



MP series

1,600kg / 1,800kg / 2,000kg / 2,200kg

Powered Pallet Truck



SPECIFICATION SHEET

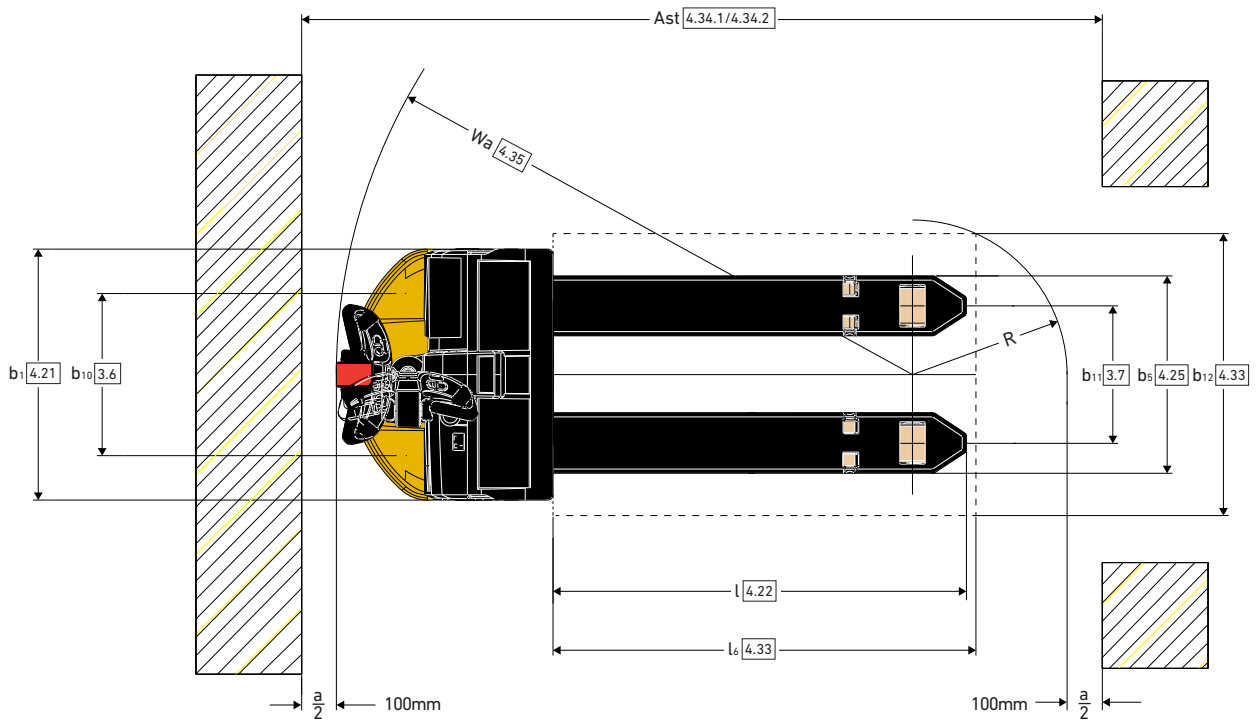
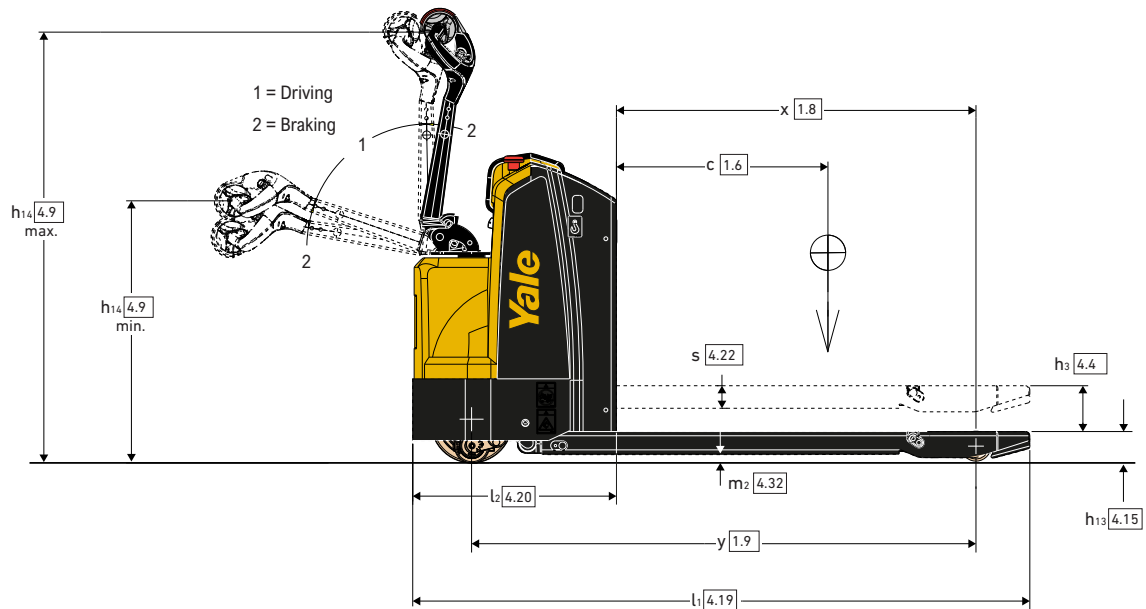
Models: MP16, MP18, MP20, MP22

