



# GDP80-160

SPEC SHEET

8,000 - 16,000 kg

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DF/EF Series

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Diesel Forklift Trucks

## TRUCK DIMENSIONS – DF/EF SERIES

= Centre of gravity of unladen truck

$AST = Wa + x + l_6 + a$  (if  $b_{12}/2 < b_{13}$ )

$AST = Wa + ((l_6+x)^2 + (b_{12}/2-b_{13})^2)^{0.5} + a$  (if  $b_{12}/2 > b_{13}$  and  $Wa > b_{13} + b_{12}/2$ )

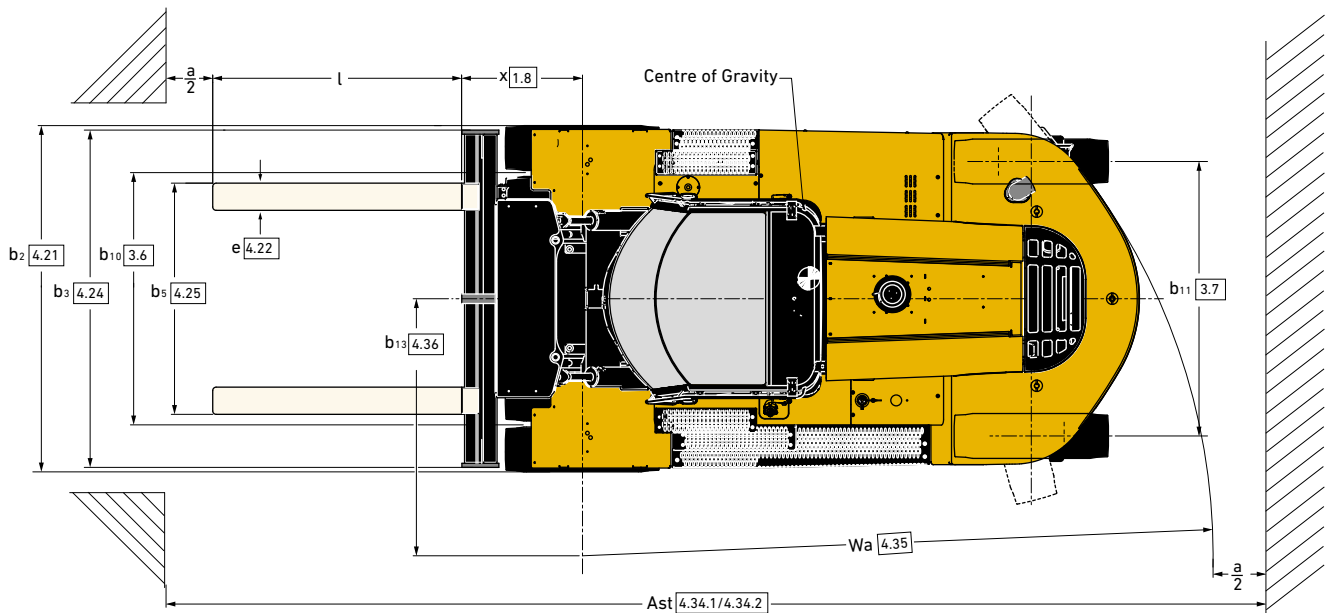
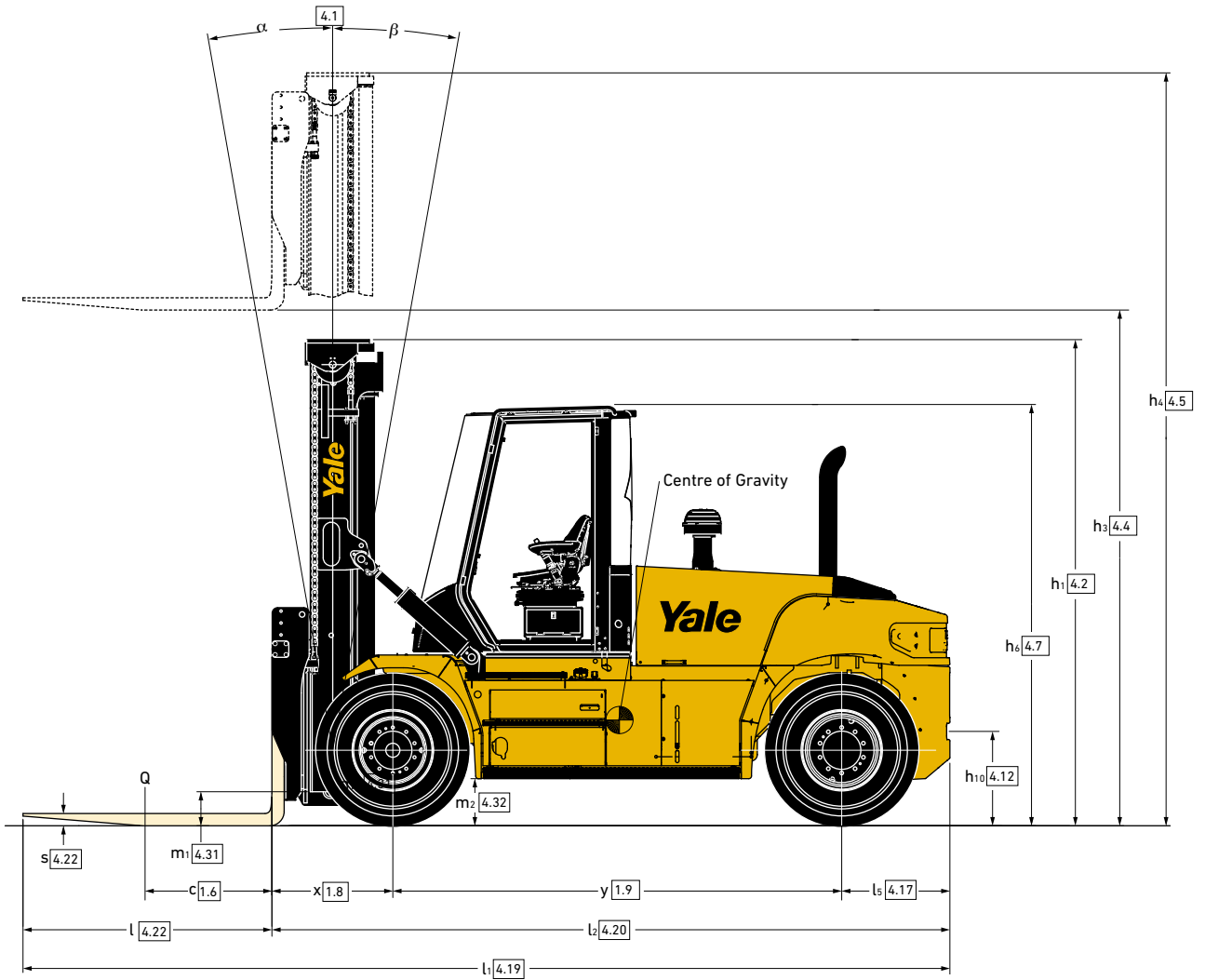
$AST = b_{13} + b_{12}/2 ((l_6+x)^2 + (b_{12}/2-b_{13})^2)^{0.5} + a$  (if  $b_{12}/2 > b_{13}$  and  $Wa < b_{13} + b_{12}/2$ )

$a$  = Minimum operating clearance = 10% of AST

(VDI standard = 200mm BITA recommendation = 300mm)

