

Technical sheet :

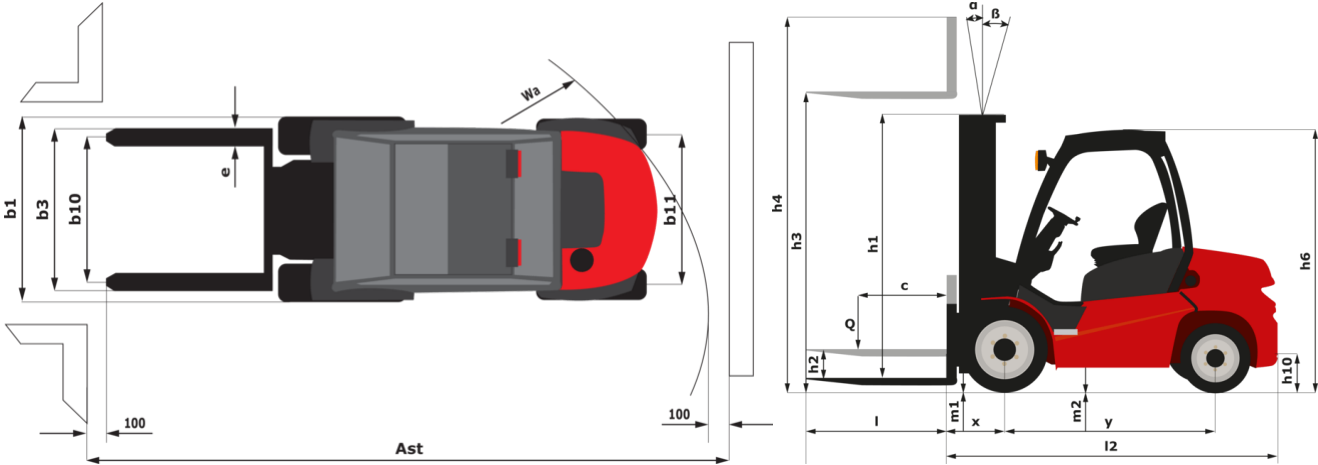
# MSI 35 ST5



 **MANITOU**  
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|       | Technical characteristics                               |           | Metric                               |
|-------|---------------------------------------------------------|-----------|--------------------------------------|
| 1.1   | Manufacturer                                            |           | Manitou                              |
| 1.2   | Model Name                                              |           | MSI 35 ST5                           |
| 1.3   | Power source                                            |           | Diesel                               |
| 1.4   | Operator type                                           |           | Seated                               |
| 1.5   | Max. capacity                                           | Q         | 3500 kg                              |
| 1.6   | Load center of gravity                                  | c         | 500 mm                               |
| 1.8   | Load distance, centre of drive axle to fork             | x         | 631 mm                               |
| 1.9   | Wheelbase                                               | y         | 1900 mm                              |
|       | Weight                                                  |           |                                      |
|       | Standard mast reference of the machine                  |           | FVD 33                               |
| 2.1   | Service weight                                          |           | 4780 kg                              |
| 2.2   | Weight on front axle (laden) / rear axle (laden)        |           | 7350 kg / 850 kg                     |
| 2.3   | Weight on front axle (Unladen) / rear axle (Unladen)    |           | 1710 kg / 3070 kg                    |
|       | Wheels                                                  |           |                                      |
| 3.1   | Tires type                                              |           | Pneumatic                            |
| 3.2   | Dimensions of front wheels                              |           | 300-15/18 6T P43                     |
| 3.3   | Dimensions of rear wheels                               |           | 7.00-12/12 ED PLUS                   |
| 3.5   | Number of front wheels / rear wheels                    |           | 2 / 2                                |
| 3.5.2 | Number of drive wheels                                  |           | 2                                    |
| 3.6   | Front wheel gauge                                       | b10       | 1044 mm                              |
| 3.7   | Rear wheel gauge                                        | b11       | 1108 mm                              |
|       | Dimensions                                              |           |                                      |
| 4.7   | Height of overhead guard (cabin)                        | h6        | 2095 mm                              |
| 4.8   | Seat height/stand height                                | h7        | 972 mm                               |
| 4.19  | Overall length                                          | l1        | 4289 mm                              |
| 4.20  | Length to face of forks                                 | l2        | 3139 mm                              |
| 4.21  | Overall width                                           | b1        | 1330 mm                              |
| 4.22  | Forks section / width / length                          | s / e / l | 45 mm x 125 mm x 1200 mm             |
| 4.23  | Fork carriage ISO 2328 (class/form) A/B                 |           | 3A                                   |
| 4.24  | Fork carriage width                                     | b3        | 1260 mm                              |
| 4.31  | Ground clearance below mast                             | m1        | 260 mm                               |
| 4.32  | Ground clearance at centre of wheelbase                 | m2        | 238 mm                               |
| 4.33  | Aisle Width for pallets 1000 x 1200 crossways           | Ast       | 4711 mm                              |
| 4.35  | Turning radius                                          | Wa        | 2680 m                               |
|       | Performances                                            |           |                                      |
| 5.1   | Travel speed (laden / unladen)                          |           | 21 km/h-21 km/h                      |
| 5.2   | Lifting speed (laden / unladen)                         |           | 0.50 m/s-0.50 m/s                    |
| 5.3   | Lowering speed (laden / unladen)                        |           | 0.50 m/s-0.30 m/s                    |
| 5.5   | Drawbar pull (Laden)                                    |           | 1900 daN                             |
| 5.7   | Gradeability (laden)                                    |           | 24 %                                 |
| 5.10  | Service brake                                           |           | Hydraulic brakes by loss of pressure |
|       | Engine                                                  |           |                                      |
| 7.1   | Engine brand / model                                    |           | Kubota / D1803 CRT E5B               |
| 7.2   | Engine power according to ISO 1585                      |           | 37 kW                                |
| 7.3   | Rated speed                                             |           | 2700 rpm                             |
| 7.4   | Number of cylinders / Capacity of cylinders             |           | 3 - 1826 cm³                         |
|       | Miscellaneous                                           |           |                                      |
| 8.1   | Type of drive control                                   |           | Electronic                           |
| 8.2   | Working hydraulic pressure for attachments              |           | 230 bar                              |
| 8.3   | Oil flow rate for attachments                           |           | 45 l/min                             |
| 8.4   | Sound level at the driver's ear according to DIN 12 053 |           | 81 dB                                |

