stabiliser	<b>Q</b> 3	kg	11,000	n/a	13,000	n/a	17,000	n/a	20,000	n/a
ت ا	1-6-1	Load centre distance c <sub>1</sub> (1)	C <sub>1</sub>	mm	1,8	65	1,8	65	1,8	65	1,8	65
	1-6-2	Load centre distance c <sub>2</sub> (1)	C <sub>2</sub>	mm	3,8	15	3,8	15	3,8	15	3,8	15
	1-6-3	Load centre distance c <sub>3</sub> (1)	C <sub>3</sub>	mm	6,3	15	6,3	15	6,3	15	6,3	15
	1-8	Load distance, ctr of drive axle to face of front Tyres/front of stabiliser	х	mm	835	n/a	835	n/a	930	n/a	930	n/a
	1-9	Wheelbase	У	mm	6,2	00	6,2	200	6,2	00	6,7	00
	1-10	Stacking height at first row (number x container height)		#	5 x 9	0′ 6″	5 x 9	9′ 6″	5 x 9	9′ 6″	5 x 9	9′ 6″
Ē	2-1	Service weight		kg	72,4	100	76,	100	83,	200	86,	500
WEIGHT	2-2-1	Axle loading with load, front / rear at c <sub>1</sub>		kg	105,400	12,000	105,200	15,900	108,800	20,400	108,800	23,700
	2-3-1	Axle loading without load, front / rear at c <sub>1</sub>		kg	40,800	31,600	40,500	35,600	42,100	41,100	43,600	42,900
	3-1	Tyre type			Pneur	matic	Pneu	matic	Pneu	matic	Pneu	matic
	3-2	Tyre size, front			18.00-2	3.00-25 40PR 18.00-25 40PR		5 40PR	18.00-3		18.00-3	3 36PR
WHEELS	3-3	Tyre size, rear			18.00-2	18.00-25 40PR		18.00-25 40PR		3 36PR	18.00-33 36PR	
Š		Wheels, number front / rear (X = driven wheels)			x4/2		x4/2		x4/2		x4/2	
	3-6	Tread, front	b <sub>10</sub>	mm	3,703		3,703		3,703		3,703	
	3-7	Tread, rear	b <sub>11</sub>	mm	3,0		3,0		3,0		3,0	
	4-1	Boom angle minimum / maximum		(°)	0/		0 / 59		0 / 59		0 / 59	
	4-2	Height of boom lowered	h <sub>1</sub>	mm		4,700		00	4,795		4,795	
	4-4-1	Lift height at load centre c <sub>1</sub> (2)	h <sub>3.1</sub>	mm	14,780		14,780		14,		-	875
	4-4-2	Lift height at load centre c <sub>2</sub> (2)	h <sub>3.2</sub>	mm	13,3		13,375		-			470
	4-5	Height, boom extended	h <sub>4</sub>	mm	18,1		18,110		18,205		-	205
	4-7	Height of overhead guard (cabin)	h <sub>6</sub>	mm	3,7		3,720			15	3,8	
	4-8	Seat height to SIP (3)	h <sub>7</sub>	mm	2,5		2,555		2,650		2,650	
S	4-15	Height under Twistlock - lowered (2)	h <sub>13</sub>	mm	88		885		980		98	
Sion	4-19	Overall length	l <sub>1</sub>	mm	8,3		-	8,360 8,650			9,1	
MENSIONS	4-20	Overall length including boom retracted	l <sub>2</sub>	mm	11,8			11,873 12,073			12,	
▋ੂੂ		Overall width across all of truck	b <sub>2</sub>	mm	4,2		4,200		4,2		4,2	
	4-21-3	Overall width across spreader 20'	b <sub>1.20</sub>	mm	6,1		6,1		6,1		6,1	
	4-21-4 4-31	Overall width across spreader 40'  Ground clearance, lowest point	b <sub>1.40</sub>	mm	12,2		28	200	12,3		12,2	
	4-31	Ground clearance, centre or wheelbase	m <sub>1</sub>	mm	43			37	53			32
	4-32	Aisle width: 20' container (5) (6)	M <sub>2</sub>	mm	12,6			639	13,			430
	4-34-4	Aisle width: 40' container (5) (6)	Ast <sub>20</sub>	mm	14,4			403				620
1	4-35	Outside turning radius	W <sub>a</sub>		8,4		8,4		14,620		9,3	
	4-35	Internal turning radius	b <sub>13</sub>	mm	1,5		1,5		9,200		2,4	
ш		Travel speed with / without load	n13	km/h	20	22	20	22	2,000		21	23
ANC	5-2	Lifting speed with / without load		m/s	0.27	0.47	0.27	0.47	0.27	0.47	0.27	0.47
PERFORMANCE	5-3	Lowering speed with / without load		m/s	0.46	0.45	0.46	0.45	0.46	0.45	0.46	0.45
PER	5-7	Gradeability - 1.6 km/h, with / without load (7)		%	26	35	25	35	23	33	21	32
					20		20	- 00			- 1	02

