

Technical sheet :

# MI 80 D ST5

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 **MANITOU**  
HANDLING YOUR WORLD

|       | Technical characteristics                                       |           | Metric                    |
|-------|-----------------------------------------------------------------|-----------|---------------------------|
| 1.1   | Manufacturer                                                    |           | MANITOU                   |
| 1.2   | Model Name                                                      |           | MI 80 D ST5               |
| 1.3   | Power source                                                    |           | Diesel                    |
| 1.4   | Operator type                                                   |           | Seated                    |
| 1.5   | Max. capacity                                                   | Q         | 8000 kg                   |
| 1.6   | Load center of gravity                                          | c         | 600 mm                    |
| 1.8   | Load distance, centre of drive axle to fork                     | x         | 714 mm                    |
| 1.9   | Wheelbase                                                       | y         | 2600 mm                   |
|       | Weight                                                          |           |                           |
|       | Standard mast reference of the machine                          |           | FVD 30                    |
| 2.1   | Service weight                                                  |           | 12540 kg                  |
| 2.2   | Weight on front axle (laden) / rear axle (laden)                |           | 18340 kg / 2200 kg        |
| 2.3   | Weight on front axle (Unladen) / rear axle (Unladen)            |           | 5180 kg / 7360 kg         |
|       | Wheels                                                          |           |                           |
| 3.1   | Tires type                                                      |           | Pneumatic                 |
| 3.2   | Dimensions of front wheels                                      |           | 9.00-20-14PR              |
| 3.3   | Dimensions of rear wheels                                       |           | 9.00-20-14PR              |
| 3.5   | Number of front wheels / rear wheels                            |           | 4 / 2                     |
| 3.5.2 | Number of drive wheels                                          |           | 4                         |
| 3.6   | Front wheel gauge                                               | b10       | 1628 mm                   |
| 3.7   | Rear wheel gauge                                                | b11       | 1700 mm                   |
|       | Dimensions                                                      |           |                           |
| 4.7   | Height of overhead guard (cabin)                                | h6        | 2580 mm                   |
| 4.8   | Seat height/stand height                                        | h7        | 1350 mm                   |
| 4.12  | Height of towing bar (coupling height)                          | h10       | 505 mm                    |
| 4.19  | Overall length                                                  | l1        | 5524 mm                   |
| 4.20  | Length to face of forks                                         | l2        | 4004 mm                   |
| 4.21  | Overall width                                                   | b1        | 2165 mm                   |
| 4.21  | Overall width - Twinned wheels                                  | b1        | 2165 mm                   |
| 4.22  | Forks section / width / length                                  | s / e / l | 75 mm x 160 mm x 1520 mm  |
| 4.23  | Fork carriage ISO 2328 (class/form) A/B                         |           | 4A                        |
| 4.24  | Fork carriage width                                             | b3        | 2100 mm                   |
| 4.31  | Ground clearance below mast                                     | m1        | 250 mm                    |
| 4.32  | Ground clearance at centre of wheelbase                         | m2        | 339 mm                    |
| 4.33  | Aisle Width for pallets 1000 x 1200 crossways                   | Ast       | 5644 mm                   |
| 4.34  | Aisle width for 800 x 1200 pallet lengthways                    | Ast       | 5844 mm                   |
| 4.35  | Turning radius                                                  | Wa        | 3730 mm                   |
| 4.36  | Internal turning radius (over tyres)                            | b13       | 1327 mm                   |
|       | Performances                                                    |           |                           |
| 5.1   | Travel speed (laden / unladen)                                  |           | 26 km/h-27 km/h           |
| 5.2   | Lifting speed (laden / unladen)                                 |           | 0.38 m/s-0.40 m/s         |
| 5.3   | Lowering speed (laden / unladen)                                |           | 0.43 m/s-0.39 m/s         |
| 5.5   | Drawbar pull (Laden / Unladen)                                  |           | 6500 daN / 4500 daN       |
| 5.7   | Gradeability (laden / unladen)                                  |           | 35 % / 35 %               |
| 5.10  | Service brake                                                   |           | Hydraulic                 |
|       | Engine                                                          |           |                           |
| 7.1   | Engine brand / model / norm                                     |           | Deutz / TCD 3.6 / Stage V |
| 7.2   | Engine power according to ISO 1585                              |           | 85 kW                     |
| 7.3   | Rated speed                                                     |           | 2200 rpm                  |
| 7.4   | Number of cylinders / Capacity of cylinders                     |           | 4 - 3600 cm³              |
|       | Miscellaneous                                                   |           |                           |
| 8.2   | Working hydraulic pressure for attachments                      |           | 195 bar                   |
| 8.3   | Oil flow rate for attachments                                   |           | 55 l/min                  |
| 8.4   | Measured/guaranteed mean noise level at the ear of the operator |           | < 84 dB                   |

MI 80 D ST5 - Dimensional drawing



# Characteristics of masts and residual capacities

| Full Visibility Duplex (FVD)                     |    | FVD 30 | FVD 33 | FVD 36 | FVD 40 | FVD 45 | FVD 50 |
|--------------------------------------------------|----|--------|--------|--------|--------|--------|--------|
| Mast/fork carriage tilt, forward                 | °  | 6      | 6      | 6      | 6      | 6      | 6      |
| Mast/fork carriage tilt, backward                | °  | 12     | 12     | 12     | 12     | 6      | 6      |
| h1 - Mast lowered height                         | mm | 2700   | 2850   | 3000   | 3200   | 3500   | 3750   |
| h2 - Mast free lift                              | mm | 200    | 200    | 200    | 200    | 200    | 200    |
| h3 - Mast lifting height                         | mm | 3000   | 3300   | 3600   | 4000   | 4500   | 5000   |
| h4 - Mast extended height                        | mm | 4210   | 4510   | 4810   | 5210   | 5710   | 6210   |
| Residual capacity at max height                  | kg | 8000   | 8000   | 8000   | 8000   | 8000   | 8000   |
| Height at max capacity                           | mm | 3000   | 3300   | 3600   | 4000   | 4500   | 5000   |
| Height at max capacity with integrated sideshift | mm | 3000   | 3300   | 3600   | 4000   | 4500   | 5000   |

| Free Lift Triplex (FLT)                          |    | FLT 45 | FLT 48 | FLT 50 | FLT 55 | FLT 60 |
|--------------------------------------------------|----|--------|--------|--------|--------|--------|
| Mast/fork carriage tilt, forward                 | °  | 6      | 6      | 6      | 3      | 3      |
| Mast/fork carriage tilt, backward                | °  | 6      | 6      | 6      | 6      | 6      |
| h1 - Mast lowered height                         | mm | 2750   | 2850   | 2950   | 3100   | 3250   |
| h2 - Mast free lift                              | mm | 1485   | 1585   | 1600   | 1800   | 1985   |
| h3 - Mast lifting height                         | mm | 4500   | 4800   | 5000   | 5500   | 6000   |
| h4 - Mast extended height                        | mm | 5775   | 6075   | 6360   | 6810   | 7275   |
| Residual capacity at max height                  | kg | 7000   | 7000   | 6500   | 6100   | 5600   |
| Height at max capacity                           | mm | 4500   | 4800   | 5000   | 5500   | 6000   |
| Height at max capacity with integrated sideshift | mm | 4500   | 4800   | 5000   | 5500   | 6000   |



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