

Technical sheet :

# MI 70 D US

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 **MANITOU**  
HANDLING YOUR WORLD

| Technical characteristics |   | Imperial  |                     |
|---------------------------|---|-----------|---------------------|
| 1.1                       | Manufacturer  |           | Manitou             |
| 1.2                       | Model Name  |           | MI 70 D US          |
| 1.3                       | Power source  |           | Diesel              |
| 1.4                       | Operator type   |           | Seated              |
| 1.5                       | Max. capacity   | Q         | 15432 lb            |
| 1.6                       | Load center of gravity  | c         | 24 in               |
| 1.8                       | Load distance, centre of drive axle to fork                     | x         | 24 in               |
| 1.9                       | Wheelbase   | y         | 91 in               |
| Weight                    |   |           |                     |
| 2.1                       | Service weight  |           | 22289 lb            |
| 2.2                       | Weight on front axle (laden) / rear axle (laden)                |           | 33709 lb / 4012 lb  |
| 2.3                       | Weight on front axle (Unladen) / rear axle (Unladen)            |           | 9083 lb / 13206 lb  |
| Wheels                    |   |           |                     |
| 3.1                       | Tires type  |           | Pneumatic           |
| 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       | 59 in               |
| 3.7                       | Rear wheel gauge  | b11       | 67 in               |
| Dimensions                |   |           |                     |
| 4.7                       | Height of overhead guard (cabin)                                | h6        | 96 in               |
| 4.8                       | Seat height/stand height  | h7        | 53 in               |
| 4.12                      | Height of towing bar (coupling height)                          | h10       | 28 in               |
| 4.19                      | Overall length  | l1        | 189 in              |
| 4.20                      | Length to face of forks   | l2        | 141 in              |
| 4.21                      | Overall width   | b1        | 78 in               |
| 4.21                      | Overall width - Twinned wheels                                  | b1        | 78 in               |
| 4.22                      | Forks section / width / length                                  | s / e / l | 3 in x 6 in x 48 in |
| 4.23                      | Fork carriage ISO 2328 (class/form) A/B                         |           | 4A                  |
| 4.24                      | Fork carriage width   | b3        | 67 in               |
| 4.31                      | Ground clearance below mast                                     | m1        | 7 in                |
| 4.32                      | Ground clearance at centre of wheelbase                         | m2        | 11 in               |
| 4.33                      | Aisle Width for pallets 1000 x 1200 crossways                   | Ast       | 207 in              |
| 4.34                      | Aisle width for 800 x 1200 pallet lengthways                    | Ast       | 212 in              |
| 4.35                      | Turning radius  | Wa        | 131 in              |
| 4.36                      | Internal turning radius (over tyres)                            | b13       | 48 in               |
| Performances              |   |           |                     |
| 5.1                       | Travel speed (laden / unladen)                                  |           | 11 mph-15 mph       |
| 5.2                       | Lifting speed (laden / unladen)                                 |           | 1 ft/s-1 ft/s       |
| 5.3                       | Lowering speed (laden / unladen)                                |           | 2 ft/s-1 ft/s       |
| 5.5                       | Drawbar pull (Laden / Unladen)                                  |           | 6280 daN / 3600 daN |
| 5.7                       | Gradeability (laden)  |           | 34 %                |
| 5.10                      | Service brake   |           | Hydraulic           |
| Engine                    |   |           |                     |
| 7.1                       | Engine brand / model  |           | Deutz / TCD 3.6L 4  |
|                           | I.C. Engine power rating  |           | 55.40 kW            |
| 7.3                       | Rated speed   |           | 2200 rpm            |
| 7.4                       | Number of cylinders / Capacity of cylinders                     |           | 4 - 220 in³         |
| Miscellaneous             |   |           |                     |
| 8.2                       | Working hydraulic pressure for attachments                      |           | 2828 PSI            |
| 8.3                       | Oil flow rate for attachments                                   |           | 15 US gpm           |
| 8.4                       | Measured/guaranteed mean noise level at the ear of the operator |           | < 84 dB             |
| 8.4                       | Sound level at the driver's ear according to DIN 12 053         |           | 84 dB               |

### MI 70 D US - 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                                  | 98.4   | 104.3  | 110.2  | 118.1  | 129.9  | 139.8  |
| h2 - Mast free lift                                       | 6.3    | 6.3    | 6.3    | 6.3    | 6.3    | 6.3    |
| h3 - Mast lifting height                                  | 118.1  | 129.9  | 141.7  | 157.5  | 177.2  | 196.9  |
| h4 - Mast extended height                                 | 164.1  | 175.9  | 187.7  | 203.4  | 223.1  | 242.8  |
| Residual capacity at max height                           | 15432  | 15432  | 15432  | 15432  | 15432  | 15432  |
| Residual capacity with hooked-on side shift at max height | 14330  | 14330  | 14330  | 14330  | 14330  | 14330  |
| Height at max capacity                                    | 118.1  | 129.9  | 141.7  | 157.5  | 177.2  | 196.9  |
| Height at max capacity with hooked-on sideshift           | 118.1  | 129.9  | 141.7  | 157.5  | 177.2  | 196.9  |

| 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                                  | 96.5   | 102.4  | 108.3  | 116.1  |
| h2 - Mast free lift                                       | 52.6   | 58.5   | 64.4   | 72.2   |
| h3 - Mast lifting height                                  | 118.1  | 129.9  | 141.7  | 157.5  |
| h4 - Mast extended height                                 | 162    | 173.8  | 185.6  | 201.4  |
| Residual capacity at max height                           | 15432  | 15432  | 15432  | 15432  |
| Residual capacity with hooked-on side shift at max height | 14330  | 14330  | 14330  | 14330  |
| Height at max capacity                                    | 118.1  | 129.9  | 141.7  | 157.5  |
| Height at max capacity with hooked-on sideshift           | 118.1  | 129.9  | 141.7  | 157.5  |

| 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                                  | 107.3  | 111.2  | 113.2  | 121.1  | 127    |
| h2 - Mast free lift                                       | 59.1   | 63     | 65.8   | 70.9   | 78.7   |
| h3 - Mast lifting height                                  | 177.2  | 189    | 196.9  | 216.5  | 236.2  |
| h4 - Mast extended height                                 | 225.8  | 237.6  | 244.6  | 267.1  | 284.8  |
| Residual capacity at max height                           | 14110  | 13889  | 13889  | 13448  | 12125  |
| Residual capacity with hooked-on side shift at max height | 13007  | 12787  | 12787  | 12346  | 11023  |
| Height at max capacity                                    | 157.5  | 157.5  | 157.5  | 157.5  | 157.5  |
| Height at max capacity with hooked-on sideshift           | 157.5  | 157.5  | 157.5  | 157.5  | 157.5  |



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