



# CATALOGUE



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02  
rev.0





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Energy**

|  | MIXER BUCKET WITH CENTRAL DISCHARGE | p.8  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
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|  | TWIN DOOR MIXER BUCKET              | p.12 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
|  | SWEEPER BUCKET HD                   | p.16 | ✓ | ✓ | ✓ | ✓ | - | ✓ |
|  | SWEEPER BUCKET F                    | p.18 | - | - | ✓ | ✓ | ✓ | ✓ |
|  | SWEEPER BUCKET D                    | p.20 | - | ✓ | ✓ | ✓ | ✓ | ✓ |
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|  | ISO 24410 ADAPTOR                   | p.33 | ✓ | ✓ | ✓ | ✓ | - | - |
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# MIXING

- Bottom and helix made of wear resistant STEEL 450HBW
- Rounded fixed safety grill complete with bag breaker
- Electric valve, hydraulic hoses + electric connection kit
- Coupling to the machine



## MIXER BUCKET WITH CENTRAL DISCHARGE



- Welded helix made of wear steel 450HBW
- Unloading pipe 1500mm length
- Sintered steel seal group

### Suitable for any type of earth moving machine:

|                                       |                                                  |
|---------------------------------------|--------------------------------------------------|
| Skid loader                           | 150/200/250/350/450                              |
| Backhoe loaders-Compact wheel loaders | BM450/600/700                                    |
| Wheel loaders                         | BM1100/1500/2000                                 |
| Telehandlers                          | 2/2,5 t BM350/450<br>3/4 t BM600<br>>4,5 t BM700 |
| Excavators                            | starting from 3,5 t                              |

## MIXER BUCKET WITH SIDE DISCHARGE



Bolted helix made of wear steel 450HBW

Hydraulic motor fully protected

Unloading pipe (length 1500mm)

Bolted bracket as standard supply, starting from class 3 models

Polyurethane seal group

### Suitable for any type of earth moving machine:

Skid loader\_\_\_\_\_BM100/150/200/250/330/400SL

Backhoe loaders-Compact wheel loaders\_\_\_\_\_BM400/500/600SL

Wheel loaders\_\_\_\_\_BM700/1100SL

Telehandlers\_\_\_\_\_2/2,5 t BM250/330/400SL

3/4 t BM500/600SL

>4,5 t BM700SL

Excavators\_\_\_\_\_starting from 3,5 t

## TWIN DOOR MIXER BUCKET



Bolted helix made of wear steel 450HBW

Hydraulic motor fully protected

Unloading pipe (length 1500mm) and side chute

Bolted bracket as standard supply, starting from class 3 models

Polyurethane seal group

### Suitable for any type of earth moving machine:

Skid loader\_\_\_\_\_BM150/200/250/330/400TD

Backhoe loaders-Compact wheel loaders\_\_\_\_\_BM400/500/600TD

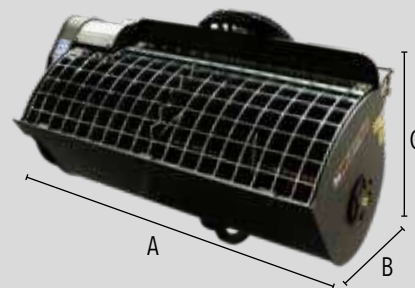
Wheel loaders\_\_\_\_\_BM700/1100TD

Telehandlers\_\_\_\_\_2/2,5 t BM250/330/400TD

3/4 t BM500/600TD

>4,5 t BM700TD

Excavators\_\_\_\_\_starting from 3,5 t



## DIMENSIONS

|   |               | BM<br>150 | BM<br>200 | BM<br>250 | BM<br>350 | BM<br>450 | BM<br>600 | BM<br>700 | BM<br>1100 | BM<br>1500 | BM<br>2000 |
|---|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|
| A | <b>Width</b>  | 1310      | 1350      | 1505      | 1520      | 1620      | 1900      | 1900      | 2165       | 2260       | 2780       |
| B | <b>Depth</b>  | 800       | 800       | 830       | 900       | 900       | 1000      | 1100      | 1320       | 1450       | 1400       |
| C | <b>Height</b> | 600       | 670       | 690       | 815       | 815       | 910       | 1030      | 1160       | 1180       | 1500       |

The concrete mixer bucket M3 is equipped with: BOTTOM AND HELIX made of wear resistant STEEL 450 HBW - Rounded fixed safety grid complete with bag-breaker - Electric valve - Hydraulic hoses - Electric connection kit - Flat Face couplings (only on SSL) - hydraulic opening of the bottom through a cylinder with covered rod - chain tensioner - unloading pipe length mm 1500 - coupling to the machine.