Truck Dimensions

$$Ast = Wa + R + a$$

$$Ast = Wa + \sqrt{(l_6 - x)^2 + (b_{12} / 2)^2} + a$$

$$a = 200$$





VDI 2198 – General Specifications

		Yale						
		MP16	MP18	MP20	MP22			
Distinguishing mark	1.1	Manufacturer (abbreviation)	Yale					
	1.2	Manufacturer's type designation	MP16	MP18	MP20	MP22		
	1.3	Drive: electric (battery type, mains, ...), diesel, petrol, fuel gas	Electric (battery)					
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Pedestrian					
	1.5	Rated capacity/Rated load	Q (t)	1.6	1.8	2.0	2.2	
	1.6	Load centre distance ⁽²⁾	c (mm)	600				
	1.8	Load distance, centre of drive axle to fork ⁽²⁾	x (mm)	955				
1.9	Wheelbase ⁽²⁾	y (mm)	1368		1440			
Weights	2.1	Service weight ⁽²⁾⁽¹⁾	kg	545		632		
	2.2	Axle loading, laden front/rear ⁽²⁾	kg	841 / 1304	893 / 1452	983 / 1649	1032 / 1800	
	2.3	Axle loading, unladen front/rear ⁽²⁾	kg	425 / 120		489 / 143		
Tyres/chassis	3.1	Tyres: polyurethane, tophane, NDIIThane, front/rear	Polyurethane					
	3.2	Tyre size, front	ø (mm x mm)	250 x 75				
	3.3	Tyre size, rear	ø (mm x mm)	85 x 110				
	3.4	Additional wheels (dimensions)	ø (mm x mm)	100 x 40				
	3.5	Wheels, number front/rear (x = driven wheels)		1x + 2 / 2				
	3.6	Tread, front	b ₁₀ (mm)	461				
	3.7	Tread, rear	b ₁₁ (mm)	390				
Dimensions	4.4	Lift	h ₃ (mm)	130				
	4.9	Height drawbar in driving position min./max.	h ₁₄ (mm)	744 / 1221				
	4.15	Height, lowered	h ₁₃ (mm)	85				
	4.19	Overall length ⁽²⁾	l ₁ (mm)	1734		1806		
	4.20	Length to face of forks ⁽²⁾	l ₂ (mm)	578		650		
	4.21	Overall width	b ₁ / b ₂ (mm)	712				
	4.22	Fork dimensions ⁽²⁾	s/e/l (mm)	64 / 172 / 1156				
	4.25	Forks spread	b ₅ (mm)	560				
	4.32	Ground clearance, centre of wheelbase	m ₂ (mm)	21				
	4.33	Load dimension b ₁₂ × l ₆	b ₁₂ × l ₆	-				
	4.34.1	Aisle width for pallets 1000mm x 1200mm crossways ⁽²⁾	A _{st} (mm)	2337		2409		
	4.34.2	Aisle width for pallets 800mm x 1200mm lengthwise ⁽²⁾	A _{st} (mm)	2204		2276		
	4.35	Turning radius ⁽²⁾	W _a (mm)	1535		1607		
Performance data	5.1	Travel speed, laden/unladen	km/h	6 / 6				
	5.1.1	Travel speed, laden/unladen, backwards	km/h	6 / 6				
	5.2	Lift speed, laden/unladen	m/s	0.04 / 0.05				
	5.3	Lowering speed, laden/unladen	m/s	0.09 / 0.04				
	5.7	Gradeability, laden/unladen	%	5.5 / 15	5 / 15	4.5 / 15	4 / 15	
	5.8	Max. gradeability, laden/unladen ⁽⁶⁾	%	10 / 20 (12 / 24)	9 / 20 (10.8 / 24)	8 / 20 (9.6 / 24)	7.5 / 20 (9 / 24)	
	5.10	Service brake		Electro Magnetic				
Electric engine	6.1	Drive motor S2 60 minute rating	kW	1.25				
	6.2	Lift motor, S3 15% rating	kW	1.2				
	6.3	Battery according to DIN 43531/35/36 A,B,C, no		B				
	6.4	Battery voltage/nominal capacity K5 ⁽²⁾	(V)/(Ah)	24 / 250 ⁽³⁾	24 / 250 ⁽³⁾	24 / 375 ⁽⁴⁾	24 / 375 ⁽⁵⁾	
	6.5	Battery weight ⁽²⁾⁽¹⁾	kg	212		288		
	6.6	Energy consumption according to DIN EN 16796	kWh/h	0.32		0.36		0.41
	6.7	Turnover output according to VDI 2198	l/h	89		110		120
	6.8	Turnover efficiency according to VDI 2198	t/kWh	112		117		119
8.1	Type of drive unit		AC-Controller					
10.7	Sound pressure level at the driver's seat	dB (A)	< 70					

