Technical sheet:

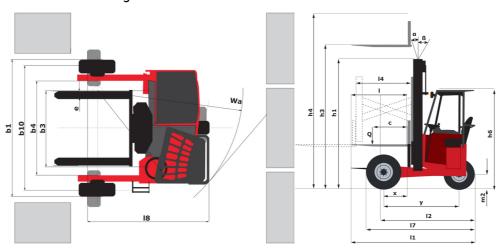
## **TMM 20 ST5**





Technical characteristics	TMM 20 ST5 Created on 4 May 2024 at 10:50:32 am 010		
1.2   Model Name			
1.2.1   Reach out equipment			
1.3   Power source			
1.4   Operator type			
1.5 Max. capacity c			
1.5 Max. capacity can be caused a common of gravity common of the common of gravity consistency and the common of gravity consistency can be common of gravity consistency can be common of gravity consistency can be common of gravity can be consistent or gravity can be common of gravity can be co			
1.6         Load center of gravity         c         5500 mm           1.8         Load distance, centre of drive axle to fork         x         4900 mm           1.9         Wheelbase         y         1598 mm           Weight         290 kg         290 kg           2.1         Service weight         290 kg         290 kg           Weight on front axie (laden) / rear axle (laden)         3050 kg / 1240 kg         3050 kg / 1240 kg           Wheels         1050 kg / 1240 kg         1050 kg / 1240 kg           3.1         Tires type         Pneumatic         27x10-12 lC30           3.2         Dimensions of front wheels         27x10-12 lC30         27x10-12 lC30           3.5         Number of front wheels / rear wheels         2.1         2.1           3.5         Dive wheels (front / rear)         2.1         2.1           3.6         Front wheel gauge         b10         2151 mm           Dimensions         1         2.1         2.1           4.7         Height of overhead guard (cabin)         h6         2.120 mm           4.8         Sea theleight/stand height         h7         1.070 mm           4.19         Overall length         h7         1.070 mm           4.21			
1.8 Load distance, centre of drive axle to fork  1.9 Wheelbase  Welpht  2.1 Service weight  2.2 Weight on front axle (laden) / rear axle (laden)  Wheelbase  Weight on front axle (Unladen) / rear axle (laden)  3.1 Tires type  3.1 Tires type  3.2 Dimensions of front wheels  3.2 Dimensions of front wheels  3.3 Dimensions of front wheels  3.5 Dimensions of rear wheels  3.5 Dimensions of rear wheels  3.6 Front wheel gauge  b10 2151 mm  Dimensions  4.7 Height of overhead guard (cabin)  A.8 Seat height/stand height  4.9 Overall length  4.10 Overall width  5.1 Coverall width  5.2 Fork carriage width  6.2 Carriage width  6.3 1260 mm  4.22 Fork carriage width  6.3 1260 mm  4.24 Fork carriage width  6.5 15 Istance between wheel arms/loading surfaces  8.4 13363 mm  4.24 Asia width for 800 x 1200 pallet lengthways  4.25 Circumances  5.1 Travel speed (laden / unladen)  Ferformances  5.1 Travel speed (laden / unladen)  Fork carriage peed (laden / unladen)  Fork carriage speed (laden / unladen)  For comances  5.1 Travel speed (laden / unladen)  Fork carriage speed (laden / unladen)  Fork carriage speed (laden / unladen)  Fork carriage speed (laden / unladen)  Foreformances  5.1 Travel speed (laden / unladen)  Fork carriage speed (laden / unladen)  Fork carriage speed (laden / unladen)  Fork carriage speed (laden / unladen)  Foreformances  Foreformanc			
1.9   Wheelbase   y   1598 mm			
Weight   221   Service weight   2290 kg   2290 kg   2290 kg   2290 kg   3050 kg / 1240 kg   23   Weight on front axie (Unladen) / rear axie (Unladen)   1050 kg / 1240 kg   23   Weight on front axie (Unladen) / rear axie (Unladen)   1050 kg / 1240 kg   24   24   27   24   27   24   27   27			
2.1   Service weight   2290 kg   3050 kg / 1240 kg   1050 kg / 1250 kg / 1			
2.2       Weight on front axle (laden) / rear axle (laden)       3050 kg / 1240 kg         2.3       Weight on front axle (Unladen)       1050 kg / 1240 kg         Wheels         3.1       Tires type       Pneumatic         3.2       Dimensions of front wheels       27x10-12 LG30         3.3       Dimensions of rear wheels       2/1         3.5       Number of front wheels / rear wheels       2/1         3.5       Drive wheels (front / rear)       2/1         3.6       Front wheel gauge       b10       2151 mm         Dimensions         Dimensions         A Height of overhead guard (cabin)       h6       2120 mm         4.8       Seat height/stand height       h7       1070 mm         4.9       Overall length       11       2650 mm         4.21       Overall width / length       s / e / l       40 mm x 122 mm x 1200 mm         4.22       Fork seation / width / length       s / e / l       40 mm x 122 mm x 1200 mm         4.23       Fork carriage width       b3       1260 mm         4.24       Fork carriage width       b3       1260 mm         4.25       Distance between wheel arms/loading surfaces       b4       1600 mm </td <td></td>			