$l_6$  = load lengths

$b_{12}$  = load width



## VDI 2198 – GENERAL SPECIFICATIONS – DF/EF SERIES

		Yale				
		GDP 80DF	GDP 90DF	GDP 90DF(L)		
<b>GENERAL</b>	1.1	Manufacturer				
	1.2	Manufacturer's type designation				
	1.3	Drive		Diesel		
	1.4	Operator type		Seated		
	1.5	Rated capacity / rated load	8500		9500	
	1.6	Load centre distance		600		
	1.8	Load distance		809		
	1.9	Wheelbase		2700	2900	
<b>WEIGHT</b>	2.1	Service weight <sup>(1)</sup>	13270	13804	13535	
	2.2	Axle loading, laden front / rear	20060 / 1710	21479 / 1825	21304 / 1731	
	2.3	Axle loading, unladen front / rear	7124 / 6146	7022 / 6782	7188 / 6347	
<b>TYRES</b>	3.1	Tyres front/rear		Pneumatic		
	3.2	Tyres size, front		10.00-20 16PR		
	3.3	Tyres size, rear		10.00-20 16PR		
	3.5	Wheels, number front / rear (x = driven wheels)		4X / 2		
	3.6	Track width, front	b <sub>10</sub> (mm)	1842		
	3.7	Track width, rear	b <sub>11</sub> (mm)	2020		
<b>DIMENSIONS</b>	4.1	Mast tilt : forward / backwards	$\alpha / \beta$ (°)	15 / 12		
	4.2	Height of mast lowered (unloaded)	h <sub>1</sub> (mm)	3885		
	4.3	Free lift	h <sub>2</sub> (mm)	-		
	4.4	Lift height (bottom of forks)	h <sub>3</sub> (mm)	4925		
	4.5	Height of mast extended (unloaded)	h <sub>4</sub> (mm)	6347		
	4.7	Height of overhead guard (open cab)	h <sub>6</sub> (mm)	3055		
	4.7.1	Height of overhead guard (closed cab)	h <sub>6</sub> (mm)	3082		
	4.7.2	Height of overhead guard (closed cab w/ airco)	h <sub>6</sub> (mm)	3082		
	4.7.3	Height of overhead guard (closed cab w/ strobe light)	h <sub>6</sub> (mm)	3177		
	4.7.4	Height of overhead guard (closed cab w/ work lights)	h <sub>6</sub> (mm)	3231		
	4.7.5	Height of overhead guard (closed cab w/ airco & strobe light)	h <sub>6</sub> (mm)	3207		
	4.8	Seat height (Seat Index Point, ISO 5353)	h <sub>7</sub> (mm)	1875		
	4.12	Coupling height	h <sub>10</sub> (mm)	661		
	4.17	Overhang	l <sub>5</sub> (mm)	795		
	4.19	Overall length	l <sub>1</sub> (mm)	5524		
	4.20	Length to face of forks	l <sub>2</sub> (mm)	4304		
	4.21	Overall width truck	b <sub>2</sub> (mm)	2490		
	4.22	Fork dimensions	s/e/l (mm)	75 / 200 / 1220		
	4.23	Carriage type		75mm std pin type		
	4.24	Carriage width	b <sub>3</sub> (mm)	2396		
	4.25	Distance over fork arms, minimum / maximum	b <sub>5</sub> (mm)	534 / 2256		
	4.30	Sideshift (min / max)	b <sub>8</sub> (mm)	-		
	4.31	Ground clearance, under mast (w/o load)	m <sub>1</sub> (mm)	253		
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm)	313		
	4.33	Load size	w x l (mm)	1200 / 1200		
	4.33.1	Aisle width (a=10%)	Ast (mm)	6524	6732	
	4.33.2	Aisle width (a=0)	Ast (mm)	5931	6120	
	4.33.3	Aisle width (a=200)	Ast (mm)	6131	6320	
	4.34	Load size	w x l (mm)	1200 / 800		
	4.34.1	Aisle width (a=10%)	Ast (mm)	6084	6292	
	4.34.2	Aisle width (a=0)	Ast (mm)	5531	5720	
	4.34.3	Aisle width (a=200)	Ast (mm)	5731	5920	
	4.35	Turning radius (outer)	W <sub>a</sub> (mm)	3850	4107	
	4.36	Internal turning radius	b <sub>13</sub> (mm)	1370	1538	
	<b>PERFORMANCE</b>	5.1	Travel speed laden/unladen Stage IIIA <sup>(2)</sup>	km/h	- / -	
5.2		Lifting speed laden/unladen 90cc Stage IIIA	m/s	- / -		
5.2.1		Lifting speed laden/unladen 111cc Stage IIIA	m/s	- / -		
5.2.2		Lifting speed laden/unladen 126cc Stage IIIA	m/s	- / -		
5.3		Lowering speed laden/unladen	m/s	0.50 / 0.48		
5.5		Drawbar pull laden/unladen @ 1.6 km/hour Stage IIIA	kN	- / -		
5.6		Drawbar pull laden/unladen @ stall Stage IIIA	kN	- / -		
5.7		Gradeability laden/unladen @ 1.6 km/hour Stage IIIA	%	- / -		
5.8		Gradeability laden/unladen @ stall Stage IIIA	%	- / -		
5.1.1		Travel speed laden/unladen Stage V <sup>(2)</sup>	km/h	0.50 / 0.48		
5.2.3		Lifting speed laden/unladen 90cc Stage V	m/s	- / -		
5.2.4		Lifting speed laden/unladen 111cc Stage V	m/s	- / -		
5.2.5		Lifting speed laden/unladen 126cc Stage V	m/s	- / -		
5.3		Lowering speed laden/unladen	m/s	- / -		
5.5.1		Drawbar pull laden/unladen @ 1.6 km/hour Stage V	kN	- / -		
5.6.1		Drawbar pull laden/unladen @ stall Stage V	kN	- / -		
5.7.1	Gradeability laden/unladen @ 1.6 km/hour Stage V	%	- / -			
5.8.1	Gradeability laden/unladen @ stall Stage V	%	- / -			
<b>OTHER</b>	10.1	Operating pressure for attachments	MPa	19.5		
	10.2	Oil volume for attachments	l/min	100		
	10.3	Hydraulic tank capacity	l	93	109	
	10.4	Fuel tank capacity	l	113		
	10.4.1	DEF tank capacity	l	19		
	10.5	Steering design		Hydraulic power steering		
	10.6	Number of steering rotation		5.0		
	10.8	Towing coupling, model / type		Pin		

(1) Truck models based on Stage-V engine and Standard pin CRG without fork positioning

(2) Travel speed laden/unladen limited at 25 km/h as factory default

**All values are nominal values and they are subject to tolerances.**

## VDI 2198 – GENERAL SPECIFICATIONS – DF/EF SERIES

		Yale					
		GDP 100DF(S)	GDP 100DF	GDP 120DF	GDP 130EF(S)		
<b>GENERAL</b>	1.1	Manufacturer					
	1.2	Manufacturer's type designation					
	1.3	Drive		Diesel			
	1.4	Operator type		Seated			
	1.5	Rated capacity / rated load	Q (t)	10500	12500	13500	
	1.6	Load centre distance	c (mm)	600			
	1.8	Load distance	x (mm)	809			
	1.9	Wheelbase	y (mm)	2700	2900		
	<b>WEIGHT</b>	2.1	Service weight <sup>(1)</sup>	kg	14883	14470	15882
2.2		Axle loading, laden front / rear	kg	23351 / 2032	23155 / 1815	26034 / 2348	
2.3		Axle loading, unladen front / rear	kg	7372 / 7511	7553 / 6917	7460 / 8421	
<b>TYRES</b>	3.1	Tyres front/rear		Pneumatic			
	3.2	Tyres size, front		10.00-20 16PR		12.00-20 20PR	
	3.3	Tyres size, rear		10.00-20 16PR		12.00-20 20PR	
	3.5	Wheels, number front / rear (x = driven wheels)		4X / 2			
	3.6	Track width, front	b <sub>10</sub> (mm)	1842			
	3.7	Track width, rear	b <sub>11</sub> (mm)	2020	2018		
	<b>DIMENSIONS</b>	4.1	Mast tilt : forward / backwards	$\alpha / \beta$ (°)	15 / 12		
4.2		Height of mast lowered (unloaded)	h <sub>1</sub> (mm)	4135	4193		
4.3		Free lift	h <sub>2</sub> (mm)	-			
4.4		Lift height (bottom of forks)	h <sub>3</sub> (mm)	4925	4910		
4.5		Height of mast extended (unloaded)	h <sub>4</sub> (mm)	6597	6648		
4.7		Height of overhead guard (open cab)	h <sub>5</sub> (mm)	3055	3083		
4.7.1		Height of overhead guard (closed cab)	h <sub>5</sub> (mm)	3082	3110		
4.7.2		Height of overhead guard (closed cab w/ airco)	h <sub>5</sub> (mm)	3082	3110		
4.7.3		Height of overhead guard (closed cab w/ strobe light)	h <sub>5</sub> (mm)	3177	3205		
4.7.4		Height of overhead guard (closed cab w/ work lights)	h <sub>5</sub> (mm)	3231	3259		
4.7.5		Height of overhead guard (closed cab w/ airco & strobe light)	h <sub>5</sub> (mm)	3207	3235		
4.8		Seat height (Seat Index Point, ISO 5353)	h <sub>7</sub> (mm)	1875	1903		
4.12		Coupling height	h <sub>10</sub> (mm)	661	689		
4.17		Overhang	l <sub>5</sub> (mm)	795	925		
4.19		Overall length	l <sub>1</sub> (mm)	5724	6544		
4.20		Length to face of forks	l <sub>2</sub> (mm)	4504	4714		
4.21		Overall width truck	b <sub>2</sub> (mm)	2490	2541		
4.22		Fork dimensions	s/e/l (mm)	75 / 200 / 1220		90 / 200 / 1830	
4.23		Carriage type		75mm standard pin type		90mm standard pin type	
4.24		Carriage width	b <sub>3</sub> (mm)	2396		2496	
4.25		Distance over fork arms, minimum / maximum	b <sub>5</sub> (mm)	534 / 2256			
4.30		Sideshift (min / max)	b <sub>8</sub> (mm)	-			
4.31		Ground clearance, under mast (w/o load)	m <sub>1</sub> (mm)	253	245		
4.32		Ground clearance, centre of wheelbase	m <sub>2</sub> (mm)	313	341		
4.33		Load size	w x l (mm)	1200 / 1200			
4.33.1		Aisle width (a=10%)	Ast (mm)	6524	6732	7112	
4.33.2		Aisle width (a=0)	Ast (mm)	5931	6120	6465	
4.33.3		Aisle width (a=200)	Ast (mm)	6131	6320	6665	
4.34		Load size	w x l (mm)	1200 / 800			
4.34.1		Aisle width (a=10%)	Ast (mm)	6084	6292	6672	
4.34.2		Aisle width (a=0)	Ast (mm)	5531	5720	6065	
4.34.3		Aisle width (a=200)	Ast (mm)	5731	5920	6265	
4.35		Turning radius (outer)	Wa (mm)	3850	4107	4180	
4.36		Internal turning radius	b <sub>13</sub> (mm)	1370	1538	1453	
<b>PERFORMANCE</b>		5.1	Travel speed laden/unladen Stage IIIA <sup>(2)</sup>	km/h	- / -	29.7 / 30.9	27.4 / 29.0
		5.2	Lifting speed laden/unladen 90cc Stage IIIA	m/s	- / -	0.40 / 0.40	- / -
	5.2.1	Lifting speed laden/unladen 111cc Stage IIIA	m/s	- / -	0.47 / 0.54	0.36 / 0.40	
	5.2.2	Lifting speed laden/unladen 126cc Stage IIIA	m/s	- / -			
	5.3	Lowering speed laden/unladen	m/s	0.50 / 0.48	0.54 / 0.48		
	5.5	Drawbar pull laden/unladen @ 1.6 km/hour Stage IIIA	kN	- / -		95 / 97	
	5.6	Drawbar pull laden/unladen @ stall Stage IIIA	kN	- / -	106 / 107	105 / 107	
	5.7	Gradeability laden/unladen @ 1.6 km/hour Stage IIIA	%	- / -	42 / 33	36 / 32	
	5.8	Gradeability laden/unladen @ stall Stage IIIA	%	- / -	48 / 33	41 / 32	
	5.1.1	Travel speed laden/unladen Stage V <sup>(2)</sup>	km/h	0.50 / 0.48	29.5 / 30.8		
	5.2.3	Lifting speed laden/unladen 90cc Stage V	m/s	- / -	0.39 / 0.40		
	5.2.4	Lifting speed laden/unladen 111cc Stage V	m/s	- / -	0.50 / 0.52		
	5.2.5	Lifting speed laden/unladen 126cc Stage V	m/s	- / -			
	5.3	Lowering speed laden/unladen	m/s	- / -			
5.5.1	Drawbar pull laden/unladen @ 1.6 km/hour Stage V	kN	- / -	105 / 107	105 / 106		
5.6.1	Drawbar pull laden/unladen @ stall Stage V	kN	- / -	116 / 118			
5.7.1	Gradeability laden/unladen @ 1.6 km/hour Stage V	%	- / -	47 / 33	32 / 40		
5.8.1	Gradeability laden/unladen @ stall Stage V	%	- / -	53 / 33	32 / 45		
<b>OTHER</b>	10.1	Operating pressure for attachments	MPa	19.5			
	10.2	Oil volume for attachments	l/min	100			
	10.3	Hydraulic tank capacity	l	93	109		
	10.4	Fuel tank capacity	l	113	151		
	10.4.1	DEF tank capacity	l	19			
	10.5	Steering design		Hydraulic power steering			
	10.6	Number of steering rotation		5.0			
	10.8	Towing coupling, model / type		Pin			