By matching the mixing bucket to compact loaders, please consider the following: the operating load of the machine  $\geq$  the full load weight of the mixer bucket. In case the longitudinal and the horizontal distance of the center of gravity of the mixing bucket is lower than the one of the standard bucket (according to the data supplied by the manufacturer of the mixing bucket) it is possible to add the weight of the standard bucket to the operating load.

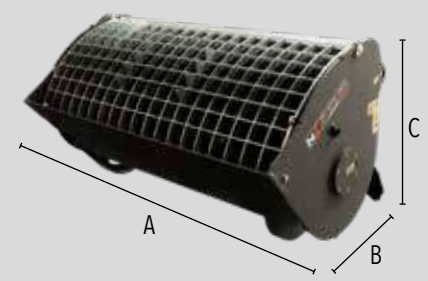
## OPTIONALS

|                       |                                                          |                                                                     |
|-----------------------|----------------------------------------------------------|---------------------------------------------------------------------|
|                       | Protection grid with hydraulic opening and safety valve. | Protection grid with manual opening, gas springs and safety sensor. |
| Bolted bracket        | Electric spring winder                                   | Excavator bracket - direct coupling                                 |
| 8 / 14 pins connector |                                                          |                                                                     |



| MODEL                        | BM 150  | BM 200  | BM 250  | BM 350  | BM 450  | BM 600  | BM 700  | BM 1100 | BM 1500         | BM 2000         |
|------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|-----------------|-----------------|
| Capacity [L]                 | 150     | 200     | 250     | 350     | 450     | 600     | 700     | 1100    | 1500            | 2000            |
| Transmission                 | chain   | chain   | chain   | chain   | chain   | chain   | chain   | chain   | chain, 2 motors | chain, 2 motors |
| Empty weight [kg]            | 275     | 310     | 380     | 395     | 420     | 630     | 710     | 1250    | 1700            | 2100            |
| Full load weight [kg]        | 635     | 790     | 980     | 1235    | 1500    | 2070    | 2390    | 3890    | 5300            | 6900            |
| Min/max flow rate [L/min]    | 30/40   | 30/40   | 30/75   | 35/75   | 35/75   | 65/75   | 70/150  | 100/114 | 140/300         | 200/228         |
| Max pression cont/peak [bar] | 140/205 | 140/205 | 230/300 | 210/300 | 210/300 | 140/300 | 150/310 | 205/330 | 150/310         | 205/330         |





# DIMENSIONS

|   |        | BM 100 SL* | BM 150 SL | BM 200 SL | BM 250 SL | BM 330 SL | BM 400 SL | BM 500 SL | BM 600 SL | BM 700 SL | BM 1100 SL |
|---|--------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| A | Width  | 1180       | 1285      | 1490      | 1495      | 1605      | 1715      | 1795      | 1940      | 2090      | 2160       |
| B | Depth  | 700        | 660       | 660       | 860       | 860       | 860       | 1075      | 1075      | 1075      | 1305       |
| C | Height | 560        | 645       | 645       | 800       | 800       | 800       | 1033      | 1033      | 1033      | 1250       |

The concrete mixer bucket M3 model SL is equipped with: safety rounded grill with bag splitter - BOTTOM and bolted HELIX made of wear steel 450 HBW - hydraulic motor fully protected - chain tensioner - electric valve with hydraulic hoses - electrical connection kit - hydraulic hoses - flat face couplings (only for SSL) - hydraulic opening of the bottom through a cylinder with covered rod - unloading pipe L=1500 mm.- coupling to the machine (standard bolted bracket, starting from the model BM 500 SL).

By matching the mixing bucket to compact loaders, please consider the following: the operating load of the machine  $\geq$  the full load weight of the mixer bucket.

## OPTIONALS

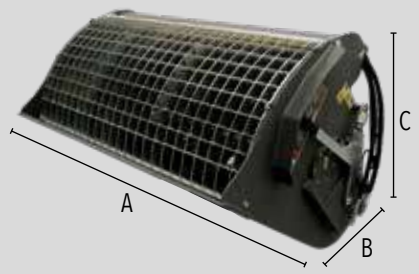
|                       |                                                                   |                                                                     |
|-----------------------|-------------------------------------------------------------------|---------------------------------------------------------------------|
|                       | Hydraulic opening of the safety grill including the safety valve. | Protection grid with manual opening, gas springs and safety sensor. |
| Bolted bracket        | Electric spring winder                                            | Excavator bracket - direct coupling                                 |
| 8 / 14 pins connector | Side chute                                                        |                                                                     |