<sup>(1)</sup> From face of front tyres. Deduct 100 mm for loadcentre from front side of Stabilizer when applicable

## RS 46-38S, RS 38LS, RS 46-41XLS INTERMODAL HANDLERS

<	

	11	Manufactures			HYS	TED	LIVE	TED	LIVE	TED	
	1-1	Manufacturer						TER	HYS		
	1-2	Model designation			RS 46-		RS 46-38LS IH  Diesel		RS 46-41XLS IH Diesel		
	1-3 1-4	Drive				Diesel Seated		Seated			
	1-5-1	Operator type	0	lea.		46,000 46,000		46,000 46,000		16 000	
	1-5-2	Load capacity at load centre distance c <sub>1</sub> without/with stabiliser	Q <sub>1</sub>	kg		,	,		46,000	46,000	
GENERAL	1-5-2	Load capacity at load centre distance c <sub>2</sub> without/with stabiliser	Q <sub>2</sub>	kg	35,000 18,000	38,000	38,000 20,000	38,000 27,000	38,000 22,000	38,000 31,000	
GEN	1-6-1	Load capacity at load centre distance c <sub>3</sub> without/with stabiliser	Q <sub>3</sub>	kg	1,8	25,000	·				
	1-6-2	Load centre distance c <sub>1</sub> (1)  Load centre distance c <sub>2</sub> (1)	C1	mm				365	1,8		
	1-6-3	Load centre distance c <sub>3</sub> (1)	C <sub>2</sub>	mm	3,8		3,815 6,315		3,815 6,315		
	1-8	Load distance, ctr of drive axle to face of front Tyres/front of stabiliser	C <sub>3</sub>	mm			1030	930	1030		
	1-9	Wheelbase	у	mm	6,200		6,700				
	1-10	Stacking height at first row (number x container height)	У	#	5 x 9′ 6″		5 x 9′ 6″		7,500 5 x 9′ 6″		
	2-1	Service weight		kg	87,500			500	88,		
WEIGHT	2-2-1	Axle loading with load, front / rear at c <sub>1</sub>		kg	111,000	22,500	111,000	23,500	110,055	24,488	
×	2-3-1	Axle loading without load, front / rear at c1		kg	44,200	43,300	45,800	42,700	46,900	41,600	
	3-1	Tyre type		Kg	Pneumatic		Pneumatic		Pneumatic		
	3-2	Tyre size, front			18.00-33 36PR		18.00-33 36PR		18.00-33 36PR		
S	3-3	Tyre size, rear			18.00-33 36PR		18.00-33 36PR		18.00-33 36PR		
WHEELS	3-5	Wheels, number front / rear (X = driven wheels)			x4/2		x4/2		x4 / 2		
-	3-6	Tread, front	b <sub>10</sub>	mm	3,703		3,703		3,703		
	3-7	Tread, rear	b <sub>11</sub>	mm	3,060		3,060		3,060		
	4-1	Boom angle minimum / maximum		(°)	0 / 59		0 / 59		3 / 58		
	4-2	Height of boom lowered	h <sub>1</sub>	mm	4,795		4,795		5,4	.57	
	4-4-1	Lift height at load centre c <sub>1</sub> ( <b>2</b> )	h <sub>3.1</sub>	mm	14,875		14,	875	14,	765	
	4-4-2	Lift height at load centre c <sub>2</sub> ( <b>2</b> )	h <sub>3.2</sub>	mm	13,470		13,470		13,0	698	
	4-5	Height, boom extended	h <sub>4</sub>	mm	18,205		18,205		18,	420	
	4-7	Height of overhead guard (cabin)	h <sub>6</sub>	mm	3,815		3,815		3,8	15	
	4-8	Seat height to SIP (3)	h <sub>7</sub>	mm	2,650		2,650		2,6	50	
	4-15	Height under Twistlock - lowered (2)	h <sub>13</sub>	mm	98	30	980		1,835		
ONS	4-19	Overall length	I <sub>1</sub>	mm	8,7	8,750		9,250		10,050	
MENSIONS	4-20	Overall length including boom retracted	l <sub>2</sub>	mm	12,0	12,073		12,573		13,613	
冒	4-21-2	Overall width across all of truck	b <sub>2</sub>	mm	4,2	00	4,200		4,200		
	4-21-3	Overall width across spreader 20'	b <sub>1.20</sub>	mm	6,1	00	6,1	6,100		6,100	
	4-21-4	Overall width across spreader 40'	b <sub>1.40</sub>	mm	12,	200	12,200		12,200		
	4-31	Ground clearance, lowest point	m <sub>1</sub>	mm	25	50	250		250		
	4-32	Ground clearance, centre or wheelbase	m <sub>2</sub>	mm	53	32	532		53	32	
	4-34-3	Aisle width: 20' container (5) (6)	Ast <sub>20</sub>	mm	13,	330	13,430		14,780		
	4-34-4	Aisle width: 40' container (5) (6)	Ast <sub>40</sub>	mm	14,6	620	14,	620	15,	370	
	4-35	Outside turning radius	Wa	mm	9,2	000	9,3	800	10,0	650	
	4-36	Internal turning radius	b <sub>13</sub>	mm	2,0	00	2,4	100	2,9	75	
J J	5-1	Travel speed with / without load		km/h	21	23	21	23	21	23	
PERFORMANCE	5-2	Lifting speed with / without load		m/s	0.27	0.47	0.27	0.47	0.27	0.47	
RFO	5-3	Lowering speed with / without load		m/s	0.46	0.45	0.46	0.45	0.46	0.45	
Ľ	5-7	Gradeability - 1.6 km/h, with / without load (7)		%	21	32	21	32	21	32	

