

Technical sheet :

# **MI 35 D ST5**

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 **MANITOU**  
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| Technical characteristics |   |           | Metric                          |
|---------------------------|---|-----------|---------------------------------|
| 1.1                       | Manufacturer  |           | MANITOU                         |
| 1.2                       | Model Name  |           | MI 35 D 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         | 485 mm                          |
| 1.9                       | Wheelbase   | y         | 1700 mm                         |
|                           | Standard mast reference of the machine                          |           | FVD 33                          |
| Weight                    |   |           |                                 |
| 2.1                       | Service weight  |           | 4860 kg                         |
| 2.2                       | Weight on front axle (laden) / rear axle (laden)                |           | 7360 kg / 1000 kg               |
| 2.3                       | Weight on front axle (Unladen) / rear axle (Unladen)            |           | 1825 kg / 3035 kg               |
| Wheels                    |   |           |                                 |
| 3.1                       | Tires type  |           | Solid tires                     |
| 3.2                       | Dimensions of front wheels                                      |           | 28-9-15 12                      |
| 3.3                       | Dimensions of rear wheels                                       |           | 6.50-10 10                      |
| 3.5                       | Number of front wheels / rear wheels                            |           | 2 / 2                           |
| 3.5.2                     | Number of drive wheels  |           | 2                               |
| 3.6                       | Front wheel gauge   | b10       | 1005 mm                         |
| 3.7                       | Rear wheel gauge  | b11       | 975 mm                          |
| Dimensions                |   |           |                                 |
| 4.8                       | Seat height/stand height  | h7        | 1215 mm                         |
| 4.7                       | Height of overhead guard (cabin)                                | h6        | 2130 mm                         |
| 4.12                      | Height of towing bar (coupling height)                          | h10       | 360 mm                          |
| 4.19                      | Overall length  | l1        | 3935 mm                         |
| 4.20                      | Length to face of forks   | l2        | 2785 mm                         |
| 4.21                      | Overall width   | b1        | 1225 mm                         |
| 4.21                      | Overall width - Single wheels                                   | b1        | 1225 mm                         |
| 4.21                      | Overall width - Twinned wheels                                  | b1        | 1725 mm                         |
| 4.22                      | Forks section / width / length                                  | s / e / l | 50 mm x 122 mm x 1150 mm        |
| 4.23                      | Fork carriage ISO 2328 (class/form) A/B                         |           | 3A                              |
| 4.24                      | Fork carriage width   | b3        | 1100 mm                         |
| 4.31                      | Ground clearance below mast                                     | m1        | 130 mm                          |
| 4.32                      | Ground clearance at centre of wheelbase                         | m2        | 200 mm                          |
| 4.33                      | Aisle Width for pallets 1000 x 1200 crossways                   | Ast       | 4195 mm                         |
| 4.34                      | Aisle width for 800 x 1200 pallet lengthways                    | Ast       | 4395 mm                         |
| 4.35                      | Turning radius  | Wa        | 2460 mm                         |
| 4.36                      | Internal turning radius (over tyres)                            | b13       | 160 mm                          |
| Performances              |   |           |                                 |
| 5.1                       | Travel speed (laden / unladen)                                  |           | 18 km/h-18.50 km/h              |
| 5.2                       | Lifting speed (laden / unladen)                                 |           | 0.42 m/s-0.45 m/s               |
| 5.3                       | Lowering speed (laden / unladen)                                |           | 0.40 m/s-0.35 m/s               |
| 5.5                       | Drawbar pull (Laden / Unladen)                                  |           | 2000 daN / 1520 daN             |
| 5.7                       | Gradeability (laden / unladen)                                  |           | 18 % / 20 %                     |
| 5.10                      | Service brake   |           | Hydraulic                       |
| Engine                    |   |           |                                 |
| 7.1                       | Engine brand / model / norm                                     |           | Kubota / V2607-CR-E5B / Stage V |
| 7.2                       | Engine power (Hp / kW)  |           | 51 Hp/37.40 kW                  |
| 7.3                       | Rated speed   |           | 2400 rpm                        |
| 7.4                       | Number of cylinders / Capacity of cylinders                     |           | 4 - 2615 cm³                    |
| Miscellaneous             |   |           |                                 |
| 8.2                       | Working hydraulic pressure for attachments                      |           | 160 bar                         |
| 8.3                       | Oil flow rate for attachments                                   |           | 35 l/min                        |
| 8.4                       | Measured/guaranteed mean noise level at the ear of the operator |           | < 84 dB                         |