| MODEL                           | BM<br>100 SL* | BM<br>150 SL | BM<br>200 SL | BM<br>250 SL | BM<br>330 SL | BM<br>400 SL | BM<br>500 SL | BM<br>600 SL | BM<br>700 SL | BM<br>1100 SL |
|---------------------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| Class                           | -             | 1            | 1            | 2            | 2            | 2            | 3            | 3            | 3            | 4             |
| Capacity<br>[L]                 | 100           | 150          | 200          | 250          | 330          | 400          | 500          | 600          | 700          | 1100          |
| Transmission                    | gear unit     | chain        | chain        | chain        | chain        | chain        | chain        | chain        | chain        | chain         |
| Empty weight<br>[kg]            | 205           | 290          | 315          | 415          | 435          | 460          | 695          | 715          | 765          | 1030          |
| Full load weight<br>[kg]        | 445           | 650          | 795          | 1015         | 1227         | 1418         | 1895         | 2155         | 2445         | 3670          |
| Min/max flow rate<br>[L/min]    | 25/70         | 30/60        | 30/60        | 40/75        | 35/75        | 35/75        | 70/150       | 70/150       | 70/150       | 100/115       |
| Max pression cont/peak<br>[bar] | 140/225       | 175/225      | 175/225      | 175/225      | 210/300      | 210/300      | 150/310      | 150/310      | 150/310      | 205/330       |

\* bucket with manual side discharge, without unloading pipe and electro valve





## DIMENSIONS

|   |        | BM<br>150 TD | BM<br>200 TD | BM<br>250 TD | BM<br>330 TD | BM<br>400 TD | BM<br>500 TD | BM<br>600 TD | BM<br>700 TD | BM<br>1100 TD |
|---|--------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| A | Width  | 1350         | 1560         | 1560         | 1670         | 1780         | 1865         | 2010         | 2160         | 2280          |
| B | Depth  | 660          | 660          | 860          | 860          | 860          | 1075         | 1075         | 1075         | 1305          |
| C | Height | 645          | 645          | 800          | 800          | 800          | 1033         | 1033         | 1033         | 1250          |

The concrete mixer bucket M3 model TD is equipped with: safety grill with bag splitter - BOTTOM and bolted HELIX made of wear resistant steel 450 HBW - hydraulic motor fully protected - chain tensioner - electric valve with hydraulic hoses - electric connection kit -hydraulic hoses - flat face couplings (only for SSL) - hydraulic opening of the bottom through a cylinder with covered rod - manually-operated side discharge - unloading pipe L=1500 mm - side chute extension – coupling to the machine (standard bolted bracket starting from mod. BM500TD).

By matching the mixing bucket to compact loaders, please consider the following: the operating load of the machine  $\geq$  the full load weight of the mixer bucket.

## OPTIONALS

|                        |                                                                     |                |
|------------------------|---------------------------------------------------------------------|----------------|
|                        | Protection grid with manual opening, gas springs and safety sensor. | Bolted bracket |
| Electric spring winder | Excavator bracket - direct coupling                                 |                |



| MODEL                           | BM<br>150 TD | BM<br>200 TD | BM<br>250 TD | BM<br>330 TD | BM<br>400 TD | BM<br>500 TD | BM<br>600 TD | BM<br>700 TD | BM<br>1100 TD |
|---------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| Class                           | 1            | 1            | 2            | 2            | 2            | 3            | 3            | 3            | 4             |
| Capacity<br>[L]                 | 150          | 200          | 250          | 330          | 400          | 500          | 600          | 700          | 1100          |
| Transmission                    | chain        | chain        | chain        | chain        | chain        | chain        | chain        | chain        | chain         |
| Empty weight<br>[kg]            | 310          | 335          | 435          | 455          | 480          | 720          | 740          | 790          | 1060          |
| Full load weight<br>[kg]        | 670          | 815          | 1035         | 1247         | 1440         | 1920         | 2180         | 2470         | 3700          |
| Min/max flow rate<br>[L/min]    | 30/60        | 30/60        | 40/75        | 35/75        | 35/75        | 70/150       | 70/150       | 70/150       | 100/115       |
| Max pression cont/peak<br>[bar] | 175/225      | 175/225      | 175/225      | 210/300      | 210/300      | 150/310      | 150/310      | 150/310      | 205/330       |



## GROUND SWEEPING

- Collecting bucket
- Polypropylene brush
- Coupling to the machine
- Extremely tough and rugged



### SWEeper BUCKET HD



Direct drive motor

Brushes made of PPN Ø550 mm

Double-bevelled blade & reinforcements made of steel HBW450

It is operated forward & backwards

### SWEeper BUCKET F



PPN brush Ø550 mm

No. 3 support wheels Ø250x70mm

Collection bucket with hydraulic opening and closing.

