

Technical sheet :

# **MI 70 D ST5**

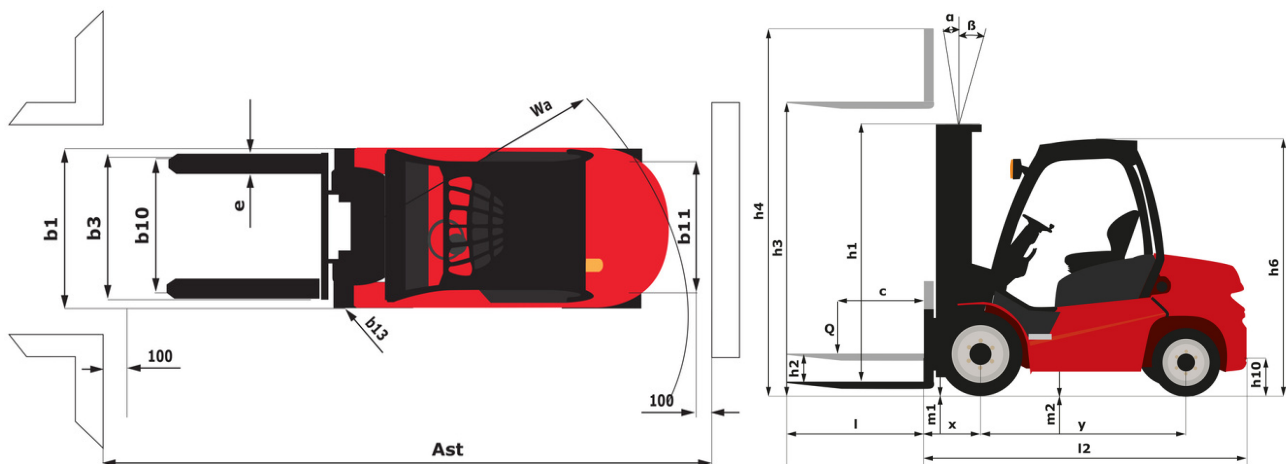
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 **MANITOU**  
HANDLING YOUR WORLD

|       | Technical characteristics                                       |           | Metric                   |
|-------|-----------------------------------------------------------------|-----------|--------------------------|
| 1.1   | Manufacturer                                                    |           | MANITOU                  |
| 1.2   | Model Name                                                      |           | MI 70 D ST5              |
| 1.3   | Power source                                                    |           | Diesel                   |
| 1.4   | Operator type                                                   |           | Seated                   |
| 1.5   | Max. capacity                                                   | Q         | 7000 kg                  |
| 1.6   | Load center of gravity                                          | c         | 600 mm                   |
| 1.8   | Load distance, centre of drive axle to fork                     | x         | 603 mm                   |
| 1.9   | Wheelbase                                                       | y         | 2300 mm                  |
|       | <b>Weight</b>                                                   |           |                          |
| 2.1   | Service weight                                                  |           | 10110 kg                 |
| 2.2   | Weight on front axle (laden) / rear axle (laden)                |           | 15290 kg / 1820 kg       |
|       | <b>Wheels</b>                                                   |           |                          |
| 3.1   | Tires type                                                      |           | Super Elastic            |
| 3.2   | Dimensions of front wheels                                      |           | 8.25-15 14PR             |
| 3.3   | Dimensions of rear wheels                                       |           | 8.25-15 14PR             |
| 3.5   | Number of front wheels / rear wheels                            |           | 4 / 2                    |
| 3.5.2 | Number of drive wheels                                          |           | 2                        |
| 3.6   | Front wheel gauge                                               | b10       | 1489 mm                  |
| 3.7   | Rear wheel gauge                                                | b11       | 1700 mm                  |
|       | <b>Dimensions</b>                                               |           |                          |
| 4.7   | Height of overhead guard (cabin)                                | h6        | 2430 mm                  |
| 4.8   | Seat height/stand height                                        | h7        | 1350 mm                  |
| 4.12  | Height of towing bar (coupling height)                          | h10       | 710 mm                   |
| 4.19  | Overall length                                                  | l1        | 4804 mm                  |
| 4.20  | Length to face of forks                                         | l2        | 3604 mm                  |
| 4.21  | Overall width                                                   | b1        | 1990 mm                  |
| 4.21  | Overall width - Twinned wheels                                  | b1        | 1990 mm                  |
| 4.22  | Forks section / width / length                                  | s / e / l | 65 mm x 150 mm x 1220 mm |
| 4.23  | Fork carriage ISO 2328 (class/form) A/B                         |           | 4A                       |
| 4.31  | Ground clearance below mast                                     | m1        | 190 mm                   |
| 4.32  | Ground clearance at centre of wheelbase                         | m2        | 270 mm                   |
| 4.34  | Aisle width for 800 x 1200 pallet lengthways                    | Ast       | 5350 mm                  |
| 4.36  | Internal turning radius (over tyres)                            | b13       | 110 mm                   |
|       | <b>Performances</b>                                             |           |                          |
| 5.1   | Travel speed (laden / unladen)                                  |           | 23 km/h-24 km/h          |
| 5.2   | Lifting speed (laden / unladen)                                 |           | 0.36 m/s-0.41 m/s        |
| 5.3   | Lowering speed (laden / unladen)                                |           | 0.48 m/s-0.42 m/s        |
| 5.5   | Drawbar pull (Laden / Unladen)                                  |           | 6500 daN / 2750 daN      |
| 5.7   | Gradeability (laden / unladen)                                  |           | 20 % / 20 %              |
| 5.10  | Service brake                                                   |           | Hydraulic                |
|       | <b>Engine</b>                                                   |           |                          |
| 7.1   | Engine brand / model                                            |           | Deutz / TCD 3.6 L4       |
| 7.2   | Engine power according to ISO 1585                              |           | 55.40 kW                 |
| 7.3   | Rated speed                                                     |           | 2300 rpm                 |
| 7.4   | Number of cylinders / Capacity of cylinders                     |           | 4 - 3621 cm³             |
|       | <b>Miscellaneous</b>                                            |           |                          |
| 8.3   | Oil flow rate for attachments                                   |           | 165 l/min                |
| 8.4   | Measured/guaranteed mean noise level at the ear of the operator |           | < 84 dB                  |