(1) Truck models based on Stage-V engine and Standard pin CRG without fork positioning

(2) Travel speed laden/unladen limited at 25 km/h as factory default

## VDI 2198 – GENERAL SPECIFICATIONS – DF/EF SERIES

		Yale				
		GDP 140EF(S)	GDP 130EF	GDP 140EF		
<b>GENERAL</b>	1.1	Manufacturer				
	1.2	Manufacturer's type designation				
	1.3	Drive		Diesel		
	1.4	Operator type		Seated		
	1.5	Rated capacity / rated load	Q (t)	14500	14500	
	1.6	Load centre distance	c (mm)	600		
	1.8	Load distance	x (mm)	809		
	1.9	Wheelbase	y (mm)	2900	3300	
<b>WEIGHT</b>	2.1	Service weight <sup>(1)</sup>	kg	19328	17806	
	2.2	Axle loading, laden front / rear	kg	30712 / 3116	28892 / 2414	
	2.3	Axle loading, unladen front / rear	kg	8767 / 10561	9300 / 8505	
<b>TYRES</b>	3.1	Tyres front/rear		Pneumatic		
	3.2	Tyres size, front		12.00-20 20PR		
	3.3	Tyres size, rear		12.00-20 20PR		
	3.5	Wheels, number front / rear (x = driven wheels)		4X / 2		
	3.6	Track width, front	b <sub>10</sub> (mm)	1842		
	3.7	Track width, rear	b <sub>11</sub> (mm)	2018		
<b>DIMENSIONS</b>	4.1	Mast tilt : forward / backwards	$\alpha / \beta$ (°)	15 / 12		
	4.2	Height of mast lowered (unloaded)	h <sub>1</sub> (mm)	4193		
	4.3	Free lift	h <sub>2</sub> (mm)	-		
	4.4	Lift height (bottom of forks)	h <sub>3</sub> (mm)	4910		
	4.5	Height of mast extended (unloaded)	h <sub>4</sub> (mm)	6648		
	4.7	Height of overhead guard (open cab)	h <sub>5</sub> (mm)	3083		
	4.7.1	Height of overhead guard (closed cab)	h <sub>5</sub> (mm)	3110		
	4.7.2	Height of overhead guard (closed cab w/ airco)	h <sub>5</sub> (mm)	3110		
	4.7.3	Height of overhead guard (closed cab w/ strobe light)	h <sub>5</sub> (mm)	3205		
	4.7.4	Height of overhead guard (closed cab w/ work lights)	h <sub>5</sub> (mm)	3259		
	4.7.5	Height of overhead guard (closed cab w/ airco & strobe light)	h <sub>5</sub> (mm)	3235		
	4.8	Seat height (Seat Index Point, ISO 5353)	h <sub>7</sub> (mm)	1903		
	4.12	Coupling height	h <sub>10</sub> (mm)	689		
	4.17	Overhang	l <sub>5</sub> (mm)	925	795	
	4.19	Overall length	l <sub>1</sub> (mm)	6544	6814	
	4.20	Length to face of forks	l <sub>2</sub> (mm)	4714	4984	
	4.21	Overall width truck	b <sub>2</sub> (mm)	2541		
	4.22	Fork dimensions	s/e/l (mm)	90 / 200 / 1830		
	4.23	Carriage type		90mm std pin type		
	4.24	Carriage width	b <sub>3</sub> (mm)	2496		
	4.25	Distance over fork arms, minimum / maximum	b <sub>5</sub> (mm)	534 / 2356		
	4.30	Sideshift (min / max)	b <sub>8</sub> (mm)	-		
	4.31	Ground clearance, under mast (w/o load)	m <sub>1</sub> (mm)	245		
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm)	341		
	4.33	Load size	w x l (mm)	1200 / 1200		
	4.33.1	Aisle width (a=10%)	Ast (mm)	7112	7399	
	4.33.2	Aisle width (a=0)	Ast (mm)	6465	6726	
	4.33.3	Aisle width (a=200)	Ast (mm)	6665	6926	
	4.34	Load size	w x l (mm)	1200 / 800		
	4.34.1	Aisle width (a=10%)	Ast (mm)	6672	6959	
	4.34.2	Aisle width (a=0)	Ast (mm)	6065	6326	
	4.34.3	Aisle width (a=200)	Ast (mm)	6265	6526	
	4.35	Turning radius (outer)	Wa (mm)	4180		
	4.36	Internal turning radius	b <sub>13</sub> (mm)	1453		
	<b>PERFORMANCE</b>	5.1	Travel speed laden/unladen Stage IIIA <sup>(2)</sup>	km/h	27.4 / 29.0	
5.2		Lifting speed laden/unladen 90cc Stage IIIA	m/s	- / -		
5.2.1		Lifting speed laden/unladen 111cc Stage IIIA	m/s	0.36 / 0.40		
5.2.2		Lifting speed laden/unladen 126cc Stage IIIA	m/s	- / -		
5.3		Lowering speed laden/unladen	m/s	0.54 / 0.48		
5.5		Drawbar pull laden/unladen @ 1.6 km/hour Stage IIIA	kN	99 / 101	99 / 102	99 / 102
5.6		Drawbar pull laden/unladen @ stall Stage IIIA	kN	111 / 114	112 / 114	111 / 114
5.7		Gradeability laden/unladen @ 1.6 km/hour Stage IIIA	%	31 / 29	34 / 35	32 / 33
5.8		Gradeability laden/unladen @ stall Stage IIIA	%	36 / 29	39 / 35	37 / 33
5.1.1		Travel speed laden/unladen Stage V <sup>(2)</sup>	km/h	27.1 / 28.9	27.1 / 28.9	27.1 / 28.9
5.2.3		Lifting speed laden/unladen 90cc Stage V	m/s	- / -		
5.2.4		Lifting speed laden/unladen 111cc Stage V	m/s	- / -		
5.2.5		Lifting speed laden/unladen 126cc Stage V	m/s	0.37 / 0.44		
5.3		Lowering speed laden/unladen	m/s	0.54 / 0.48		
5.5.1		Drawbar pull laden/unladen @ 1.6 km/hour Stage V	kN	109 / 111	109 / 112	109 / 111
5.6.1		Drawbar pull laden/unladen @ stall Stage V	kN	122 / 125	122 / 125	122 / 125
5.7.1	Gradeability laden/unladen @ 1.6 km/hour Stage V	%	35 / 29	38 / 35	36 / 33	
5.8.1	Gradeability laden/unladen @ stall Stage V	%	40 / 29	43 / 35	41 / 33	
<b>OTHER</b>	10.1	Operating pressure for attachments	MPa	19.5		
	10.2	Oil volume for attachments	l/min	100		
	10.3	Hydraulic tank capacity	l	109		
	10.4	Fuel tank capacity	l	151	203	
	10.4.1	DEF tank capacity	l	19		
	10.5	Steering design		Hydraulic power steering		
	10.6	Number of steering rotation		5.0		
	10.8	Towing coupling, model / type		Pin		

All values are nominal values and they are subject to tolerances.