It is operated only forward

Floating system for forklift or forks

## SWEeper BUCKET D



Ø590 mm polypropylene brush

N. 2 Ø250x50mm support wheels

Mechanical working angle adjustment

Hydraulic opening and closing of the collection bucket

It is operated only forward

Hooks for: forklift, tractor, earth moving machines

Suitable for skid loader, backhoe loader, wheel loader, and forklift up to 7 T; and tractors

## SWEeper BUCKET DS



Ø660 mm polypropylene brush

N. 3 Ø250x60mm support wheels

Built-in motor

Mechanical working angle adjustment

Hydraulic opening and closing of the collection bucket

It is operated only forward

Hooks for: forklift, tractor, earth moving machines

Suitable for wheel loader, backhoe loader and telehandlers from 5 to 12 T, tractors from 100 HP and forklifts from 3,5 T

## SWEeper BUCKET C



Ø750 mm polypropylene brush

N. 3 Ø405x110mm support wheels

Built-in motor

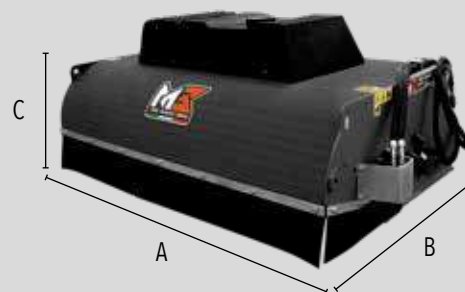
Mechanical working angle adjustment

Hydraulic opening and closing of the collection bucket

It is operated only forward

Hooks for: forklift, tractor, earth moving machines

Suitable for wheel loaders and telehandlers starting from 12 T and tractors from 100 HP



## DIMENSIONS

|   |        | BS 140 HD | BS 155 HD | BS 180 HD | BS 210 HD | BS 240 HD |
|---|--------|-----------|-----------|-----------|-----------|-----------|
| A | Width  | 1670      | 1770      | 2070      | 2270      | 2610      |
| B | Depth  | 1450      | 1450      | 1450      | 1450      | 1450      |
| C | Height | 620       | 620       | 620       | 620       | 640       |

The experience acquired over the years on the use of sweeper buckets has allowed us to make some improvements. The steel wear-resistant reinforcements in the most stressed points of the collection bucket, the bolted and reversible blade in 450 HBW make the use of the HD sweeper buckets suitable for both burdensome construction sites and in normal road maintenance. The motor with direct transmission reduces the maintenance and significantly reduces the time required for the roller replacement. It is supplied with collection bucket with reinforcements in Hardox 450 HBW, brush shaft Ø 550 mm (Ø 600 mm for BS240HD) in PPN, bolted reversible blade, hydraulic hoses with quick hitches and coupling for skid loader. Equipped with coupling for backhoe loaders, wheel loaders or telehandlers only for model BS240D.

## OPTIONALS

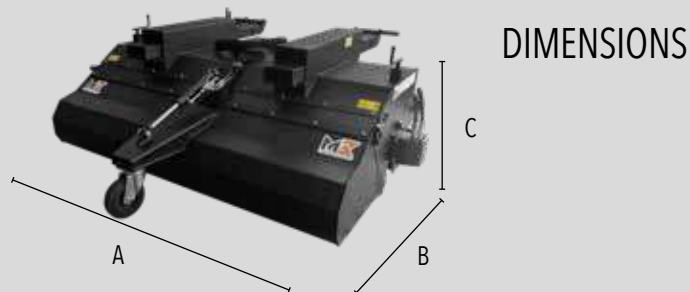
|                                          |                                                                                          |                                               |
|------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------|
|                                          | Nebulizers kit (without tank)                                                            | Brush shaft with mixed STEEL/PPN rings        |
| Side brush r/l Ø 600 mm in polypropylene | Sprinkler kit 100 L / 200 L (only BS 240 HD) with electric pump and hose with nebulizers | Falling gravity sprinkler kit with 100 L tank |
| Connector 8/14 poles                     |                                                                                          |                                               |



| MODEL                     | BS 140 HD | BS 155 HD | BS 180 HD      | BS 210 HD | BS 240 HD |
|---------------------------|-----------|-----------|----------------|-----------|-----------|
| Working width [mm]        | 1400      | 1600      | 1800           | 2100      | 2400      |
| Weight [kg]*              | 280       | 400       | 440            | 470       | 780       |
| Min/max flow rate [L/min] | 50/90     | 50/90     | 50/90          | 50/90     | 75/90     |
| Min/max pressure [bar]    | 230/295   | 230/295   | 230/295        | 230/295   | 230/300   |
| Ø Brush [mm]              | 550       | 550       | 550            | 550       | 600       |
| Number of rollers [n°]    | 2x700     | 2x750     | 1x800 - 1x1000 | 2x1000    | 3x750     |
| Bucket capacity [L]       | 385       | 450       | 510            | 560       | 620       |

\* the value indicated in the table refers to the weight of the sweeper with universal coupling for skid loader (except for BS 240 HD)