On MP16 / MP18 available batteries 150Ah, 210Ah.

⁽¹⁾ These values may vary of +/- 5%

⁽²⁾ See "Batteries table"

⁽³⁾ Available batteries 150Ah, 210Ah and 50Ah, 60Ah, 100Ah, 120Ah Li-Ion

⁽⁴⁾ Available batteries 150Ah, 210Ah, 250Ah, 315Ah and 50Ah, 60Ah, 100Ah, 120Ah, 200Ah Li-Ion

⁽⁵⁾ Available batteries 210Ah, 250Ah, 315Ah and 50Ah, 100Ah, 200Ah Li-Ion

⁽⁶⁾ Values in bracket are Optional

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

For further information, please contact the manufacturer.

Yale products might be subject to change without notice.

Lift trucks illustrated may feature optional equipment.

Values may vary with alternative configurations.

Battery compartment 375 / 315 Ah ($b_5 = 520\text{mm} - 560\text{mm} - 670\text{mm}$)

Distinguishing mark	1.6	Load centre distance	c (mm)	400	500	600	700	800	400	500	600	700	800
				1.8	Load distance, centre of drive axle to fork	x (mm)	599	805	955	1199	1399	599	805
1.9	Wheelbase	y (mm)	1084	1290	1440	1684	1884	1084	1290	1440	1684	1884	
Weights	2.1	Service weight ⁽¹⁾	kg	612	623	632	646	657	456	467	476	490	501
	2.2	Axle loading, laden ⁽³⁾	kg front	809	944	983	1106	1166	753	756	759	763	767
			kg rear	1803	1679	1649	1540	1491	1703	1711	1717	1727	1734
2.3	Axle loading, unladen	kg front	441	471	489	513	529	140	143	146	150	154	
		kg rear	171	152	143	133	128	316	324	330	340	347	
Dimensions	4.19	Overall length (pedestrian)	l_1 (mm)	1450	1656	1806	2050	2250	1450	1656	1806	2050	2250
	4.20	Length to face of forks (pedestrian)	l_2 (mm)	650	650	650	650	650	650	650	650	650	650
	4.22	Fork length	l (mm)	800	1006	1156	1400	1600	800	1006	1156	1400	1600
	4.34.1	Aisle width for pallets 1000mm x 1200mm wide (pedestrian)	A_{st} (mm)	2173	2288	2409	2683	2972	2173	2288	2409	2683	2972
	4.34.2	Aisle width for pallets 800mm x 1200mm long (pedestrian)	A_{st} (mm)	2173	2219	2276	2451	2698	2173	2219	2276	2451	2698
	4.35	Turning radius (pedestrian)	W_a (mm)	1251	1457	1607	1851	2051	1251	1457	1607	1851	2051
Electric engine	6.3	Battery according to DIN 43531/35/36 A,B,C, no		B				no					
	6.4	Battery voltage / capacity at 5 hours rate	(V) / (Ah)	24 / 375 - 315				24 / 200 ⁽²⁾					
	6.5	Battery weight ⁽¹⁾	kg	288				132					