2.3   Weight on front axie (Unladen) / rear axie (Unladen)   1050 kg / 1240 kg			
Wheels   Pneumatic   Pneumatic			
3.1   Tires type			
3.2   Dimensions of front wheels   27x10-12 IC30     3.3   Dimensions of rear wheels   27x10-12 IC30     3.5   Number of front wheels / rear wheels   2/1     3.5   Drive wheels (front / rear)   2/1     3.6   Front wheel gauge   b10   2151 mm			
3.3       Dimensions of rear wheels       27x10-12 IC30         3.5       Number of front wheels / rear wheels       2 / 1         3.5.2       Drive wheels (front / rear)       2 / 1         3.6       Front wheel gauge       b10       2151 mm         Dimensions         4.7       Height of overhead guard (cabin)       h6       2120 mm         4.8       Seat height/stand height       h7       1070 mm         4.19       Overall length       11       2650 mm         4.21       Overall width       b1       2406 mm         4.22       Fork section / width / length       s / e / I       40 mm x 122 mm x 1200 mm         4.23       Fork carriage ISO 2328 (class/form) A/B       2A         4.24       Fork carriage width       b3       1260 mm         4.25       Distance between support arms       b4       1165 mm         4.26       Distance between wheel arms/loading surfaces       b4       1600 mm         4.28       Maximum horizontal extension at COG 600       I4       1000 mm         4.32       Ground clearance at centre of wheelbase       m2       272 mm         4.34       Aisle width for 800 x 1200 pallet lengthways       Ast       3363 mm         4.35 </td <td></td>			
3.5       Number of front wheels / rear wheels       2 / 1         3.5.2       Drive wheels (front / rear)       2 / 1         3.6       Front wheel gauge       b10       2151 mm         Olmensions         4.7       Height of overhead guard (cabin)       h6       2120 mm         4.8       Seat height/stand height       h7       1070 mm         4.19       Overall length       i1       2550 mm         4.21       Overall width       b1       2406 mm         4.22       Fork section / width / length       s / e / I       40 mm x 122 mm x 1200 mm         4.23       Fork carriage ISO 2328 (class/form) A/B       2A         4.24       Fork carriage width       b3       1260 mm         4.25       Distance between support arms       b4       1165 mm         4.26       Distance between wheel arms/loading surfaces       b4       1600 mm         4.26       Distance between wheel arms/loading surfaces       b4       1000 mm         4.32       Ground clearance at centre of wheelbase       m2       272 mm         4.33       Aisle width for 800 x 1200 pallet lengthways       Ast       3363 mm         4.35       Turning radius       Wa       2463 mm <td< td=""><td></td></td<>			
3.5.2   Drive wheels (front / rear)   2 / 1			
See			
Dimensions           4.7         Height of overhead guard (cabin)         h6         2120 mm           4.8         Seat height/stand height         h7         1070 mm           4.19         Overall length         I1         2650 mm           4.21         Overall width         b1         2406 mm           4.22         Forks section / width / length         s / e / l         40 mm x 122 mm x 1200 mm           4.23         Fork carriage ISO 2328 (class/form) A/B         2A           4.24         Fork carriage width         b3         1260 mm           4.25         Distance between support arms         b4         1165 mm           4.26         Distance between wheel arms/loading surfaces         b4         1600 mm           4.28         Maximum horizontal extension at COG 600         l4         1000 mm           4.32         Ground clearance at centre of wheelbase         m2         272 mm           4.34         Aisle width for 800 x 1200 pallet lengthways         Ast         3363 mm           4.35         Tuming radius         Wa         2463 mm           Performances           5.1         Travel speed (laden / unladen)         9.40 km/h - 9.50 km/h           5.2         Lifting speed (laden / unla			