## DIMENSIONS

|   |        | BS 150 F | BS 180 F | BS 210 F | BS 240 F |
|---|--------|----------|----------|----------|----------|
| A | Width  | 1760     | 2060     | 2360     | 2660     |
| B | Depth  | 1900     | 1900     | 1900     | 1900     |
| C | Height | 735      | 735      | 735      | 735      |

- Collection bucket with hydraulic opening and closing
- PPN brush
- N.3 support wheels
- Floating system for forks

The new sweeper bucket M3 F-series is suitable for forklifts and, generally speaking, for all machinery equipped with forks. It can be used in the industrial, agricultural and nursery sectors. It is operated only forward. Thanks to the quick installation, it looks handy and fast for the cleaning of every surface, from big industrial areas to yards, from roads and car parks to farms and riding schools. It is equipped with: collection bucket with hydraulic opening and closing, floating system for forks, three support wheels and PPN brush Ø 550 mm. (Ø 600 mm for BS240F).

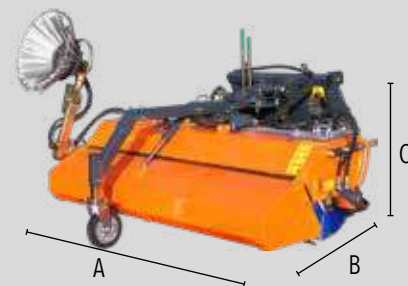
## OPTIONALS

|                                          |                                                                                          |                                                                          |
|------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
|                                          | Sprinkler kit 100 / 200 L (only for BS240F), with electric pump and hose with nebulizers | Hose kit with nebulizers (for sprinkler kit with tank already installed) |
| Side brush r/l Ø 600 mm in polypropylene | Nebulizers kit for side brush                                                            | Brush shaft with mixed STEEL - PPN rings                                 |



| MODEL                          | BS 150 F | BS 180 F       | BS 210 F | BS 240 F |
|--------------------------------|----------|----------------|----------|----------|
| Working width [mm]             | 1500     | 1800           | 2000     | 2400     |
| Weight [kg]                    | 450      | 500            | 550      | 600      |
| Required oil flow [L/min]      | 30÷45    | 30÷45          | 30÷45    | 30÷45    |
| Flow rate cont/int [L/min]     | 75÷90    | 75÷90          | 75÷90    | 75÷90    |
| Max pressure cont/int [bar]    | 230÷295  | 230÷295        | 230÷295  | 230÷295  |
| Ø Brush [mm]                   | 550      | 550            | 550      | 600      |
| Number of rollers [n°]         | 2x750    | 1x800 - 1x1000 | 2x1000   | 3x750    |
| Collection bucket capacity [L] | 190      | 225            | 261      | 320      |





## DIMENSIONS

|   |        | BS 135 D | BS 150 D | BS 180 D | BS 200 D | BS 230 D | BS 260 D |
|---|--------|----------|----------|----------|----------|----------|----------|
| A | Width  | 1680     | 1830     | 2130     | 2330     | 2630     | 2930     |
| B | Depth  | 1650     | 1650     | 1650     | 1650     | 1650     | 1650     |
| C | Height | 1200     | 1200     | 1200     | 1200     | 1200     | 1200     |

The sweeper bucket M3 series D is designed for customers who work both in the field of cable or phone laying sectors and of road maintenance.

It can be fitted to any kind of skid loader, backhoe loader, wheel loader, and forklift up to 7 T; and tractors. It is equipped with hydraulically driven collecting bucket - polypropylene brush Ø 590 mm., no. 2 support wheels 250x50 mm, hydraulic hoses, floating system and mechanical adjustment of the work angle.

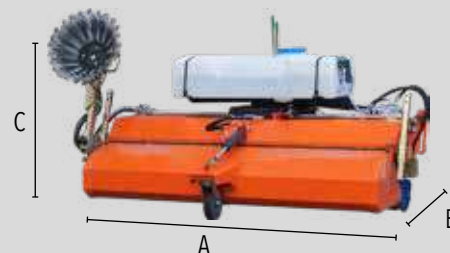
## OPTIONALS

|                                                    |                                                                                   |                                                                                                                |
|----------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
|                                                    | Overflow valve                                                                    | 3rd front wheel Ø 250x50 mm                                                                                    |
| Ø600 mm PPN side brush right/left                  | Internal hydraulic motor                                                          | Hydraulic working angling adjustment (an additional hydraulic line is required)                                |
| 100 L water tank with electric pump and nebulizers | 200 L water tank with electric pump and nebulizers (not available in mod. BS135D) | Solenoid valve kit to operate the hydraulic adjustment (if the machine is not equipped with 2 hydraulic lines) |