Battery compartment 250 / 210Ah ($b_5 = 520\text{mm} - 560\text{mm} - 670\text{mm}$)

Distinguishing mark	1.6	Load centre distance	c (mm)	400	500	600	700	800	400	500	600	700	800
				1.8	Load distance, centre of drive axle to fork	x (mm)	599	805	955	1199	1399	599	805
1.9	Wheelbase	y (mm)	1012	1218	1368	1612	1812	1012	1218	1368	1612	1812	
Weights	2.1	Service weight ⁽¹⁾	kg	525	536	545	559	570	499 ⁽⁵⁾	510 ⁽⁵⁾	519 ⁽⁵⁾	533 ⁽⁵⁾	544 ⁽⁵⁾
	2.2	Axle loading, laden ⁽³⁾	kg front	776	910	945	1066	1123	768	771	774	909	945
			kg rear	1749	1626	1600	1493	1447	1731	1739	1745	1624	1599
2.3	Axle loading, unladen	kg front	382	409	425	447	461	363	371	378	407	424	
		kg rear	143	127	120	112	109	136	139	141	126	120	
Dimensions	4.19	Overall length (pedestrian)	l_1 (mm)	1378	1584	1734	1978	2178	1378	1584	1734	1978	2178
	4.20	Length to face of forks (pedestrian)	l_2 (mm)	578	578	578	578	578	578	578	578	578	578
	4.22	Fork length	l (mm)	800	1006	1156	1400	1600	800	1006	1156	1400	1600
	4.34.1	Aisle width for pallets 1000mm x 1200mm wide (pedestrian)	A_{st} (mm)	2101	2216	2337	2611	2900	2101	2216	2337	2611	2900
	4.34.2	Aisle width for pallets 800mm x 1200mm long (pedestrian)	A_{st} (mm)	2101	2147	2204	2379	2626	2101	2147	2204	2379	2626
	4.35	Turning radius (pedestrian)	W_a (mm)	1179	1385	1535	1779	1979	1179	1385	1535	1779	1979
Electric engine	6.3	Battery according to DIN 43531/35/36 A,B,C, no		B				no					
	6.4	Battery voltage / capacity at 5 hours rate	(V) / (Ah)	24 / 250 - 210				24 / 250 ⁽⁴⁾					
	6.5	Battery weight ⁽¹⁾	kg	212				180					

Battery compartment 150Ah ($b_5 = 520\text{mm} - 560\text{mm} - 670\text{mm}$)

Distinguishing mark	1.6	Load centre distance	c (mm)	400	500	600	700	800	400	500	600	700	800
				1.8	Load distance, centre of drive axle to fork	x (mm)	599	805	955	1199	1399	599	805
1.9	Wheelbase	y (mm)	950	1156	1306	1550	1750	950	1156	1306	1550	1750	
Weights	2.1	Service weight ⁽¹⁾	kg	449	460	469	483	494	430	441	450	464	475
	2.2	Axle loading, laden ⁽³⁾	kg front	748	881	912	1032	1086	729	862	893	1013	1067
			kg rear	1701	1579	1557	1451	1408	1701	1579	1557	1451	1408
2.3	Axle loading, unladen	kg front	328	352	367	387	400	314	337	352	371	384	
		kg rear	121	108	102	96	94	116	104	98	93	91	
Dimensions	4.19	Overall length (pedestrian)	l_1 (mm)	1316	1522	1672	1916	2116	1316	1522	1672	1916	2116
	4.20	Length to face of forks (pedestrian)	l_2 (mm)	516	516	516	516	516	516	516	516	516	516
	4.22	Fork length	l (mm)	800	1006	1156	1400	1600	800	1006	1156	1400	1600
	4.34.1	Aisle width for pallets 1000mm x 1200mm wide (pedestrian)	A_{st} (mm)	2039	2154	2275	2549	2838	2039	2154	2275	2549	2838
	4.34.2	Aisle width for pallets 800mm x 1200mm long (pedestrian)	A_{st} (mm)	2039	2085	2142	2317	2564	2039	2085	2142	2317	2564
	4.35	Turning radius (pedestrian)	W_a (mm)	1117	1323	1473	1717	1917	1117	1323	1473	1717	1917
Electric engine	6.3	Battery according to DIN 43531/35/36 A,B,C, no		no				no					
	6.4	Battery voltage / capacity at 5 hours rate	(V) / (Ah)	24 / 150				24 / 150 ⁽⁴⁾					
	6.5	Battery weight ⁽¹⁾	kg	144				125					