 $<sup>\</sup>textbf{(1)} \quad \text{From face of front tyres. Deduct 100 mm for loadcentre from front side of Stabilizer when applicable}$ 

<sup>(2)</sup> For CH models only: With optional P(owered) P(ile) S(lope) function: deduct 310 mm

<sup>(3)</sup> Full suspension seat in depressed position

<sup>(5)</sup> These data are with the container carried 500 mm in front of the wheels (loadcenter 1720 mm)

<sup>(6)</sup> Stacking aisle width 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 truck.

<sup>(7)</sup> Gradeability figures are provided for comparison of tractive performance, but are not intended to endorse the operation of vehicle on the stated inclines.

<sup>(2)</sup> For CH models only: With optional P(owered) P(ile) S(lope) function: deduct 310 mm

<sup>(3)</sup> Full suspension seat in depressed position

<sup>(5)</sup> These data are with the container carried 500 mm in front of the wheels (loadcenter 1720 mm)

<sup>(6)</sup> Stacking aisle width 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 truck.

<sup>(7)</sup> Gradeability figures are provided for comparison of tractive performance, but are not intended to endorse the operation of vehicle on the stated inclines.

## **POWERTRAINS**

1-1   Manufacturer   HYSTER   HYSTER    -2   Model designation   RS46 CH   RS46 IH    -3   Powertrain / drivetrain   Diesel   Diesel	뒺 1-1	Manufacturer	HYSTER	HYSTER
	별 1-2	Model designation	RS46 CH	RS46 IH
Diesel Diesel	물 1-3	Powertrain / drivetrain	Diesel	Diesel

	7-1	Engine manufacturer / model		Cummins / QSL9	Cummins / QSL9
	7-1a	EPA / CE Tier compliance		Tier 4 / Stage IV	Tier 4 / Stage IV
	7-2	Engine power output according to ISO 1585	kW	261	261
l	7-2-1	Engine power output - peak	kW	283	283
ENGINE	7-3	Rated speed	rpm	2,100	2,100
ä	7-3-1	Engine torque @rpm (1/min)	N-m	1,627 @ 1500	1,627 @ 1500
	7-4	Number of cylinders / displacement	# / cm <sup>3</sup>	6 / 8900	6 / 8900
		Turbocharger	Туре	Variable geometry, water cooled	Variable geometry, water cooled
	7-8	Alternator output	Amps	120	120
	7-10	Battery voltage, rated capacity	V / Ah	24 / 102	24 / 102