| MODEL                                 | BS 135 D | BS 150 D | BS 180 D | BS 200 D | BS 230 D | BS 260 D |
|---------------------------------------|----------|----------|----------|----------|----------|----------|
| Working width [mm]                    | 1350     | 1500     | 1800     | 2000     | 2300     | 2600     |
| Working width with 20° angle [mm]     | 1270     | 1410     | 1690     | 1880     | 2160     | 2440     |
| Required oil flow (at 160bar) [L/min] | 30       | 30       | 30       | 40       | 40       | 50       |
| Ø Brush [mm]                          | 590      | 590      | 590      | 590      | 590      | 590      |
| Weight with collecting bucket [kg]    | 329      | 344      | 373      | 398      | 429      | 462      |
| Capacity of collecting bucket [L]     | 166      | 184      | 220      | 244      | 280      | 315      |
| Number of rings [n°]                  | 25       | 28       | 34       | 38       | 44       | 50       |





## DIMENSIONS

|   |        | BS 200 DS | BS 230 DS | BS 260 DS | BS 280 DS |
|---|--------|-----------|-----------|-----------|-----------|
| A | Width  | 2230      | 2530      | 2830      | 2990      |
| B | Depth  | 1850      | 1850      | 1850      | 1850      |
| C | Height | 1200      | 1200      | 1200      | 1200      |

The sweeper bucket M3 series DS is designed for customers who work both in the field of cable or phone laying sectors and in the road maintenance, or for the clean-up of big external areas.

It can be fitted to any kind of wheel loader, backhoe loader and telehandlers from 5 to 12 T, tractors from 100 HP and forklifts from 3,5 T. It is equipped with hydraulic collecting bucket - PPN brush Ø 660 mm., no. 3 support wheels 250x60 mm, hydraulic hoses, integrated motor, floating system and mechanical adjustment of the work angle.

## OPTIONALS

|                                                                                                                |                                                    |                                                                                 |
|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------|
|                                                                                                                | Overflow valve                                     | Side brush right or left Ø 600 mm in PPN and STEEL                              |
| Solenoid valve kit to operate the hydraulic adjustment (if the machine is not equipped with 2 hydraulic lines) | Water tank 200 l with electric pump and nebulizers | Hydraulic working angling adjustment (an additional hydraulic line is required) |
| Nebulizer kit (without tank)                                                                                   |                                                    |                                                                                 |



| MODEL                                 | BS 200 DS | BS 230 DS | BS 260 DS | BS 280 DS |
|---------------------------------------|-----------|-----------|-----------|-----------|
| Working width [mm]                    | 2000      | 2300      | 2600      | 2800      |
| Working width with 20° angle [mm]     | 1880      | 2160      | 2440      | 2600      |
| Required oil flow (at 160bar) [L/min] | 40        | 40        | 50        | 50        |
| Ø Brush [mm]                          | 660       | 660       | 660       | 660       |
| Weight with collecting bucket [kg]    | 575       | 610       | 644       | 661       |
| Capacity of collecting bucket [L]     | 315       | 361       | 407       | 431       |
| Number of rings [n°]                  | 38        | 44        | 50        | 53        |





DIMENSIONS

|   |        | BS 210 C | BS 240 C | BS 280 C |
|---|--------|----------|----------|----------|
| A | Width  | 2360     | 2660     | 2990     |
| B | Depth  | 2230     | 2230     | 2230     |
| C | Height | 1200     | 1200     | 1200     |

The Sweeper bucket M3 series D is designed for customers who work both in the field of road maintenance and of the cleanup of huge areas. It can be fitted to any kind of wheel loaders and telehandlers starting from 12 T and tractors from 100 HP. It is equipped with hydraulically-driven collecting bucket – polypropylene brush Ø 750 mm, no. 3 support wheels 405x110 mm, hydraulic hoses, integrated motor, floating system, and mechanical adjustment system of the work angle.

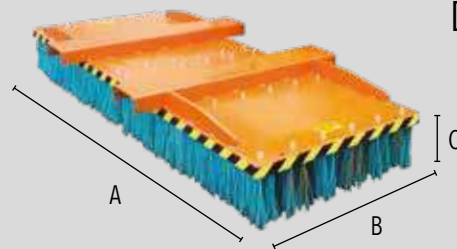
## OPTIONALS

|                                                    |                                                                                                                |                                                                                 |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
|                                                    | Overflow valve                                                                                                 | Extra strong wheels Ø 410x145 mm                                                |
| Side brush right or left Ø 750 mm in PPN and STEEL | Solenoid valve kit to operate the hydraulic adjustment (if the machine is not equipped with 2 hydraulic lines) | Hydraulic working angling adjustment (an additional hydraulic line is required) |
| Water tank 200 l with electric pump and nebulizers | Water tank 400 l with electric pump and nebulizers                                                             | Nebulizer kit (without tank)                                                    |



| MODEL                                 | BS 210 C | BS 240 C | BS 280 C |
|---------------------------------------|----------|----------|----------|
| Working width [mm]                    | 2100     | 2400     | 2800     |
| Working width with 20° angle [mm]     | 1950     | 2250     | 2550     |
| Required oil flow (at 160bar) [L/min] | 56       | 56       | 56       |
| Ø Brush [mm]                          | 750      | 750      | 750      |
| Weight with collecting bucket [kg]    | 795      | 904      | 957      |
| Capacity of collecting bucket [L]     | 450      | 480      | 550      |
| Number of rings [n°]                  | 48       | 56       | 66       |