4.7       Height of overhead guard (cabin)       h6       2120 mm         4.8       Seat height/stand height       h7       1070 mm         4.19       Overall length       I1       2650 mm         4.21       Overall width       b1       2406 mm         4.22       Forks section / width / length       s / e / I       40 mm x 122 mm x 1200 mm         4.23       Fork carriage ISO 2328 (class/form) A/B       2A         4.24       Fork carriage width       b3       1260 mm         4.25       Distance between support arms       b4       1165 mm         4.26       Distance between wheel arms/loading surfaces       b4       1600 mm         4.28       Maximum horizontal extension at COG 600       I4       1000 mm         4.32       Ground clearance at centre of wheelbase       m2       272 mm         4.34       Aisle width for 800 x 1200 pallet lengthways       Ast       3363 mm         4.35       Turning radius       Wa       2463 mm         Performances         5.1       Travel speed (laden / unladen)       9.40 km/h - 9.50 km/h         5.2       Lifting speed (laden / unladen)       0.26 m/s / 0.24 m/s         5.5       Nominal pulling force (laden)       2200 </td <td></td>			
4.8       Seat height/stand height       h7       1070 mm         4.19       Overall length       l1       2650 mm         4.21       Overall width       b1       2406 mm         4.22       Fork section / width / length       s / e / l       40 mm x 122 mm x 1200 mm         4.23       Fork carriage ISO 2328 (class/form) A/B       2A         4.24       Fork carriage width       b3       1260 mm         4.25       Distance between support arms       b4       1165 mm         4.26       Distance between wheel arms/loading surfaces       b4       16000 mm         4.28       Maximum horizontal extension at COG 600       l4       10000 mm         4.32       Ground clearance at centre of wheelbase       m2       272 mm         4.34       Aisle width for 800 x 1200 pallet lengthways       Ast       3363 mm         4.35       Turning radius       Wa       2463 mm         Performances         5.1       Travel speed (laden / unladen)       9.40 km/h - 9.50 km/h         5.2       Lifting speed (laden / unladen)       0.26 m/s / 0.24 m/s         5.5       Nominal pulling force (laden)       2200			
4.19       Overall length       I1       2650 mm         4.21       Overall width       b1       2406 mm         4.22       Forks section / width / length       s / e / l       40 mm x 122 mm x 1200 mm         4.23       Fork carriage ISO 2328 (class/form) A/B       2A         4.24       Fork carriage width       b3       1260 mm         4.25       Distance between support arms       b4       1165 mm         4.26       Distance between wheel arms/loading surfaces       b4       1600 mm         4.28       Maximum horizontal extension at COG 600       I4       1000 mm         4.32       Ground clearance at centre of wheelbase       m2       272 mm         4.34       Aisle width for 800 x 1200 pallet lengthways       Ast       3363 mm         4.35       Tuming radius       Wa       2463 mm         Performances         5.1       Travel speed (laden / unladen)       9.40 km/h - 9.50 km/h         5.2       Lifting speed (laden / unladen)       0.26 m/s / 0.24 m/s         5.5       Nominal pulling force (laden)       2200			
4.21       Overall width       b1       2406 mm         4.22       Forks section / width / length       s / e / l       40 mm x 122 mm x 1200 mm         4.23       Fork carriage ISO 2328 (class/form) A/B       2A         4.24       Fork carriage width       b3       1260 mm         4.25       Distance between support arms       b4       1165 mm         4.26       Distance between wheel arms/loading surfaces       b4       1600 mm         4.28       Maximum horizontal extension at COG 600       14       1000 mm         4.32       Ground clearance at centre of wheelbase       m2       272 mm         4.34       Aisle width for 800 x 1200 pallet lengthways       Ast       3363 mm         4.35       Tuming radius       Wa       2463 mm         Performances         5.1       Travel speed (laden / unladen)       9.40 km/h - 9.50 km/h         5.2       Lifting speed (laden / unladen)       0.26 m/s / 0.24 m/s         5.5       Nominal pulling force (laden)       2200			