⁽¹⁾ These values may vary of +/- 5%

⁽³⁾ Axle loading with LOAD = 2000Kg

⁽⁵⁾ Includes ballast 6kg

⁽²⁾ Li-Ion battery

⁽⁴⁾ Polypropylene case version

Battery compartment 150Ah (b₅ = 520mm - 560mm - 670mm) - continued

Distinguishing mark	Description	Unit	520mm				560mm				670mm							
			400	500	600	700	800	400	500	600	700	800	400	500	600	700	800	
1.6	Load centre distance	c (mm)	400	500	600	700	800	400	500	600	700	800	400	500	600	700	800	
1.8	Load distance, centre of drive axle to fork	x (mm)	599	805	955	1199	1399	599	805	955	1199	1399	599	805	955	1199	1399	
1.9	Wheelbase	y (mm)	950	1156	1306	1550	1750	950	1156	1306	1550	1750	950	1156	1306	1550	1750	
Weights	2.1	Service weight ⁽¹⁾	kg	367	378	387	401	412	350	361	370	384	395	350	361	370	384	395
	2.2	Axle loading, laden ⁽³⁾	kg front	723	726	729	734	737	718	721	724	728	732	718	721	724	728	732
			kg rear	1644	1652	1658	1667	1675	1632	1640	1646	1656	1663	1632	1640	1646	1656	1663
	2.3	Axle loading, unladen	kg front	112	115	118	123	126	107	110	113	117	121	107	110	113	117	121
			kg rear	255	263	269	278	286	243	251	257	267	274	243	251	257	267	274
Dimensions	4.19	Overall length (pedestrian)	l ₁ (mm)	1316	1522	1672	1916	2116	1316	1522	1672	1916	2116	1316	1522	1672	1916	2116
	4.20	Length to face of forks (pedestrian)	l ₂ (mm)	516	516	516	516	516	516	516	516	516	516	516	516	516	516	516
	4.22	Fork length	l (mm)	800	1006	1156	1400	1600	800	1006	1156	1400	1600	800	1006	1156	1400	1600
	4.34.1	Aisle width for pallets 1000mm x 1200mm wide (pedestrian)	A _{st} (mm)	2039	2154	2275	2549	2838	2039	2154	2275	2549	2838	2039	2154	2275	2549	2838
	4.34.2	Aisle width for pallets 800mm x 1200mm long (pedestrian)	A _{st} (mm)	2039	2085	2142	2317	2564	2039	2085	2142	2317	2564	2039	2085	2142	2317	2564
	4.35	Turning radius (pedestrian)	W _a (mm)	1117	1323	1473	1717	1917	1117	1323	1473	1717	1917	1117	1323	1473	1717	1917
Electric engine	6.3	Battery according to DIN 43531/35/36 A,B,C, no		no				no				no						
	6.4	Battery voltage / capacity at 5 hours rate	(V) / (Ah)	24 / 50 ⁽²⁾				24 / 60 ⁽²⁾				24 / 60 ⁽²⁾						
	6.5	Battery weight ⁽¹⁾	kg	62				62				45						