## VDI 2198 – GENERAL SPECIFICATIONS – DF/EF SERIES

		Yale						
GENERAL	1.1	Manufacturer						
	1.2	Manufacturer's type designation	<b>GDP160EF</b>	<b>GDP 120EF12</b>	<b>GDP 160EF(S)12</b>	<b>GDP 160EF12</b>		
	1.3	Drive	Diesel					
	1.4	Operator type	Seated					
	1.5	Rated capacity / rated load	16500	12500	16400			
	1.6	Load centre distance	600	1200				
	1.8	Load distance	889		941			
	1.9	Wheelbase	3300	3500		3750		
WEIGHT	2.1	Service weight <sup>(1)</sup>	19459	19754	23461	22681		
	2.2	Axle loading, laden front / rear	33225 / 2734	29368 / 2886	36401 / 3459	35861 / 3219		
	2.3	Axle loading, unladen front / rear	9280 / 10179	9407 / 10347	9969 / 13491	10098 / 12583		
TYRES	3.1	Tyres front/rear	Pneumatic					
	3.2	Tyres size, front	12.00-20 20PR		12.00 R 20			
	3.3	Tyres size, rear	12.00-20 20PR		12.00 R 20			
	3.5	Wheels, number front / rear (x = driven wheels)	4X / 2					
	3.6	Track width, front	b <sub>10</sub> (mm)	1842	1844			
	3.7	Track width, rear	b <sub>11</sub> (mm)	2018	2020			
	DIMENSIONS	4.1	Mast tilt : forward / backwards	$\alpha / \beta$ (°)		15 / 12		6 / 10
4.2		Height of mast lowered (unloaded)	h <sub>1</sub> (mm)		4193		4008	
4.3		Free lift	h <sub>2</sub> (mm)		-			
4.4		Lift height (bottom of forks)	h <sub>3</sub> (mm)		4910		4494	
4.5		Height of mast extended (unloaded)	h <sub>4</sub> (mm)		6648		6255	
4.7		Height of overhead guard (open cab)	h <sub>5</sub> (mm)		3083		3083	
4.7.1		Height of overhead guard (closed cab)	h <sub>6</sub> (mm)		3110		3110	
4.7.2		Height of overhead guard (closed cab w/ airco)	h <sub>6</sub> (mm)		3110		3110	
4.7.3		Height of overhead guard (closed cab w/ strobe light)	h <sub>6</sub> (mm)		3205		3205	
4.7.4		Height of overhead guard (closed cab w/ work lights)	h <sub>6</sub> (mm)		3259		3259	
4.7.5		Height of overhead guard (closed cab w/ airco & strobe light)	h <sub>6</sub> (mm)		3235		3235	
4.8		Seat height (Seat Index Point, ISO 5353)	h <sub>7</sub> (mm)		1903		1903	
4.12		Coupling height	h <sub>10</sub> (mm)		689		689	
4.17		Overhang	l <sub>5</sub> (mm)		795	925	942	925
4.19		Overall length	l <sub>1</sub> (mm)		6814	7754	7823	8056
4.20		Length to face of forks	l <sub>2</sub> (mm)		4984	5314	5383	5616
4.21		Overall width truck	b <sub>2</sub> (mm)				2541	
4.22		Fork dimensions	s/e/l (mm)		90 / 200 / 1830	90 / 200 / 2440	100 / 200 / 2440	
4.23		Carriage type	90mm std pin type		100mm std pin type			
4.24		Carriage width	b <sub>3</sub> (mm)		2496		2540	
4.25		Distance over fork arms, minimum / maximum	b <sub>5</sub> (mm)		534 / 2356		470 / 2440	
4.30		Sideshift (min / max)	b <sub>8</sub> (mm)		-			
4.31		Ground clearance, under mast (w/o load)	m <sub>1</sub> (mm)		245		225	
4.32		Ground clearance, centre of wheelbase	m <sub>2</sub> (mm)		341			
4.33		Load size	w x l (mm)		1200 / 1200		2400 / 2400	
4.33.1		Aisle width (a=10%)	Ast (mm)		7399	9066	9140	9395
4.33.2	Aisle width (a=0)	Ast (mm)		6726	8242	8309	8541	
4.33.3	Aisle width (a=200)	Ast (mm)		6926	8442	8509	8741	
4.34	Load size	w x l (mm)		1200 / 800		1930 / 1830		
4.34.1	Aisle width (a=10%)	Ast (mm)		6959	8439	-		
4.34.2	Aisle width (a=0)	Ast (mm)		6326	7672	-		
4.34.3	Aisle width (a=200)	Ast (mm)		6526	7872	-		
4.35	Turning radius (outer)	Wa (mm)		4573	4947	4889	5,185	
4.36	Internal turning radius	b <sub>13</sub> (mm)		1777	1940	1803	1996	
PERFORMANCE	5.1	Travel speed laden/unladen Stage IIIA <sup>(2)</sup>	km/h		27.4 / 29.0		27.1 / 29.0	
	5.2	Lifting speed laden/unladen 90cc Stage IIIA	m/s		-		-	
	5.2.1	Lifting speed laden/unladen 111cc Stage IIIA	m/s		0.36 / 0.40		-	
	5.2.2	Lifting speed laden/unladen 126cc Stage IIIA	m/s		-		0.33 / 0.44	
	5.3	Lowering speed laden/unladen	m/s		0.54 / 0.48			
	5.5	Drawbar pull laden/unladen @ 1.6 km/hour Stage IIIA	kN		99 / 101			
	5.6	Drawbar pull laden/unladen @ stall Stage IIIA	kN		111 / 114	111 / 113	110 / 113	
	5.7	Gradeability laden/unladen @ 1.6 km/hour Stage IIIA	%		29 / 32	33 / 32	26 / 31	26 / 36
	5.8	Gradeability laden/unladen @ stall Stage IIIA	%		33 / 32	38 / 32	29 / 31	30 / 36
	5.1.1	Travel speed laden/unladen Stage V <sup>(2)</sup>	km/h		27.1 / 28.9		26.8 / 28.9	
	5.2.3	Lifting speed laden/unladen 90cc Stage V	m/s		-		-	
	5.2.4	Lifting speed laden/unladen 111cc Stage V	m/s		-		-	
	5.2.5	Lifting speed laden/unladen 126cc Stage V	m/s		0.37 / 0.44		0.39 / 0.42	
	5.3	Lowering speed laden/unladen	m/s		0.54 / 0.48		0.54 / 0.45	
5.5.1	Drawbar pull laden/unladen @ 1.6 km/hour Stage V	kN		108 / 111	109 / 111	108 / 111		
5.6.1	Drawbar pull laden/unladen @ stall Stage V	kN		122 / 125	123 / 125	121 / 124		
5.7.1	Gradeability laden/unladen @ 1.6 km/hour Stage V	%		32 / 32	37 / 32	29 / 31	29 / 36	
5.8.1	Gradeability laden/unladen @ stall Stage V	%		37 / 32	42 / 32	33 / 31	33 / 36	
OTHER	10.1	Operating pressure for attachments	MPa		19.5			
	10.2	Oil volume for attachments	l/min		100			
	10.3	Hydraulic tank capacity	l		109			
	10.4	Fuel tank capacity	l		203			
	10.4.1	DEF tank capacity	l		19			
	10.5	Steering design	Hydraulic power steering					
	10.6	Number of steering rotation	5.0					
	10.8	Towing coupling, model / type	Pin					

(1) Truck models based on Stage-V engine and Standard pin CRG without fork positioning

(2) Travel speed laden/unladen limited at 25 km/h as factory default

## 8-9 T RATED CAPACITY – DF/EF SERIES

Lift height h <sub>3+s</sub> (mm)	Lowered height h <sub>1</sub> (mm)	Extended height h <sub>4</sub> (mm)	Capacities (kg) @ 600mm Load Centre					
			Standard pin type carriage (kg)		Sideshift frame pin type carriage (kg)		QD DFSSFP carriage (kg)	
			GDP 80DF	GDP 90DF(L)	GDP 80DF	GDP 90DF(L)	GDP 80DF	GDP 90DF(L)
2-Stage No Free-Lift (NFL) Mast								
3250	3009.5	4597	8500	9500	8400	9400	8200	9200
3500	3134.5	4847	8500	9500	8400	9400	8200	9200
3750	3259.5	5097	8500	9500	8400	9400	8200	9200
4000	3384.5	5347	8500	9500	8400	9400	8200	9200
4500	3634.5	5847	8500	9500	8400	9400	8200	9200
4750	3759.5	6097	8500	9500	8400	9400	8200	9200
5000	3884.5	6347	8500	9500	8400	9400	8200	9200
5500	4134.5	6847	8360	9340	8300	9280	8080	9060

Capacity calculated with 1220mm forks

Note: addition of header hoses will add 16.5mm to OLH (h<sub>1</sub>) and OEH (h<sub>4</sub>)

## 10-12 T RATED CAPACITY – DF/EF SERIES

Lift height h <sub>3+s</sub> (mm)	Lowered height h <sub>1</sub> (mm)	Extended height h <sub>4</sub> (mm)	Capacities (kg) @ 600mm Load Centre					
			Standard pin type carriage (kg)		Sideshift frame pin type carriage (kg)		QD DFSSFP carriage (kg)	
			GDP 100DFS	GDP 120DF	GDP 100DFS	GDP 120DF	GDP 100DFS	GDP 120DF
2-Stage No Free-Lift (NFL) Mast								
2750	3010	4347	10500	12500	10400	12400	10200	12200
3000	3135	4597	10500	12500	10400	12400	10200	12200
3250	3260	4847	10500	12500	10400	12400	10200	12200
3500	3385	5097	10500	12500	10400	12400	10200	12200
3750	3510	5347	10500	12500	10400	12400	10200	12200
4000	3635	5597	10500	12500	10400	12400	10200	12200
4500	3885	6097	10500	12500	10400	12400	10200	12200
4750	4010	6347	10500	12500	10400	12400	10200	12200
5000	4135	6597	10500	12500	10400	12400	10200	12200
5500	4385	7097	10340	12320	10300	12320	10040	12000
6000	4635	7597	10160	12140	10100	12100	Capacity will vary based on side shift and tilt	
6250	4760	7847	10080	12060	10000	12000		
6500	4885	8097	9980	11960	9880	11880		
7000	5135	8597	9760	11740	9660	11640		

