

Technical sheet :

# **MI 80 D ST5**

---



 **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                   |
|                           | Standard mast reference of the machine                          |           | FVD 30                    |
| Weight                    |                                                                 |           |                           |
| 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                |                                                                 |           |                           |
| 4.8                       | Seat height/stand height                                        | h7        | 1350 mm                   |
| 4.7                       | Height of overhead guard (cabin)                                | h6        | 2580 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 / nom                                      |           | Deutz / TCD 3.6 / Stage V |
| 7.2                       | Engine power (Hp / kW)                                          |           | 116 Hp/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 |
|--------------------------------------------------|--------|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward             | 6.20   | 6.20   | 6.20   | 6.20   | 6.20   | 6.20   |
| β - Mast/fork carriage tilt, backward            | 12.20  | 12.20  | 12.20  | 12.20  | 6.20   | 6.20   |
| h1 - Mast lowered height                         | 2700   | 2850   | 3000   | 3200   | 3500   | 3750   |
| h2 - Mast free lift                              | 200    | 200    | 200    | 200    | 200    | 200    |
| h3 - Mast lifting height                         | 3000   | 3300   | 3600   | 4000   | 4500   | 5000   |
| h4 - Mast extended height                        | 4210   | 4510   | 4810   | 5210   | 5710   | 6210   |
| Residual capacity at max height                  | 8000   | 8000   | 8000   | 8000   | 8000   | 8000   |
| Height at max capacity                           | 3000   | 3300   | 3600   | 4000   | 4500   | 5000   |
| Height at max capacity with integrated sideshift | 3000   | 3300   | 3600   | 4000   | 4500   | 5000   |

| Free Lift Triplex (FLT)                          | FLT 45 | FLT 48 | FLT 50 | FLT 55 | FLT 60 |
|--------------------------------------------------|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward             | 6.20   | 6.20   | 6.20   | 3.20   | 3.20   |
| β - Mast/fork carriage tilt, backward            | 6.20   | 6.20   | 6.20   | 6.20   | 6.20   |
| h1 - Mast lowered height                         | 2750   | 2850   | 2950   | 3100   | 3250   |
| h2 - Mast free lift                              | 1485   | 1585   | 1600   | 1800   | 1985   |
| h3 - Mast lifting height                         | 4500   | 4800   | 5000   | 5500   | 6000   |
| h4 - Mast extended height                        | 5775   | 6075   | 6360   | 6810   | 7275   |
| Residual capacity at max height                  | 7000   | 7000   | 6500   | 6100   | 5600   |
| Height at max capacity                           | 4500   | 4800   | 5000   | 5500   | 6000   |
| Height at max capacity with integrated sideshift | 4500   | 4800   | 5000   | 5500   | 6000   |



**Head Office**

B.P. 249 - 430 rue de l'Aubinière  
44150 Ancenis Cedex - France

Tel: +33 (0)2 40 09 10 11 - Fax: +33 (0)2 40 09 10 97

[www.manitou.com](http://www.manitou.com)



This publication provides a description of the configuration versions and options for Manitou products, which may differ for equipment. The equipment presented in this brochure may be part of a series, as an option, or it may not be available, depending on the versions. Manitou reserves the right, at any time and without notice, to amend the specifications described and represented. The specifications provided do not bind the manufacturer. For more details, please contact your Manitou agent. This is not a contractually binding document. The presentation of the products is not contractually binding. List of specifications non-exhaustive. The logos as well as the visual identity of the company are owned by Manitou and cannot be used without authorisation. All rights reserved. The photos and diagrams contained in this brochure are only provided for consultation and information purposes.

MANITOU BF SA - Limited company with board of directors - Share capital: 39,668,399 euros - 857 802 508 RCS Nantes