# DIMENSIONS

|   |        | SI 151I | SI 151IP | SI 200I | SI 201I | SI 200IP | SI 201IP | SI 250I | SI 251I | SI 250IP | SI 251IP | SI 300I | SI 300IP | SI 201IR | SI 251IR |
|---|--------|---------|----------|---------|---------|----------|----------|---------|---------|----------|----------|---------|----------|----------|----------|
| A | Width  | 1400    | 1400     | 1900    | 1900    | 1900     | 1900     | 2400    | 2400    | 2400     | 2400     | 2900    | 2900     | 1900     | 2400     |
| B | Depth  | 700     | 700      | 700     | 1000    | 700      | 1000     | 700     | 1000    | 700      | 1000     | 1000    | 1000     | 1000     | 1000     |
| C | Height | 400     | 400      | 400     | 400     | 400      | 400      | 400     | 400     | 400      | 400      | 400     | 400      | 400      | 400      |

- With interchangeable welded iron strips (I series) or interchangeable PPN strips (IP series)
- Coupling for lifting forks

The broom sweeper M3 is suitable for the cleaning of large yards, industrial and market areas, and for the scrap collection. It can be fitted to any type of forklift or machinery. It is wear-resistant and completely recyclable. It is equipped with interchangeable welded iron strips (series I) or interchangeable strips in PPN (series IP), or in a reinforced version with thickness 8 mm with iron strips (IR series) with lifting forks.

## OPTIONALS

|                    |                        |                         |
|--------------------|------------------------|-------------------------|
|                    | Spare kit - PPN strips | Spare kit - IRON strips |
| Frontal push blade | Containment sides      |                         |



| MODEL              | SI 151 I | SI 151 IP | SI 200 I | SI 201 I | SI 200 IP | SI 201 IP | SI 250 I | SI 251 I | SI 250 IP | SI 251 IP | SI 300 I | SI 300 IP | SI 201 IR | SI 251 IR |
|--------------------|----------|-----------|----------|----------|-----------|-----------|----------|----------|-----------|-----------|----------|-----------|-----------|-----------|
| Working width [mm] | 1400     | 1400      | 1900     | 1900     | 1900      | 1900      | 2400     | 2400     | 2400      | 2400      | 2900     | 2900      | 1900      | 2400      |
| Sectors [n°]       | 15       | 15        | 20       | 24       | 20        | 24        | 25       | 30       | 25        | 30        | 36       | 36        | 24        | 30        |
| Weight [kg]        | 250      | 220       | 250      | 270      | 230       | 250       | 340      | 360      | 300       | 330       | 430      | 400       | 450       | 575       |





# DIMENSIONS

|   |        | SA 150 | SA 180 | SA 210 | SA 240 |
|---|--------|--------|--------|--------|--------|
| A | Width  | 1770   | 2070   | 2270   | 2670   |
| B | Depth  | 1620   | 1620   | 1620   | 1620   |
| C | Height | 650    | 650    | 650    | 650    |

- Coupling for skid steer loaders
- Direct drive hydraulic motor

The angle broom sweeper M3 fits any kind of skid steer loaders, backhoe and wheel loaders and telehandlers (up to 80 HP). Thanks to its strong structure it can be used for the cleaning of construction yards, streets, large courtyard areas or as a snow blade, in case of light snowfalls.

It is equipped with hydraulic motor with direct transmission, hydraulic hoses complete with quick couplings (only on SSL), +/-30° mechanical adjustment of the work angle, PPN brush Ø 550 mm, no. 2 support wheels Ø 200x50 mm and SSL coupling.

## OPTIONALS

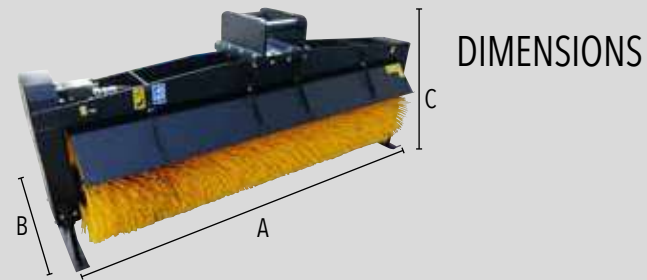
|                                                                       |                                  |                                                    |
|-----------------------------------------------------------------------|----------------------------------|----------------------------------------------------|
|                                                                       | Floating Coupling with 3rd wheel | Hydraulic Angling complete with valve and cylinder |
| Sprinkler kit with 100 LTank, electric pump and hoses with nebulizers | 3rd wheel Ø 200x50 mm            |                                                    |