Capacity calculated with 1220mm forks

Note: addition of header hoses will add 17mm to OLH (h<sub>1</sub>) and OEH (h<sub>4</sub>)

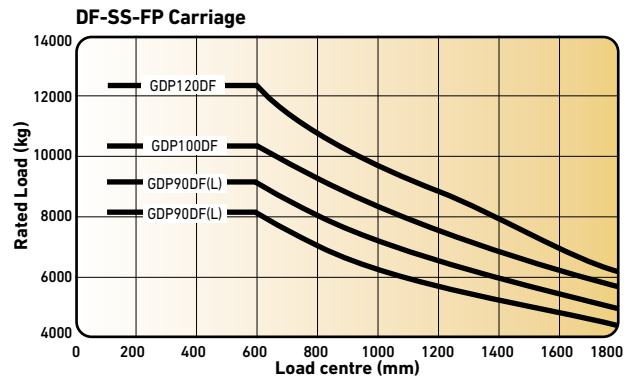
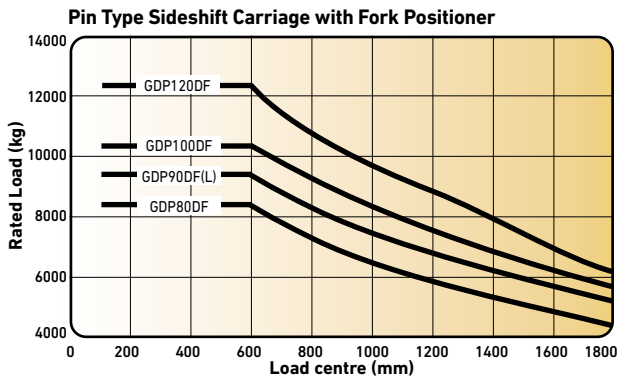
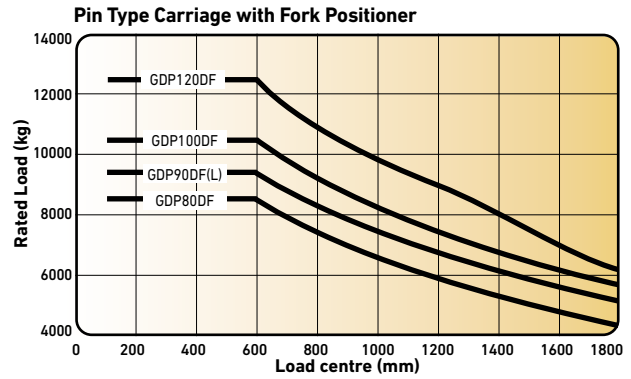
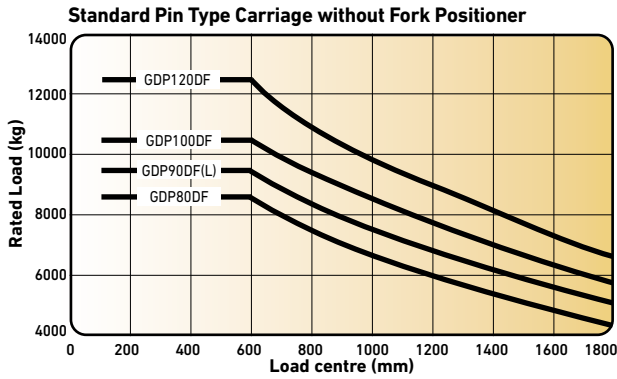
## 8-12 T RATED CAPACITY – DF/EF SERIES

Lift height h <sub>3+s</sub> (mm)	Lowered height h <sub>1</sub> (mm)	Extended height h <sub>4</sub> (mm)	Capacities (kg) @ 600mm Load Centre			
			Sideshift pin type carriage (kg)			
			GDP 80DF	GDP 90DF(L)	GDP 100DFS	GDP 120DF
3-Stage Full Free-Lift (FFL) Mast						
5500	3012	6880	7420	8360	9400	11300
6000	3178	7380	7260	8220	9240	11120
6500	3345	7880	7080	8020	9040	10920
7000	3511	8380	6880	7780	8800	10660

Capacity calculated with 1220mm forks

All values are nominal values and they are subject to tolerances.

## RATED CAPACITIES – DF/EF SERIES



**Load Centre**  
Distance from front of forks to centre of gravity of load.

**Rated Load**  
Based on vertical mast.

**Graphs**  
Graphs are based on 5000mm top of forks ( $h_3 + s$  (mm)) lift height and 1220mm long forks. Long load centre capacities are for reference only and will require longer forks. Please request actual capacity based on the full configuration.

Note: top of forks – No Free-Lift (NFL) mast

## 13-16 T RATED CAPACITY – DF/EF SERIES

Lift height $h_3 + s$ (mm)	Lowered height $h_1$ (mm)	Extended height $h_4$ (mm)	Capacities (kg) @ 600mm Load Centre					
			Standard pin type carriage (kg)					
			GDP 130EF(S)	GDP 140EF(S)	GDP 130EF	GDP 140EF	GDP 160EF	GDP 120EF12
2-Stage No Free-Lift (NFL) Mast								
2750	3068	4398	13500	14500	13500	14500	16500	12500
3000	3193	4648	13500	14500	13500	14500	16500	12500
3250	3318	4898	13500	14500	13500	14500	16500	12500
3500	3443	5148	13500	14500	13500	14500	16500	12500
3750	3568	5398	13500	14500	13500	14500	16500	12500
4000	3693	5648	13500	14500	13500	14500	16500	12500
4500	3943	6148	13500	14500	13500	14500	16500	12500
4750	4068	6398	13500	14500	13500	14500	16500	12500
5000	4193	6648	13500	14500	13500	14500	16500	12500
5500	4443	7148	13340	14340	13320	14320	16300	12360
6000	4693	7648	13160	14140	13140	14140	16120	12200
6250	4818	7898	13080	14060	13040	14040	16000	12100
6500	4943	8148	12960	13960	12920	13940	15900	12000
7000	5193	8648	12700	13760	12660	13720	15660	11800

Capacity calculated with 1830mm forks  
Note: addition of header hoses will add 17mm to OLH ( $h_1$ ) and OEH ( $h_4$ )



### 13-16 T RATED CAPACITY – DF/EF SERIES

Lift height h <sub>3+s</sub> (mm)	Lowered height h <sub>1</sub> (mm)	Extended height h <sub>4</sub> (mm)	Capacities (kg) @ 600mm Load Centre					
			Sideshift frame pin type carriage (kg)					
			GDP 130EF(S)	GDP 140EF(S)	GDP 130EF	GDP 140EF	GDP 160EF	GDP 120EF12
2-Stage No Free-Lift (NFL) Mast								
2750	3068	4398	13400	14500	13400	14500	16400	12400
3000	3193	4648	13400	14500	13400	14500	16400	12400
3250	3318	4898	13400	14500	13400	14500	16400	12400
3500	3443	5148	13400	14500	13400	14500	16400	12400
3750	3568	5398	13400	14500	13400	14500	16400	12400
4000	3693	5648	13400	14500	13400	14500	16400	12400
4500	3943	6148	13400	14500	13400	14500	16400	12400
4750	4068	6398	13400	14500	13400	14500	16400	12400
5000	4193	6648	13400	14500	13400	14500	16400	12400
5500	4443	7148	13240	14340	13240	14320	16280	12260
6000	4693	7648	13040	14160	13000	14140	16040	12080
6250	4818	7898	12920	14060	12900	14040	15900	12000
6500	4943	8148	12800	13960	12780	13940	15780	11900
7000	5193	8648	12560	13760	12500	13720	15500	11680

Capacity calculated with 1830mm forks

Note: addition of header hoses will add 17mm to OLH (h<sub>1</sub>) and OEH (h<sub>4</sub>)

### 13-16 T RATED CAPACITY – DF/EF SERIES

Lift height h <sub>3+s</sub> (mm)	Lowered height h <sub>1</sub> (mm)	Extended height h <sub>4</sub> (mm)	Capacities (kg) @ 600mm Load Centre					
			QD DFSSFP carriage (kg)					
			GDP 130EF(S)	GDP 140EF(S)	GDP 130EF	GDP 140EF	GDP 160EF	GDP 120EF12
2-Stage No Free-Lift (NFL) Mast								
2750	3068	4398	13100	14400	13100	14400	16100	12000
3000	3193	4648	13100	14400	13100	14400	16100	12000
3250	3318	4898	13100	14400	13100	14400	16100	12000
3500	3443	5148	13100	14400	13100	14400	16100	12000
3750	3568	5398	13100	14400	13100	14400	16100	12000
4000	3693	5648	13100	14400	13100	14400	16100	12000
4500	3943	6148	13100	14400	13100	14400	16100	12000
4750	4068	6398	13100	14400	13100	14400	16100	12000
5000	4193	6648	13100	14400	13100	14400	16100	12000
5500	4443	7148	12700	12720	12880	13640	14040	12000
6000	4693	7648	Capacity will vary based on side shift and tilt					
6250	4818	7898						
6500	4943	8148						
7000	5193	8648						

Capacity calculated with 1830mm forks

Note: addition of header hoses will add 17mm to OLH (h<sub>1</sub>) and OEH (h<sub>4</sub>)