	8-1	Drive control / transmission	Type / #	Powershift Transmission	Powershift Transmission
	8-2	Transmission manufacturer / type	Type / #	Spicer Off-Highway / TE-32	Spicer Off-Highway / TE-32
١,	8-4	Transmission speeds forward / backward	#	4 / 4	4 / 4
	8-4 8-5 8-6	Coupling	Туре	Torque Converter	Torque Converter
ľ	8-6	Wheel drive / drive axle manufacturer / type	Type / #	Kessler D102	Kessler D102
	8-11	Service brake	Туре	Oil immersed (wet) disc	Oil immersed (wet) disc
	8-12	Parking brake	Туре	Spring applied, dry disc on drive axle	Spring applied, dry disc on drive axle

	9-1	Spreader manufacturer / type		Type / #	Elme / 817	Elme / 857
	9-1-1	Pile slope, mechanical without PPS		0	3	3
e:	9-1-2	Pile slope, mechanical with PPS		۰	1,5	1,5
٤	9-1-2 9-1-3 9-3	Pile slope, total with PPS		0	6	6
# #	9-3	Size of containers		feet (´)	ISO 20' - 40'	ISO 20' - 40'
~	9-4	Side shift	b <sub>8</sub>	mm	+800 / -800	+800 / -800
	9-6-1	Rotation angle, without override		0	+12 / -12	+12 / -12
	9-6-2	Rotation angle, with override		0	+185 / -95	+185 / -95

	10-1	Operating pressure for attachments		bar	140	140
	10-2	Oil volume for attachments		l/min	110	110
	10-3	Hydraulic oil tank, capacity		I	625	625
۱.,	10-4	Fuel tank capacity		1	830	830
MISC	10-4-1	DEF/AdBlue tank capacity		I	57	57
-	10-5	Steering design			Hydrostatic	Hydrostatic
	10-6	Number of steering rotation			6	6
	10-7	Sound pressure level at driver's seat (7)	Lpaz	dB(A)	75	75
	10-7-1	Sound power level during the workcycle	Lwaz	dB	109	109

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  $\mathsf{Hyster}^{\texttt{®}}$  truck.

- (1) From face of front tyres. Deduct 100 mm for loadcentre from front side of Stabilizer
- when applicable.

  (2) For CH models only: With optional P(owered) P(ile) S(lope) function: deduct 310 mm
- (3) Full suspension seat in depressed position.
   (5) These data are with the container carried 500 mm in front of the wheels (loadcenter
- (6) Stacking aisle width 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 truck.
- (7) Gradeability figures are provided for comparison of tractive performance, but are not intended to endorse the operation of vehicle on the stated inclines.
- (8) Add 2 dB(A) for option with additional cab fan.

All capacities are according to EN1459.

All specifications and capacities are valid for trucks equipped with a  $\mathsf{Hyster}^{\texttt{@}}$  container handling spreader for handling ISO container.

Care must be exercised when handling elevated loads. Operators must be trained and must read, understand and follow the instructions contained in

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.

CERTIFICATION: Hyster lift trucks meet the design and construction requirements of B56.1-1969, per OSHA Section 1910.178(a)(2), and also comply with the B56.1 revision in effect at time of manufacture. Certification of compliance with the applicable ANSI standards appears on the lift truck. Performance specifications are for a truck equipped as described under Standard Equipment on this Technical Guide. Performance specifications are affected by the condition of the vehicle and how it is equipped, as well as by the nature, condition of the operating area, proper service and maintenance of the vehicle. If these specifications are critical, the proposed application should be discussed with your dealer.

 ${\it NOTE: Specifications, unless otherwise \ listed, are for a standard \ truck \ without}$ optional equipment.

Specification data is based on VDI 2198.