MSI 35 ST5 - Dimensional drawing



# Characteristics of masts and residual capacities

| Full Visibility Duplex (FVD)                             |    | FVD 30 | FVD 33 | FVD 37 | FVD 40 | FVD 45 |
|----------------------------------------------------------|----|--------|--------|--------|--------|--------|
| Mast/fork carriage tilt, forward                         | °  | 12     | 12     | 12     | 12     | 12     |
| Mast/fork carriage tilt, backward                        | °  | 10     | 10     | 10     | 10     | 10     |
| h1 - Mast lowered height                                 | mm | 2136   | 2286   | 2546   | 2736   | 2986   |
| h2 - Mast free lift                                      | mm | 90     | 90     | 90     | 90     | 90     |
| h3 - Mast lifting height                                 | mm | 3000   | 3300   | 3700   | 4000   | 4500   |
| h4 - Mast extended height                                | mm | 3738   | 4038   | 4438   | 4738   | 5238   |
| Residual capacity at max height                          | kg | 3500   | 3500   | 3500   | 3500   | 3500   |
| Residual capacity with hooked-on side shift at max heigh | kg | 3500   | 3500   | 3500   | 3500   | 3500   |
| Height at max capacity                                   | mm | 3000   | 3300   | 3700   | 4000   | 4500   |
| Height at max capacity with hooked-on sideshift          | mm | 3000   | 3300   | 3700   | 4000   | 4500   |

| Free Lift Triplex (FLT)                                  |    | FLT 34 | FLT 37 | FLT 40 | FLT 43 | FLT 47 | FLT 55 | FLT 60 |
|----------------------------------------------------------|----|--------|--------|--------|--------|--------|--------|--------|
| Mast/fork carriage tilt, forward                         | °  | 12     | 12     | 12     | 12     | 12     | 6      | 6      |
| Mast/fork carriage tilt, backward                        | °  | 10     | 10     | 10     | 10     | 10     | 6      | 6      |
| h1 - Mast lowered height                                 | mm | 1936   | 2036   | 2136   | 2286   | 2386   | 2736   | 2986   |
| h2 - Mast free lift                                      | mm | 1208   | 1308   | 1408   | 1558   | 1658   | 2008   | 2258   |
| h3 - Mast lifting height                                 | mm | 3400   | 3700   | 4000   | 4300   | 4700   | 5500   | 6000   |
| h4 - Mast extended height                                | mm | 4184   | 4484   | 4784   | 5084   | 5484   | 6284   | 6784   |
| Residual capacity at max height                          | kg | 3500   | 3500   | 3500   | 2600   | 1800   |        |        |
| Residual capacity with hooked-on side shift at max heigh | kg | 3500   | 3500   | 3500   | 3200   | 1800   |        |        |
| Height at max capacity                                   | mm | 3400   | 3700   | 4000   | 4000   | 3500   | 2500   | 2500   |
| Height at max capacity with hooked-on sideshift          | mm | 3400   | 3700   | 4000   | 4000   | 3500   |        |        |

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