Capacity calculated with bias tires, radial tyres will give a higher derate for DFSSFP carriage above 5000mm Lift Height

### 13-16 T RATED CAPACITY – DF/EF SERIES

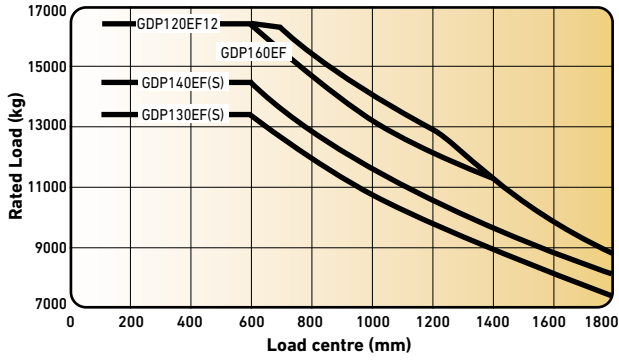
Lift height h <sub>3+s</sub> (mm)	Lowered height h <sub>1</sub> (mm)	Extended height h <sub>4</sub> (mm)	Capacities (kg) @ 600mm Load Centre					
			Sideshift pin type carriage (kg)					
			GDP 130EF(S)	GDP 140EF(S)	GDP 130EF	GDP 140EF	GDP 160EF	GDP 120EF12
2-Stage No Free-Lift (NFL) Mast								
4500	3103	6180	12000	12900	12000	12900	14720	11440
5000	3269	6680	11960	12840	11960	12840	14660	11400
6000	3602	7680	11580	12460	11580	12460	14240	11080
7000	3935	8680	11060	11940	11060	11940	13720	10680

Capacity calculated with 1830mm forks

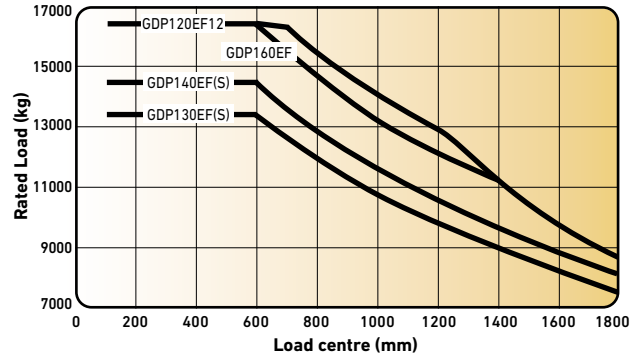
All values are nominal values and they are subject to tolerances.

## RATED CAPACITIES – DF/EF SERIES

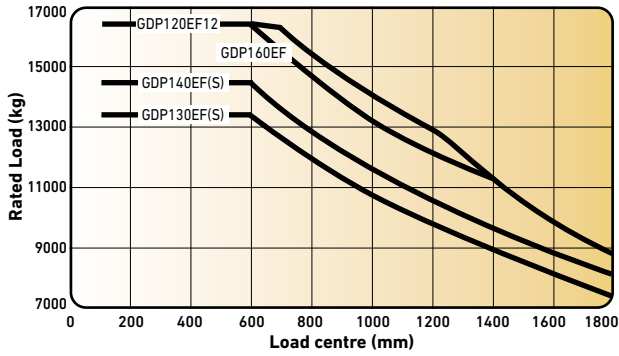
**Standard Pin Type Carriage without Fork Positioner**



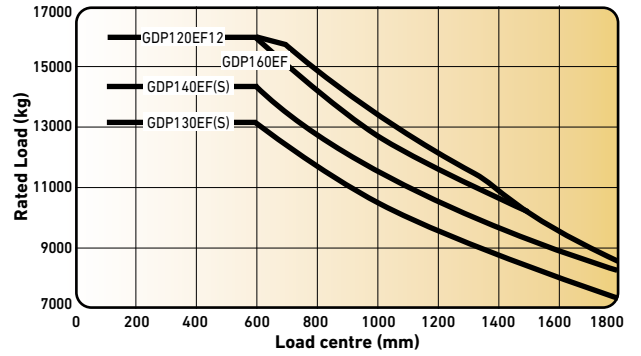
**Standard Pin Type Carriage with Fork Positioner**



**Pin Type Sideshift Frame Carriage with Fork Positioner**



**DF-SS-FP Carriage**



**Load Centre**

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

**Rated Load**

Based on 5000mm 2-stage top of forks – No Free lift (NFL) mast.

**Graphs**

Graphs are based on 5000mm top of forks ( $h_3 + s$  (mm)) lift height. EF models are calculated with 1830 mm long forks. EF12 models are calculated with 2440mm long forks. Long load centre capacities are for reference only and will require longer forks. Please request actual capacity based on the full configuration.

Note: top of forks – No Free-Lift (NFL) mast

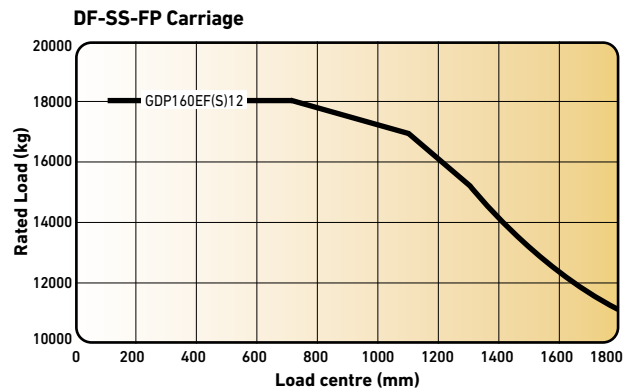
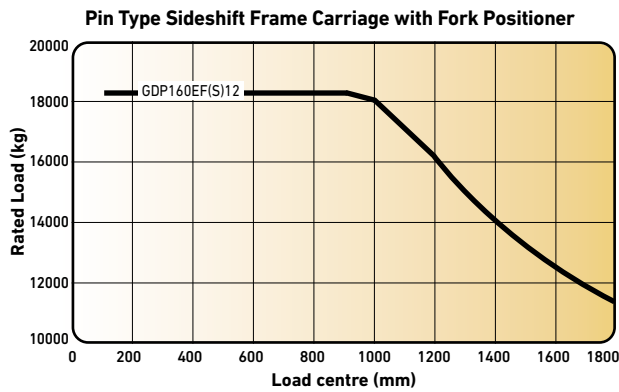
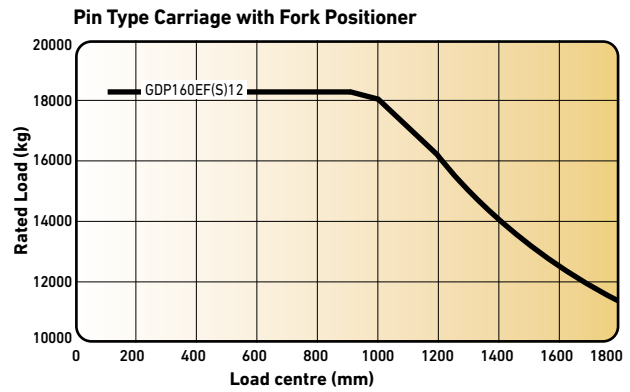
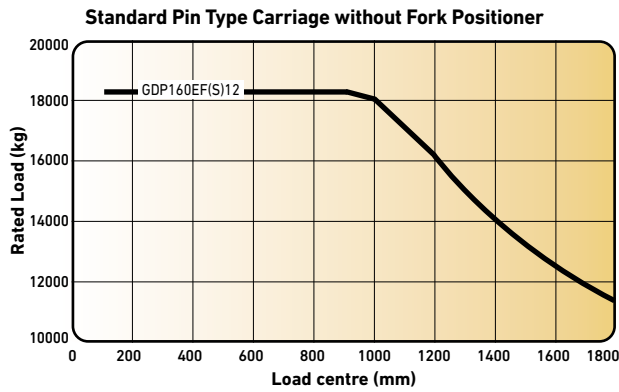
## 16 T RATED CAPACITY – DF/EF SERIES

Lift height $h_3+s$ (mm)	Lowered height $h_1$ (mm)	Extended height $h_4$ (mm)	Capacities (kg) @ 1200mm Load Centre							
			Standard pin type carriage (kg)		Sideshift frame pin type carriage (kg)		QD DFSSFP carriage (kg)		DFSSFP Integrated forks carriage (kg)	
2-Stage No Free-Lift (NFL) Mast										
3984	3703	5645	16000	16000	16000	16000	16000	16000	16000	16000
4594	4008	6255	16000	16000	16000	16000	16000	16000	16000	16000
5406	4414	7067	16000	16000	16000	16000	14740	14960	14880	15100
6219	4821	7880	16000	16000	15940	15920	Capacity will vary based on side shift and tilt			

Capacity calculated with 2440mm forks

Note: addition of header hoses will add 17mm to OLH ( $h_1$ ) and OEH ( $h_4$ )

## RATED CAPACITIES – DF/EF SERIES



**Load Centre**  
Distance from front of forks to centre of gravity of load.

**Rated Load**  
Based on 5000mm 2-stage top of forks – No Free lift (NFL) mast.

**Graphs**  
Graphs are based on 4594mm top of forks (h<sub>3</sub> + s (mm) lift height and 2440mm long forks. Long load centre capacities are for reference only and will require longer forks. Please request actual capacity based on the full configuration.  
Note: top of forks – No Free-Lift (NFL) mast