#### STANDARD AND OPTIONAL EQUIPMENT <

PERFORMANCE	STD	OPT
Cummins QSL 9 diesel engine delivering 261 kW (rated) / 283 kW (max),	Х	
Stage IV variable geometry turbocharger, water cooled		
Hibernate idle Hydraulically driven on-demand cooling fan	X	
Powertrain protection system	X	
Heavy duty air intake	Х	
High mount exhaust	Х	
Spicer Off-Highway TE-32 4-speed auto-shifting transmission*	Х	
Kessler D102 drive axle with wet disc brakes	X	
DRIVE	STD	OPT
Travel speed limiter - unconditional (adjustable)  Travel speed limiter - loaded (adjustable)	X	Х
E4 Pneumatic Drive and Steer Tyres Continental Container		
Master 18.00-25 40PR	Х	
E4 Pneumatic Drive and Steer Tyres Continental Container Master 18.00-33 40PR	Х	Х
18.00-25 40PR Goodyear Pneumatic Bias Ply drive and steer tyres		Х
18.00-R25 Goodyear Slick Radial drive and steer tyres		X
18.00-25 40PR Bridgestone STMS Slick Bias Ply drive and steer tyres 18.00-R36 Michelin XZM Pneumatic Radial drive and steer tyres		X
18.00-R36 Goodyear Pneumatic Slick Radial drive and steer tyres		X
18.00-33 36PR Goodyear Pneumatic Bias Ply drive and steer tyres		X
LIFT	STD	OPT
On-demand load sensing hydraulic system	Х	
Automatic throttle-up when lifting (in neutral or inching)	Х	
2-stage boom for 5-high 1st row stacking	Х	
6-high 1st row stacking	V	Х
Load Moment Indicator (integrated in digital operator display) High speed hoist system - below 10 tons	X	
Hydraulic system temperature protection with performance de-rate	_ ^	Х
Container weighing system SOLAS compliant		Х
HANDLING	STD	ОРТ
CANBus Spreader, Hyster Model 817 with rotation (CH models)	Х	
CANBus Spreader, Hyster Model 857 with rotation (IH models)	Х	
Soft landing systerm for spreader	ļ.,	Х
Mechanical Pile Slope	X	CII
Powered Pile Slope Dampening cylinders	IH X	СН
Powered dampening cylinders	^	Х
Wide Twistlock Position (WTP) container handling		Х
Intermodal handling - top / bottom pick	СН	
Tool changer	_	X
Attachments for steel load handling		X
Attachments for wind industry load handling  Barge container handling		X
4 lifting eyes located on end beam corners	X	
4 lifting eyes located under centre beam of spreader		Х
Spreader guides located at end of spreader beams		Χ
Rotation stops with override	Х	
Automatic one-touch extend/retract (20'/40') for spreader		X
Stops for 30' containers  Vertical lift		X
Stops for 20-40' containers		X
VISIBILITY	STD	OPT
External wide angle mirrors mounted on rear of front fenders	Х	
Futured uside and a mirrors mounted on ton of front founders	IH	СН
External wide angle mirrors mounted on top of front fenders	1	Х
Rear view camera system		
Rear view camera system Halogen work lights	Х	v
Rear view camera system Halogen work lights High performance LED work lights		Χ
Rear view camera system Halogen work lights	X	Х
Rear view camera system Halogen work lights High performance LED work lights LED twistlock indicator lights LED stop/tail/brake lights	Х	X
Rear view camera system Halogen work lights High performance LED work lights LED twistlock indicator lights	X	
Rear view camera system Halogen work lights High performance LED work lights LED twistlock indicator lights LED stop/tail/brake lights Turn signals, hazard & marker lights (LED)	X X X	
Rear view camera system Halogen work lights High performance LED work lights LED twistlock indicator lights LED stop/tail/brake lights Turn signals, hazard & marker lights (LED)  APPEARANCE Hyster yellow paint base truck and spreader Special paint base truck and spreader	X X X STD X	<b>OPT</b>
Rear view camera system Halogen work lights High performance LED work lights LED twistlock indicator lights LED stop/tail/brake lights Turn signals, hazard & marker lights (LED)  APPEARANCE Hyster yellow paint base truck and spreader Special paint base truck and spreader SUPPLEMENTAL	X X X STD X	<b>OPT</b>
Rear view camera system Halogen work lights High performance LED work lights LED twistlock indicator lights LED stop/tail/brake lights Turn signals, hazard & marker lights (LED)  APPEARANCE Hyster yellow paint base truck and spreader Special paint base truck and spreader  SUPPLEMENTAL Literature package	X X X X STD X X	ОРТ
Rear view camera system Halogen work lights High performance LED work lights LED twistlock indicator lights LED stop/tail/brake lights Turn signals, hazard & marker lights (LED)  APPEARANCE Hyster yellow paint base truck and spreader Special paint base truck and spreader SUPPLEMENTAL Literature package Operator's manual	X X X STD X STD X	<b>OPT</b>
Rear view camera system Halogen work lights High performance LED work lights LED twistlock indicator lights LED stop/tail/brake lights Turn signals, hazard & marker lights (LED)  APPEARANCE Hyster yellow paint base truck and spreader Special paint base truck and spreader  SUPPLEMENTAL Literature package	X X X X STD X X	<b>OPT</b>
Rear view camera system Halogen work lights High performance LED work lights LED twistlock indicator lights LED stop/tail/brake lights Turn signals, hazard & marker lights (LED)  APPEARANCE Hyster yellow paint base truck and spreader Special paint base truck and spreader SUPPLEMENTAL Literature package Operator's manual Warranty: 24 Months / 4,000 Hours Parts & Labor	X X X STD X STD X	<b>OPT</b>