4.22       Forks section / width / length       s / e / l       40 mm x 1220 mm x 1200 mm         4.23       Fork carriage ISO 2328 (class/form) A/B       2A         4.24       Fork carriage width       b3       1260 mm         4.25       Distance between support arms       b4       1165 mm         4.26       Distance between wheel arms/loading surfaces       b4       1600 mm         4.28       Maximum horizontal extension at COG 600       14       1000 mm         4.32       Ground clearance at centre of wheelbase       m2       272 mm         4.34       Aisle width for 800 x 1200 pallet lengthways       Ast       3363 mm         4.35       Tuming radius       Wa       2463 mm         Performances         5.1       Travel speed (laden / unladen)       9.40 km/h - 9.50 km/h         5.2       Lifting speed (laden / unladen)       0.26 m/s / 0.24 m/s         5.5       Nominal pulling force (laden)       2200			
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4.25       Distance between support arms       b4       1165 mm         4.26       Distance between wheel arms/loading surfaces       b4       1600 mm         4.28       Maximum horizontal extension at COG 600       14       1000 mm         4.32       Ground clearance at centre of wheelbase       m2       272 mm         4.34       Aisle width for 800 x 1200 pallet lengthways       Ast       3363 mm         4.35       Tuming radius       Wa       2463 mm         Performances         5.1       Travel speed (laden / unladen)       9.40 km/h - 9.50 km/h         5.2       Lifting speed (laden / unladen)       0.26 m/s / 0.24 m/s         5.5       Nominal pulling force (laden)       2200			
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4.35     Tuming radius     Wa     2463 mm       Performances       5.1     Travel speed (laden / unladen)     9.40 km/h - 9.50 km/h       5.2     Lifting speed (laden / unladen)     0.26 m/s / 0.24 m/s       5.5     Nominal pulling force (laden)     2200			
Performances           5.1         Travel speed (laden / unladen)         9.40 km/h - 9.50 km/h           5.2         Lifting speed (laden / unladen)         0.26 m/s / 0.24 m/s           5.5         Nominal pulling force (laden)         2200			
5.1       Travel speed (laden / unladen)       9.40 km/h - 9.50 km/h         5.2       Lifting speed (laden / unladen)       0.26 m/s / 0.24 m/s         5.5       Nominal pulling force (laden)       2200			
5.2       Lifting speed (laden / unladen)       0.26 m/s / 0.24 m/s         5.5       Nominal pulling force (laden)       2200			
5.5 Nominal pulling force (laden) 2200			
5.3 Lowering speed (laden / unladen) 0.38 m/s / 0.24 m/s			
- 1 1 W (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
5.7 Gradeability (laden / unladen) 56 % / 51 %			
5.10 Service brake Hydraulic brakes by loss of press	e		
5.9 Acceleration time (laden / unladen) 4.10 s / 2.60 s			
5.11 Transmission type Hydrostatic			
Engine			
7.1 Engine brand / nom Kubota - Stage V			
7.2 Engine power according to ISO 1585 18.50 kW			
7.3 Rated speed 3000 rpm			
7.4 Number of cylinders / Capacity of cylinders 3 - 1123 cm <sup>3</sup> Miscellaneous			
8.1 Type of drive control Cable			
8.2 Working hydraulic pressure for attachments 190 bar			
8.3 Oil flow rate for attachments 43 I/min			
8.4 Sound level at the driver's ear according to DIN 12 053 84 dB			

## TMM 20 ST5 - Dimensional drawing



## Characteristics of masts and residual capacities

		Full Visibility Duplex (FVD)		FVD 30	FVD 36
		h1 - Mast lowered height	mm	2352	2702
		h3 - Mast lifting height	mm	3000	3600
Residual Capacity (Maximum Height & LC = 600 mm)		h4 - Mast extended height	mm	4455	5055
	Simple Reach	Pantograph reach in	kg	2000	2000
		Pantograph reach out with stabilizers	kg	1750	1750
		Pantograph reach out without stabilizers	kg	1050	1050
		Telescopic forks reach in	kg	2000	2000
		Telescopic Forks reach out with stabilizers	kg	1300	1300
		Telescopic Forks reach out without stabilizers	kg	1100	1100
	Double Reach	Pantograph & TF reach in	kg	2000	2000
		Pantograph & TF reach out with stabilizers	kg	1100	1100
		Pantograph & TF reach out without stabilizers	kg	550	550





## **Head Office**

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