## POWERTRAINS – DF/EF SERIES

		Yale		
<b>GENERAL</b>	1.1	Manufacturer		
	1.2	Manufacturer's type designation	<b>GDP 90DF(L), GDP 100-120DF, GDP 130-160EF(S), GDP 120-160EF(S)12</b> <b>GDP 80-90DF(L), GDP 100-120DF(S), GDP 130-160EF(S), GDP 120-160EF(S)12</b>	
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas	Diesel	
	1.9	Wheelbase	y (mm)	2900 - 3750      2700-3750
<b>ENGINE</b>	7.1	Engine manufacturer / model	Cummins QSB 6.7 Stage IIIA      MTU OM 934 Stage V	
	7.2	Engine power output according to ISO 1585 nominal	kW	116 @ 2300rpm      129 @ 2200rpm
	7.2.1	Engine power output according to ISO 1585 max.	kW	116 @ 2300rpm      129 @ 1800rpm
	7.2.2	Maximum engine torque	Nm	597 @ 1500rpm      750 @ 1600rpm
	7.3	Rated speed	rpm	2300      2200
	7.4	Number of cylinders / displacement	# / cm <sup>3</sup>	6 / 6700      4 / 5300
	7.8	Alternator output	Amps	120      100
	7.10	Battery voltage / nominal capacity	V / Ah	24 / 102
	10.7	Sound pressure level at the driver's seat <sup>(1)</sup>	dB(A)	-      74
	10.7.1	Sound power level during the working cycle <sup>(1)</sup>	dB(A)	-      102

(1) Sound level(s) based on low mount exhaust

## POWERTRAINS – DF/EF SERIES

		Yale	
<b>GENERAL</b>	1.1	Manufacturer	
	1.2	Manufacturer's type designation	<b>GDP 80-120DF(S), GDP 90DF(L)</b> <b>GDP 130-160EF(S), GDP 160-160EF(S), GDP 120-160EF(S)12</b>
<b>DRIVE</b>	8.1	Type of drive unit	Torque Converter      Torque Converter
	8.2	Transmission Manufacturer / Type	ZF / 3WG161      ZF / 3WG161
	8.3	Drive axle Manufacturer / Type	Kessler D61      Kessler D81
	8.4	Service brake	Oil immersed disc      Oil immersed disc
	8.5	Parking brake	Dry disc on drive axle      Dry disc on drive axle

All values are nominal values and they are subject to tolerances.

## FEATURES LIST – DF/EF SERIES

ALL TRUCKS	STD	OPT	ALL TRUCKS	STD	OPT
Mercedes-Benz OM 934 Stage V / Cummins QSB 6.7 Stage IIIA diesel engines	●		"H"-pattern front wiper (Enclosed operator cabin)		●
Hydraulic driven cooling fan	●		Front, top and rear wipers with individual controlled washers		●
Performance modes	●		Tinted operator compartment windows (all)		●
Powertrain protection system	●		Tinted operator compartment top window		●
Heavy duty air intake	●		Plexiglass shield in front of front window		●
Low mount exhaust (below chassis)	●		Wire mesh installed on top of operator compartment		●
ZF Transmission WG161 3-speeds forward/3-speeds reverse auto-shifting	●		Steel bars under armoured glass top window (enclosed operator cabin)		●
Kessler drive axle with wet disc brakes	●		Operator shield wire mesh		●
On-demand load sensing hydraulic system	●		Joystick hydraulic control integrated in control arm		●
Automatic throttle-up when lifting (in neutral or inching)	●		Directional control lever		●
Pressure compensated lowering	●		FDC pedal directional control		●
Open operator compartment (without doors and screens)	●		Park brake - automatic		●
Manual tilt operator compartment for service	●		Diesel fueled cabin heater		●
Isolated cabin mounting for low noise and vibration	●		24-12 DC converter with 2 sockets and 2 USB outlets		●
Operator presence system	●		Automatic climate control		●
Mechanical suspension seat	●		Reading light		●
Low backrest seat	●		Sun shades on top and rear		●
Vinyl seat cover	●		Sun visors front window		●
2-point high visibility seatbelt	●		Trainer seat		●
Floor mat	●		Recirculation fan		●
Coat hook	●		Accessory mounting bar on cab front right pillar		●
"I"-pattern front wiper (Enclosed operator cabin)	●		Document holder on cab front right pillar		●
Top window with armoured glass (Enclosed operator cabin)	●		Heated top- and/or rear window		●
7" Integrated performance display	●		Radio preparation set-up (wiring, two speakers and antenna)		●
Accutouch mini levers hydraulic control integrated in control arm	●		Bluetooth radio with 2 speakers and antenna		●
Steering wheel with spinner knob	●		Exterior mirrors mounted to cab		●
Directional control on Mini-levers or Joystick	●		Rear view camera system		●
Park brake - manual	●		Radar object detection system		●
Heater with adjustable speed fan (enclosed operator cabin)	●		LED work lights		●
Telescoping and tilting steering column	●		High Performance LED work lights		●
USB outlet inside armrest	●		Two head lights mounted on front fenders		●
Interior wide angle mirrors	●		Mast mounted work lights		●
Halogen work lights	●		Four cabin mounted work lights		●
Two rearward work lights mounted on the cabin	●		Air horn 112 dBA		●
LED stop/tail/brake lights	●		Visible alarm – Amber strobe light, key switch activated		●
Turn signals, hazard and marker lights (LED)	●		Audible alarm – reverse direction activated 82–102 dB(A), self-adjusting		●
Electric horn 105 dBA	●		Audible alarm – reverse direction white noise		●
Truck Start with key switch and start button	●		Forward / reverse motion alarm		●
Power distribution group with fuses	●		Blue LED spotlight – rear / front and rear		●
Non-lockable fuel cap	●		Seatbelt interlock for engine start		●
24 volt electrical system	●		Tyre pressure monitoring system		●
Yale Gold paint base truck	●		Air-conditioning or automatic climate control off with open door		●
Literature package	●		Automatic truck shutdown with timer		●
Operator's manual	●		Lockable battery disconnect switch		●
CE certification	●		Battery jump start connector (NATO plug)		●
24 Months / 4000 Hours Parts manufacturer's warranty	●		Operator password (display) for truck start		●
Heavy duty air intake (raised)		●	Seatbelt interlock for truck start		●
High mount exhaust		●	Fuses partially replaced by electric circuit breakers		●
Speed limiter - unconditional and customer adjustable		●	Lockable fuel cap		●
Travel speed limiter - loaded (adjustable)		●	Diesel fuel inlet strainer in filler neck		●
Hydraulic accumulator		●	Yale Vision wireless asset management system		●
Hydraulic system temperature protection		●	Yale Vision wireless asset management - Access / Verification		●
Mast tilt indicator - mechanical		●	Yale Vision wireless asset management - Monitoring		●
Enclosed operator cabin		●	Auto greasing system for basic truck and outer mast		●
Powered tilt operator compartment for service		●	Steer wheel lug nut protection		●
Air suspension seat		●	Front mud flaps		●
Deluxe air suspension seat		●	Rear mud flaps		●
High backrest seat		●	Lifting eyes - 2 front and 2 rear		●
Additional armrest on left side		●	Special paint base truck		●
Cloth seat cover		●	Operator compartment special paint (outside only)		●
Seat heating		●	Hazard warning striping on counterweight		●
Seat ventilation		●	12 Months / 2000 Hours Parts manufacturer's warranty		●
Lateral seat sliding mechanism		●			