## MI 70 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 | 2500   | 2650   | 2800   | 3000   | 3300   | 3550   |
| h2 - Mast free lift                                       | mm | 160    | 160    | 160    | 160    | 160    | 160    |
| h3 - Mast lifting height                                  | mm | 3000   | 3300   | 3600   | 4000   | 4500   | 5000   |
| h4 - Mast extended height                                 | mm | 4167   | 4467   | 4767   | 5167   | 5667   | 6167   |
| Residual capacity at max height                           | kg | 7000   | 7000   | 7000   | 7000   | 7000   | 7000   |
| Residual capacity with hooked-on side shift at max heigth | kg | 6500   | 6500   | 6500   | 6500   | 6500   | 6500   |
| Height at max capacity                                    | mm | 3000   | 3300   | 3600   | 4000   | 4500   | 5000   |
| Height at max capacity with hooked-on sideshift           | mm | 3000   | 3300   | 3600   | 4000   | 4500   | 5000   |

| Free Lift Duplex (FLD)                                    |    | FLD 30 | FLD 33 | FLD 36 | FLD 40 |
|-----------------------------------------------------------|----|--------|--------|--------|--------|
| Mast/fork carriage tilt, forward                          | °  | 6      | 6      | 6      | 6      |
| Mast/fork carriage tilt, backward                         | °  | 12     | 12     | 12     | 12     |
| h1 - Mast lowered height                                  | mm | 2450   | 2600   | 2750   | 2950   |
| h2 - Mast free lift                                       | mm | 1335   | 1485   | 1635   | 1835   |
| h3 - Mast lifting height                                  | mm | 3000   | 3300   | 3600   | 4000   |
| h4 - Mast extended height                                 | mm | 4115   | 4415   | 4715   | 5115   |
| Residual capacity at max height                           | kg | 7000   | 7000   | 7000   | 7000   |
| Residual capacity with hooked-on side shift at max heigth | kg | 6500   | 6500   | 6500   | 6500   |
| Height at max capacity                                    | mm | 3000   | 3300   | 3600   | 4000   |
| Height at max capacity with hooked-on sideshift           | mm | 3000   | 3300   | 3600   | 4000   |

| 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 | 2725   | 2825   | 2875   | 3075   | 3225   |
| h2 - Mast free lift                                       | mm | 1500   | 1600   | 1672   | 1800   | 2000   |
| h3 - Mast lifting height                                  | mm | 4500   | 4800   | 5000   | 5500   | 6000   |
| h4 - Mast extended height                                 | mm | 5735   | 6035   | 6213   | 6785   | 7235   |
| Residual capacity at max height                           | kg | 6400   | 6300   | 6300   | 6100   | 5500   |
| Residual capacity with hooked-on side shift at max heigth | kg | 5900   | 5800   | 5800   | 5600   | 5000   |
| Height at max capacity                                    | mm | 4500   | 4800   | 5000   | 5500   | 6000   |
| Height at max capacity with hooked-on sideshift           | mm | 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)



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