ERGONOMICS	STD	<b>OPT</b>
Powered partial-sliding cabin, including additional mirrors on top of fenders  Powered full-sliding cabin, including rear view mirrors, front rail, right	Х	
side stairway, and handrails		Х
ull steel cab operator compartment	Х	
Elevating operator cabin	V	Х
solated mounting for low noise and vibration  Operator presence system	X	
Mechanical suspension seat	X	
Deluxe air suspension seat		Х
Low backrest*	Х	
High backrest*		Χ
Cloth seat cover	Х	
Vinyl seat cover		X
Seat heating	Х	Х
P-point red high visibility seatbelt -point red high visibility seatbelt	^	Х
Floor mat	Х	
Coat hook	Х	
Front, top and rear wipers	Х	
H"-pattern front wiper	Χ	
l"-pattern front wiper		Χ
ront and rear window defrosters	Χ	
Left side handrails, stairway and cabin door	X	
Right side door	Х	v
Right side handrails and stairway Left side stair lights		X
7" Color digital operator display	Х	^
Seat-side joystick hydraulic control	X	
Steering wheel spinner knob	Х	
Directional control lever	Χ	
Manual park brake	Х	
Automatic park brake		Χ
nterior wide angle mirrors	X	
Heater with 3 speed fan	X	
Felescoping & tilting steering column DC/DC converter 24 volt/12 volt with socket	Х	Х
DC/DC converter 24 volt/12 volt 2nd 12 volt socket		X
Air conditioning		X
Reading light		Χ
Sun shades on top and rear		Χ
Trainer seat		Χ
Recirculation fan		Χ
Rear locking console		X
Accessory mounting post		X
Heated top window Radio preparation set-up (wiring, two speakers and antenna)		X
OPERATION	STD	OPT
Electric air horn 112 dB	Х	UFI
/isible alarm – Amber strobe light	X	
Audible alarm – reverse direction activated 82–102 dB(A), self-adjusting	X	
Forward motion alarm		Х
Seatbelt interlock for engine start		Χ
Seatbelt indicator light on top of cab		Χ
Tyre pressure monitoring system		Χ
		.,
·	Х	
Battery jump start connection (NATO plug)	X	X
Battery jump start connection (NATO plug) Adjustable automatic "empty seat" engine shutdown	X	Χ
Battery jump start connection (NATO plug) Adjustable automatic "empty seat" engine shutdown Key switch start	X	X
Battery jump start connection (NATO plug) Adjustable automatic "empty seat" engine shutdown Key switch start Key switch start with seat belt interlock for engine start and operation		Χ
Battery jump start connection (NATO plug) Adjustable automatic "empty seat" engine shutdown Key switch start Key switch start with seat belt interlock for engine start and operation Non-locking fuel cap	X	X
Battery jump start connection (NATO plug) Adjustable automatic "empty seat" engine shutdown Key switch start Key switch start with seat belt interlock for engine start and operation Non-locking fuel cap Lockable fuel cap		X X X
Battery jump start connection (NATO plug) Adjustable automatic "empty seat" engine shutdown Key switch start Key switch start with seat belt interlock for engine start and operation Non-locking fuel cap Lockable fuel cap Diesel fuel inlet strainer in filler neck Hyster Tracker wireless asset management system		X X X
Battery jump start connection (NATO plug) Adjustable automatic "empty seat" engine shutdown Key switch start Key switch start with seat belt interlock for engine start and operation Non-locking fuel cap Lockable fuel cap Diesel fuel inlet strainer in filler neck Hyster Tracker wireless asset management system Hyster Tracker wireless asset management - monitoring	X	X X X X