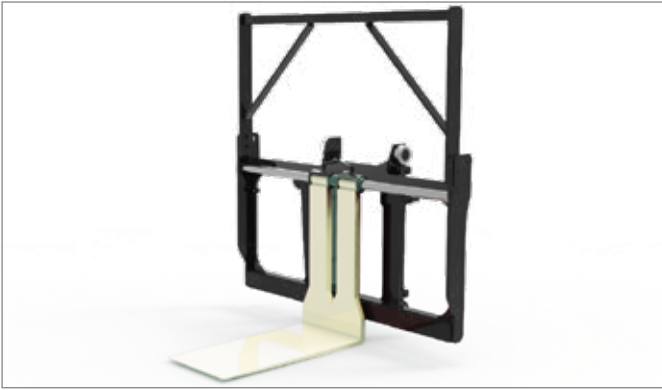
## FEATURES LIST – DF/EF SERIES

GDP 90DF(L), GDP 100DF, GDP 120DF	STD	OPT	GDP 160EF(S)12, GDP 160EF12	STD	OPT
10.00 - 20 16PR Pneumatic Bias Ply drive and steer tyres	●		12.00 - 20 20 Pneumatic Bias Drive tyres	●	
10.00 - R20 Radial Michelin XZM drive and steer tyres		●	12.00 - R20 Michelin XZM Radial drive and steer tyres		●
10.00 - R20 Radial Trelleborg drive and steer tyres		●	126cc dual pump hydraulic system	●	
10.00 - 20 Pneumatic Shaped Solid drive and steer tyres		●	Two mast mounted work lights		●
Spare wheels and tyres		●	2 Stage Non Free Lift mast 18t	●	
90cc Dual pump hydraulic system	●		2 Stage Full Free Lift mast 18t		●
111cc Dual pump hydraulic system		●	3 Stage Full Free Lift mast 18t		●
Four mast mounted work lights		●	Mast tilt - 6° forward / 10° back	●	
2 stage Non Free Lift 9t and 12t mast	●		Mast tilt - 10.5° forward / 12° back		●
2 Stage Full Free Lift 12t mast (can be used on lower capacity models)		●	Mast tilt - 15° forward / 10° back		●
3 Stage Full Free Lift 12t mast (can be used on lower capacity models)		●	2440mm (96") length pin type forks		●
Mast tilt - 15° forward / 12° back	●		2440mm (96") length hook type forks		●
Mast tilt - 5° forward / 6° back		●	2540mm (100") Pin type carriage with mechanical fork locks	●	
Mast tilt - 5° forward / 12° back		●	2440mm (96") length integral fork	●	
Mast tilt - 15° forward / 10° back		●	2540mm (100") Dual function sideshift carriage with individual fork positioner with integral forks		●
Mast tilt - 20.5° forward / 7° back		●	2540mm (100") Pin type carriage with individual fork positioner		●
2400mm (94.3") Pin type standard carriage	●		2540mm (100") Pin type apron-style sideshift carriage		●
2400mm (94.3") Pin type carriage with simultaneous and independent fork positioner		●	2540mm (100") Pin type apron-style sideshift carriage with individual fork positioner		●
2400mm (94.3") Pin type integral sideshift carriage		●	2540mm (100") Hook type dual function sideshift carriage with individual fork positioner with Quick Disconnect forks		●
2400mm (94.3") Pin type integral sideshift carriage with simultaneous fork positioner		●	Simultaneous fork positioning		●
2400mm (94.3") Pin type integral sideshift carriage with simultaneous and independent fork positioner		●			
2400mm (94.5") QD Hook type dual function sideshift carriage with simultaneous and independent fork positioner		●			
2400mm (94.4") QD Hook type dual function sideshift carriage with simultaneous fork positioner and 2 auxiliary functions		●			
2500mm (98") High load backrest (for lumber applications)		●			
1760mm (69") High load backrest		●			
2010mm (79") High load backrest		●			
Pin type forks (various sizes)		●			
Hook type quick disconnect DFSSFP forks (various sizes)		●			
GDP 130EF(S), GDP 130EF, GDP 140EF(S), GDP 140EF, GDP 160EF, GDP 120EF12	STD	OPT			
12.00 - 20 20PR Trelleborg Pneumatic Bias Ply drive and steer tyres	●				
12.00 - R20 Michelin XZM Radial drive and steer tyres		●			
12.00 - R20 Trelleborg Radial drive and steer tyres		●			
12.00 - 20 Pneumatic Shaped Solid drive and steer tyres		●			
Spare wheels and tyres		●			
126cc dual pump hydraulic system	●				
Four mast mounted work lights		●			
2 Stage Non Free Lift 16T mast	●				
2 Stage Full Free Lift 16T mast		●			
3 Stage Full Free Lift 16T mast		●			
Mast tilt - 15° forward / 12° back	●				
Mast tilt - 5° forward / 6° back		●			
Mast tilt - 5° forward / 12° back		●			
Mast tilt - 15° forward / 10° back		●			
Mast tilt - 20.5° forward / 7° back		●			
2400mm (94.3") Pin type standard carriage	●				
2400mm (94.3") Pin type carriage with simultaneous and independent fork positioner		●			
2400mm (94.3") Pin type integral sideshift carriage		●			
2400mm (94.3") Pin type integral sideshift carriage with simultaneous fork positioner		●			
2400mm (94.3") Pin type integral sideshift carriage with simultaneous and independent fork positioner		●			
2400mm (94.5") QD Hook type dual function sideshift carriage with simultaneous and independent fork positioner		●			
2400mm (94.4") QD Hook type dual function sideshift carriage with simultaneous fork positioner and 2 auxiliary functions		●			
2500mm (98") high load backrest (for lumber applications)		●			
1760mm (69") high load backrest		●			
2010mm (79") high load backrest		●			
Pin type forks (various sizes)		●			
Pin type forks for lumber applications		●			
Hook type quick disconnect DFSSFP forks (various sizes)		●			

Standard or optional in selected markets. Other options available through Special Products Engineering Department (SPED). Contact Yale for details

All values are nominal values and they are subject to tolerances.

**FRONT END EQUIPMENT – GDP 90-160DF/EF**



Pin type carriage with simultaneous and independent fork positioner (for Lumber applications).



Pin type standard carriage.



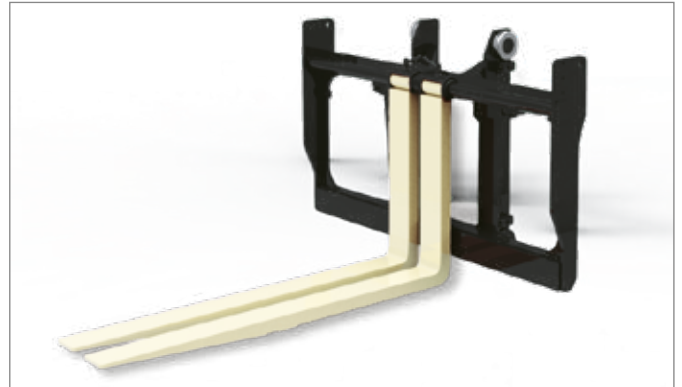
Pin type carriage with simultaneous and independent fork positioner.



Pin type integral Sideshift frame carriage.



Pin type integral Sideshift frame carriage.



Pin type frame carriage.



QD hook type Dual Function sideshift with simultaneous and independent fork positioner.



**FRONT END EQUIPMENT – GDP 160EF(S)12**



Range of pin type and hook type forks.



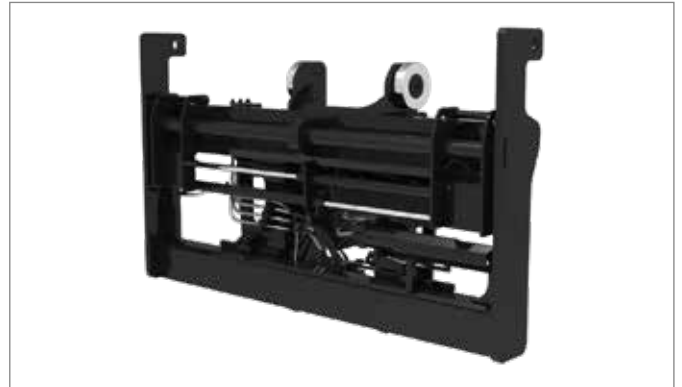
Pin type carriage without fork positioner.



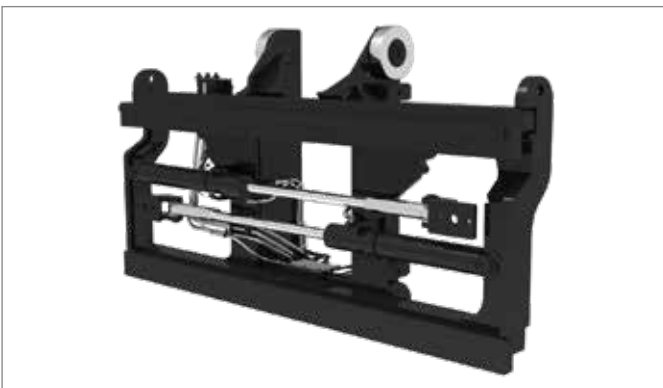
Pin type carriage with fork positioner.



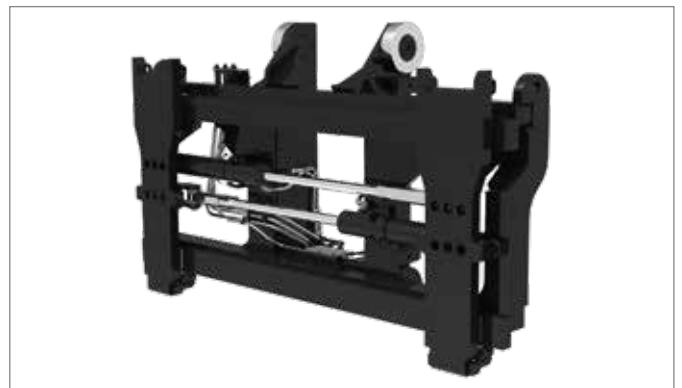
Pin type integral sideshift frame carriage without fork positioner.



Pin type integral sideshift frame carriage without fork positioner.



Integral hook type dual function sideshift carriage with fork positioner.



QD hook type dual function sideshift carriage with fork positioner.



# About Yale®

Yale Materials Handling Corporation is one of the oldest manufacturers of lift trucks in the world. We've been in the business of lifting since 1875 and we apply that experience to help customers solve materials handling challenges. Our full line of lift trucks range in capacity from 1 to 16 tonne and are powered by internal combustion engines or electric options. Yale also offers robotic solutions, telemetry, fleet management, parts, financing and training. From traditional lift truck equipment to emerging technologies, our goal, every day, is to work with our nationwide dealer network to continually improve and provide the solutions you need, when and how you need them.

## MATERIALS HANDLING FOR:

3PL

Auto Parts

Beverage

Cold & Frozen Foods

Food Distribution

Food Processing

Furniture & Furnishings

Health & Pharma

Home Centres

Retail

E-Commerce

## Yale Lift Truck Technologies


Centennial House  
Frimley Business Park  
Frimley  
Surrey  
GU16 7SG  
United Kingdom

[www.yale.com](http://www.yale.com)



**Safety:** All Yale products sold into EU countries, UK, and Turkey conform to the EU requirements of Machinery Directive 2006/42/EC and contain **CE** marking. Yale trucks sold into other countries may be ordered for production in conformance with Machinery Directive requirements, and when so ordered will contain **CE** marking.

HYSTER-YALE UK LIMITED trading as Yale Lift Truck Technologies. Registered Address: Centennial House, Building 4.5, Frimley Business Park, Frimley, Surrey, GU16 7SG, United Kingdom. Registered in England and Wales. Company Registration Number: 02636775.

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**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. Consult your Yale® Dealer if any of the information shown is critical to your application.

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