Battery compartment 150Ah (b₅ = 520mm - 560mm - 670mm) - continued

Distinguishing mark	Description	Unit	520mm				560mm				670mm							
			400	500	600	700	800	400	500	600	700	800	400	500	600	700	800	
1.6	Load centre distance	c (mm)	400	500	600	700	800	400	500	600	700	800	400	500	600	700	800	
1.8	Load distance, centre of drive axle to fork	x (mm)	599	805	955	1199	1399	599	805	955	1199	1399	599	805	955	1199	1399	
1.9	Wheelbase	y (mm)	950	1156	1306	1550	1750	950	1156	1306	1550	1750	950	1156	1306	1550	1750	
Weights	2.1	Service weight ⁽¹⁾	kg	380	391	400	414	425	380	391	400	414	425	380	391	400	414	425
	2.2	Axle loading, laden ⁽³⁾	kg front	727.1	730.5	733.2	737.5	740.8	727.1	730.5	733.2	737.5	740.8	727.1	730.5	733.2	737.5	740.8
			kg rear	1653	1661	1667	1677	1684	1653	1661	1667	1677	1684	1653	1661	1667	1677	1684
	2.3	Axle loading, unladen	kg front	116.1	119.5	122.2	126.5	129.8	116.1	119.5	122.2	126.5	129.8	116.1	119.5	122.2	126.5	129.8
			kg rear	263.9	271.5	277.8	287.5	295.2	263.9	271.5	277.8	287.5	295.2	263.9	271.5	277.8	287.5	295.2
Dimensions	4.19	Overall length (pedestrian)	l ₁ (mm)	1316	1522	1672	1916	2116	1316	1522	1672	1916	2116	1316	1522	1672	1916	2116
	4.20	Length to face of forks (pedestrian)	l ₂ (mm)	516	516	516	516	516	516	516	516	516	516	516	516	516	516	516
	4.22	Fork length	l (mm)	800	1006	1156	1400	1600	800	1006	1156	1400	1600	800	1006	1156	1400	1600
	4.34.1	Aisle width for pallets 1000mm x 1200mm wide (pedestrian)	A _{st} (mm)	2039	2154	2275	2549	2838	2039	2154	2275	2549	2838	2039	2154	2275	2549	2838
	4.34.2	Aisle width for pallets 800mm x 1200mm long (pedestrian)	A _{st} (mm)	2039	2085	2142	2317	2564	2039	2085	2142	2317	2564	2039	2085	2142	2317	2564
	4.35	Turning radius (pedestrian)	W _a (mm)	1117	1323	1473	1717	1917	1117	1323	1473	1717	1917	1117	1323	1473	1717	1917
Electric engine	6.3	Battery according to DIN 43531/35/36 A,B,C, no		no				no				no						
	6.4	Battery voltage / capacity at 5 hours rate	(V) / (Ah)	24 / 120 ⁽²⁾				24 / 120 ⁽²⁾				24 / 120 ⁽²⁾						
	6.5	Battery weight ⁽¹⁾	kg	75				75				75						

⁽¹⁾ These values may vary of +/- 5%

⁽²⁾ Li-Ion battery

⁽³⁾ Axle loading with LOAD = 2000kg

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

For further information, please contact the manufacturer.

Yale products might be subject to change without notice.

Lift trucks illustrated may feature optional equipment.

Values may vary with alternative configurations.



About Yale®



Yale is a leading global manufacturer and supplier of high-quality counterbalance forklift trucks, warehouse equipment and fleet solutions. 'People, products and productivity' sums up our approach to the materials handling business. With over 140 years' experience, we are proud of our reputation as an innovative, forward-thinking manufacturer.

Yale dealerships provide flexible truck servicing solutions and are linked to one of the industry's most sophisticated parts distribution operations. You'll find support for Yale forklifts throughout the EMEA region – provided by a big regional footprint stretching through Europe, Middle East and Africa.

Materials handling for:



Automotive



Beverage



Chemical



Construction



Food



Logistics



Metals



Paper



Retail



Wood

Yale Europe Materials Handling

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

Tel: +44 (0) 1276 538500

Fax: +44 (0) 1276 538559

www.yale.com



Publication part no. 220991547 Rev.05 Printed in The Netherlands (1022HG) EN.

HYSTER-YALE UK LIMITED trading as Yale Europe Materials Handling.

Safety: This truck conforms to the current EU requirements.

Specification is subject to change without notice.

©2022 Yale. All rights reserved. YALE, and PEOPLE. PRODUCTS. PRODUCTIVITY. are trademarks of Hyster-Yale Group, Inc. is a registered copyright of Hyster-Yale Group, Inc.

Trucks shown with optional equipment. Country of Registration: England and Wales.

Company Registration Number: 02636775.