### MI 35 D ST5 - Dimensional drawing



## Characteristics of masts and residual capacities

| Full Visibility Duplex (FVD)                               |    | FVD 33 | FVD 37 | FVD 40 |
|--|----|--------|--------|--------|
| α - Mast/fork carriage tilt, forward                       | °  | 6      | 6      | 6      |
| β - Mast/fork carriage tilt, backward                      | °  | 12     | 12     | 12     |
| h1 - Mast lowered height                                   | mm | 2315   | 2565   | 2715   |
| h2 - Mast free lift  | mm | 145    | 145    | 145    |
| h3 - Mast lifting height                                   | mm | 3300   | 3700   | 4000   |
| h4 - Mast extended height                                  | mm | 4115   | 4515   | 4815   |
| Residual capacity at max height                            | kg | 3500   | 3500   | 3500   |
| Residual capacity with integrated side shift at max height | kg | 3500   | 3500   | 3500   |
| Height at max capacity                                     | mm | 3300   | 3700   | 4000   |
| Height at max capacity with integrated sideshift           | mm | 3300   | 3700   | 4000   |

| Free Lift Duplex (FLD)                                     |    | FLD 33 | FLD 37 | FLD 40 |
|--|----|--------|--------|--------|
| α - Mast/fork carriage tilt, forward                       | °  | 6      | 6      | 6      |
| β - Mast/fork carriage tilt, backward                      | °  | 12     | 12     | 12     |
| h1 - Mast lowered height                                   | mm | 2330   | 2530   | 2680   |
| h2 - Mast free lift  | mm | 1500   | 1700   | 1850   |
| h3 - Mast lifting height                                   | mm | 3300   | 3700   | 4000   |
| h4 - Mast extended height                                  | mm | 4130   | 4530   | 4830   |
| Residual capacity at max height                            | kg | 3500   | 3500   | 3500   |
| Residual capacity with integrated side shift at max height | kg | 3500   | 3500   | 3500   |
| Height at max capacity                                     | mm | 3300   | 3700   | 4000   |
| Height at max capacity with integrated sideshift           | mm | 3300   | 3700   | 4000   |

| Free Lift Triplex (FLT)                                    |    | FLT 43 | FLT 45 | FLT 47 | FLT 48 | FLT 50 | FLT 55 | FLT 60 | FLT 65 |
|--|----|--------|--------|--------|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward                       | °  | 6      | 6      | 6      | 6      | 6      | 3      | 3      | 3      |
| β - Mast/fork carriage tilt, backward                      | °  | 6      | 6      | 6      | 6      | 6      | 6      | 6      | 6      |
| h1 - Mast lowered height                                   | mm | 2215   | 2265   | 2315   | 2365   | 2415   | 2565   | 2815   | 2965   |
| h2 - Mast free lift  | mm | 1385   | 1435   | 1485   | 1535   | 1585   | 1735   | 1985   | 2135   |
| h3 - Mast lifting height                                   | mm | 4300   | 4500   | 4700   | 4800   | 5000   | 5500   | 6000   | 6500   |
| h4 - Mast extended height                                  | mm | 5130   | 5380   | 5530   | 5630   | 5830   | 6330   | 6880   | 7330   |
| Residual capacity at max height                            | kg | 3450   | 3400   | 3300   | 3300   | 3000   | 2200   | 1600   | 1500   |
| Residual capacity with integrated side shift at max height | kg | 3450   | 3300   | 3200   | 3200   | 2900   | 2100   | 1500   | 1400   |
| Height at max capacity                                     | mm | 4000   | 4000   | 4000   | 4000   | 4000   | 4000   | 4000   | 4000   |
| Height at max capacity with integrated sideshift           | mm | 4000   | 4000   | 4000   | 4000   | 4000   | 3700   | 3700   | 3700   |

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