Battery jump start connection (NATO plug) Adjustable automatic "empty seat" engine shutdown Key switch start Key switch start with seat belt interlock for engine start and operation Non-locking fuel cap Lockable fuel cap Diesel fuel inlet strainer in filler neck Hyster Tracker wireless asset management system Hyster Tracker wireless asset management - monitoring Hyster Tracker wireless asset management - access / verification	X	X X X X X
Battery jump start connection (NATO plug) Adjustable automatic "empty seat" engine shutdown Key switch start Key switch start with seat belt interlock for engine start and operation Non-locking fuel cap Lockable fuel cap Diesel fuel inlet strainer in filler neck Hyster Tracker wireless asset management system Hyster Tracker wireless asset management - monitoring Hyster Tracker wireless asset management - access / verification Auto greasing system for basic truck & outer boom	X	X X X X X
Battery jump start connection (NATO plug) Adjustable automatic "empty seat" engine shutdown Key switch start Key switch start with seat belt interlock for engine start and operation Non-locking fuel cap Lockable fuel cap Diesel fuel inlet strainer in filler neck Hyster Tracker wireless asset management system Hyster Tracker wireless asset management - monitoring Hyster Tracker wireless asset management - access / verification Auto greasing system for basic truck & outer boom Auto greasing system for inner boom and spreader	X	X X X X X X X
Lockable battery disconnect switch Battery jump start connection (NATO plug) Adjustable automatic "empty seat" engine shutdown Key switch start Key switch start with seat belt interlock for engine start and operation Non-locking fuel cap Lockable fuel cap Diesel fuel inlet strainer in filler neck Hyster Tracker wireless asset management system Hyster Tracker wireless asset management - monitoring Hyster Tracker wireless asset management - access / verification Auto greasing system for basic truck & outer boom Auto greasing system for inner boom and spreader Fire suppression system	X	X X X X X
Battery jump start connection (NATO plug) Adjustable automatic "empty seat" engine shutdown Key switch start Key switch start with seat belt interlock for engine start and operation Non-locking fuel cap Lockable fuel cap Diesel fuel inlet strainer in filler neck Hyster Tracker wireless asset management system Hyster Tracker wireless asset management - monitoring Hyster Tracker wireless asset management - access / verification Auto greasing system for basic truck & outer boom Auto greasing system for inner boom and spreader Fire suppression system 24 volt electrical system	X	X X X X X X X X
Battery jump start connection (NATO plug) Adjustable automatic "empty seat" engine shutdown Key switch start Key switch start with seat belt interlock for engine start and operation Non-locking fuel cap Lockable fuel cap Diesel fuel inlet strainer in filler neck Hyster Tracker wireless asset management system Hyster Tracker wireless asset management - monitoring Hyster Tracker wireless asset management - access / verification Auto greasing system for basic truck & outer boom Auto greasing system for inner boom and spreader Fire suppression system	X	X X X X X X

<sup>\*</sup>Standard or Optional in select markets or on select models. Other options available through Special Products Engineering Department (SPED). Contact Hyster for details.

13 **12** 

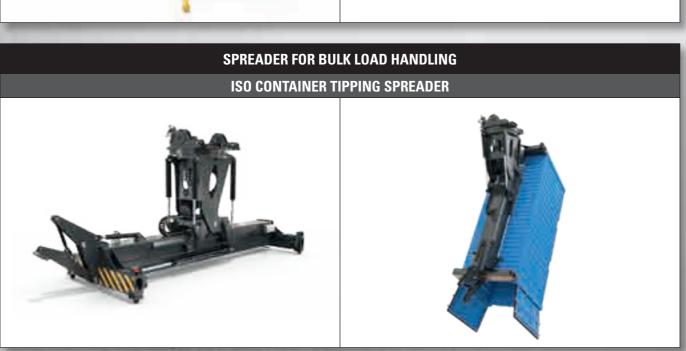
## > FRONT END EQUIPMENT

















#### 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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