

Technical sheet :

# **M 50-4 D ST5**

---



 **MANITOU**  
HANDLING YOUR WORLD

| Technical characteristics |  | Metric    |                           |
|---------------------------|--|-----------|---------------------------|
| 1.1                       | Manufacturer   |           | MANITOU                   |
| 1.2                       | Model Name   |           | M 50-4 D ST5              |
| 1.3                       | Power source   |           | Diesel                    |
| 1.4                       | Operator type  |           | Seated                    |
| 1.5                       | Max. capacity  | Q         | 5000 kg                   |
| 1.6                       | Load center of gravity   | c         | 600 mm                    |
| 1.8                       | Load distance, centre of drive axle to fork  | x         | 773 mm                    |
| 1.9                       | Wheelbase  | y         | 2120 mm                   |
| Weight                    |  |           |                           |
|                           | Standard mast reference of the machine   |           | FVD 37                    |
| 2.1                       | Service weight   |           | 8325 kg                   |
| 2.2                       | Weight on front axle (laden) / rear axle (laden)   |           | 11520 kg / 1805 kg        |
| 2.3                       | Weight on front axle (Unladen) / rear axle (Unladen)                                     |           | 3285 kg / 5040 kg         |
| Wheels                    |  |           |                           |
| 3.1                       | Tires type   |           | Pneumatic                 |
| 3.2                       | Dimensions of front wheels   |           | 18-22,5 MPT-06            |
| 3.3                       | Dimensions of rear wheels  |           | 340/80 R18 XMCL           |
| 3.5                       | Number of front wheels / rear wheels   |           | 2 / 2                     |
| 3.5.2                     | Number of drive wheels   |           | 4                         |
| 3.6                       | Front wheel gauge  | b10       | 1620 mm                   |
| 3.7                       | Rear wheel gauge   | b11       | 1740 mm                   |
| Dimensions                |  |           |                           |
| 4.7                       | Height of overhead guard (cabin) / Overall height of low overhead guard (Buggie version) | h6        | 2486 mm / 2486 mm         |
| 4.8                       | Seat height/stand height   | h7        | 1455 mm                   |
| 4.19                      | Overall length   | l1        | 4948 mm                   |
| 4.20                      | Length to face of forks  | l2        | 3748 mm                   |
| 4.21                      | Overall width  | b1        | 2080 mm                   |
| 4.22                      | Forks section x width x length   | s / e / l | 60 mm x 150 mm / 1200 mm  |
| 4.23                      | Fork carriage ISO 2328 (class/form) A/B  |           | 4A                        |
| 4.24                      | Fork carriage width  | b3        | 1670 mm                   |
| 4.31                      | Ground clearance below mast  | m1        | 300 mm                    |
| 4.32                      | Ground clearance at centre of wheelbase  | m2        | 426 mm                    |
| 4.33                      | Aisle width for 1000 x 1200 pallet widthways   | Ast       | 6812 mm                   |
| 4.34                      | Aisle width for 800 x 1200 pallet lengthways   | Ast       | 6812 mm                   |
| 4.35                      | Turning radius   | Wa        | 4640 mm                   |
| Performances              |  |           |                           |
| 5.1                       | Travel speed (laden / unladen)   |           | 10 km/h / 22 km/h         |
| 5.2                       | Lifting speed (laden / unladen)  |           | 0.40 m/s / 0.40 m/s       |
| 5.3                       | Lowering speed (laden / unladen)   |           | 0.50 m/s / 0.40 m/s       |
| 5.5                       | Drawbar pull (Laden)   |           | 11000 daN                 |
| 5.10                      | Service brake  |           | Hydraulic                 |
|                           | Transmission type  |           | Torque converter          |
| Engine                    |  |           |                           |
| 7.1                       | Engine brand / model / norm  |           | Deutz / TCD 2,9 / Stage V |
| 7.2                       | Engine power (Hp / kW)   |           | 75 Hp/55 kW               |
| 7.3                       | Rated speed  |           | 2300 rpm                  |
| 7.4                       | Number of cylinders / Capacity of cylinders  |           | 4 - 2925 cm³              |
| Miscellaneous             |  |           |                           |
| 8.2                       | Working hydraulic pressure for attachments   |           | 230 bar                   |
| 8.3                       | Oil flow rate for attachments  |           | 52 l/min                  |
| 8.4                       | Sound level at the driver's ear according to DIN 12 053                                  |           | 78 dB                     |

### M 50-4 D ST5 - Dimensional drawing



## Characteristics of masts and residual capacities

| Full Visibility Duplex (FVD)                              | FVD 33 | FVD 35 | FVD 37 | FVD 40 | FVD 45 | FVD 50 |
|---|--------|--------|--------|--------|--------|--------|
| $\alpha$ - Mast/fork carriage tilt, forward               | °      | 15     | 15     | 15     | 15     | 10     |
| $\beta$ - Mast/fork carriage tilt, backward               | °      | 15     | 15     | 15     | 15     | 15     |
| h1 - Mast lowered height                                  | mm     | 2670   | 2770   | 2870   | 3020   | 3520   |
| h3 - Mast lifting height                                  | mm     | 3300   | 3500   | 3700   | 4000   | 5000   |
| Residual capacity at max height                           | kg     | 5000   | 5000   | 5000   | 5000   | 2200   |
| Residual capacity with hooked-on side shift at max height | kg     | 4700   | 4700   | 4700   | 4000   | 3800   |
| Height at max capacity                                    | mm     | 3300   | 3500   | 3700   | 4000   | 4000   |
| Height at max capacity with hooked-on sideshift           | mm     | 3300   | 3500   | 3700   | 4000   | 4000   |

| Free Lift Triplex (FLT)                                   | FLT 43 | FLT 45 | FLT 47 | FLT 50 | FLT 55 | FLT 60 |
|---|--------|--------|--------|--------|--------|--------|
| $\alpha$ - Mast/fork carriage tilt, forward               | °      | 15     | 15     | 15     | 10     | 10     |
| $\beta$ - Mast/fork carriage tilt, backward               | °      | 15     | 15     | 15     | 15     | 15     |
| h1 - Mast lowered height                                  | mm     | 2470   | 2545   | 2605   | 2720   | 3045   |
| h2 - Mast free lift                                       | mm     | 1455   | 1530   | 1590   | 1705   | 2030   |
| h3 - Mast lifting height                                  | mm     | 4300   | 4500   | 4700   | 5000   | 6000   |
| Residual capacity at max height                           | kg     | 4500   | 4350   | 3500   | 2800   | 900    |
| Residual capacity with hooked-on side shift at max height | kg     |        | 4100   | 3600   | 2100   | 900    |
| Height at max capacity                                    | mm     | 3800   | 4000   | 4000   | 4000   | 4000   |
| Height at max capacity with hooked-on sideshift           | mm     |        | 4000   | 4000   | 4000   | 4000   |

## Equipment

| Standard                                       |
|--|
| Battery cut-off                                |
| Easy link                                      |
| Front and rear road lighting                   |
| Front tires - Rough terrain profil             |
| Mechanical suspension PVC seat - Grammer MSG65 |
| Open cab                                       |
| Operation Safety System (OSS)                  |
| Rear tires - Rough terrain profil              |
| Windshield wiper (front and rear)              |
| Optional                                       |
| Audio warning on reverse movements             |
| Enclosed Cab with Heat and A/C                 |
| Hydraulic kit 4th element                      |
| LED Rotative Beacon                            |
| Load backrest                                  |
| Pneumatic seat                                 |
| Sideshift carriage                             |



**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