| MODEL                             | SA 150  | SA 180         | SA 210  | SA 240  |
|-----------------------------------|---------|----------------|---------|---------|
| Working width [mm]                | 1500    | 1800           | 2100    | 2400    |
| Working width with 30° angle [mm] | 1299    | 1566           | 1736    | 2078    |
| Min/max flow rate [L/min]         | 25/100  | 25/100         | 25/100  | 25/100  |
| Min/max pressure [bar]            | 100/250 | 100/250        | 100/250 | 100/250 |
| Ø Brush [mm]                      | 550     | 550            | 550     | 550     |
| Number of rollers [n°]            | 2x750   | 1x800 - 1x1000 | 2x1000  | 3x800   |
| Weight [kg] *                     | 295     | 310            | 380     | 416     |

\* The value indicated in the table refers to the weight of the sweeper with universal coupling for skid loaders





DIMENSIONS

|   |        | SPE 150 | SPE 180 | SPE 210 |
|---|--------|---------|---------|---------|
| A | Width  | 1760    | 2060    | 2360    |
| B | Depth  | 600     | 600     | 600     |
| C | Height | 816     | 816     | 816     |

- Hydraulic motor with chain transmission
- Drilled flat plate to bolt the excavator bracket on

The excavator sweeper M3 is the best solution to clean trenches, road edges and places difficult to be reached.

The sweeper is supplied with hydraulic motor with chain transmission, hydraulic hoses L. 2000 mm (without quick couplings ),PPN brush Ø 600 mm, and bolted drilled plate (bracket not included).

## OPTIONALS

|                               |                             |
|-------------------------------|-----------------------------|
| Bolt-in bracket for excavator | Brush rings mixed PPN/steel |
|-------------------------------|-----------------------------|



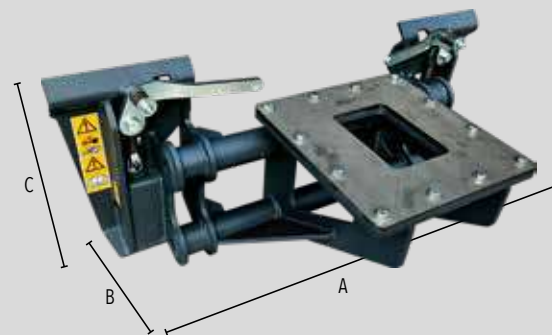
| MODEL                   | SPE 150 | SPE 180 | SPE 210 |
|-------------------------|---------|---------|---------|
| Working width [mm]      | 1500    | 1800    | 2100    |
| Max pressure [bar]      | 180     | 180     | 180     |
| Oil flow [cont - l/min] | 60      | 60      | 60      |
| Hydraulic motor [cc]    | 250     | 250     | 250     |
| Ø Brush [mm]            | 600     | 600     | 600     |
| Number of rings [n°]    | 25      | 30      | 35      |
| Transmission            | chain   | chain   | chain   |
| Weight [kg]             | 205     | 230     | 250     |





The Quick-Hitch M3 without modification of the original bucket avoids any intervention in the workshop, significantly increasing the productivity of the machine. It can be fitted to any backhoe loaders. According to the machine, it is supplied with a couple of adapters to be bolted on the original bucket. The Quick-Hitch M3 with modification of the original bucket does neither change the center of gravity of the machine nor alter the load capacity and the breakout force. It is particularly appreciated in tough working conditions, where the best performance is required by the machine. Upon request, it can be supplied with modification of the original bucket in compliance with ISO23727 standard measures.





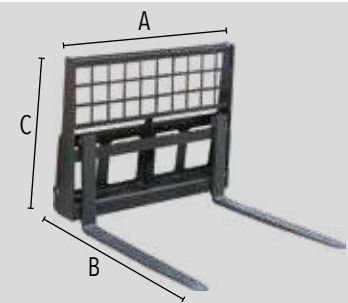
## DIMENSIONS

|   |               |      |
|---|---------------|------|
| A | <b>Width</b>  | 1130 |
| B | <b>Depth</b>  | 500  |
| C | <b>Height</b> | 200  |

The new adaptor plate M3 can be attached to any equipment with skid steer loader coupling even on other operating machines.

In a quick and easy way, any equipment can be moved from the skid loader to an excavator rather than to a telehandler or any other machinery. The best solution for a fast exchange making your job easier. It is equipped with welded coupling for wheel loaders / backhoe loaders/ telehandlers or with bolted counter plate, where the excavator hooks can be welded on.





# DIMENSIONS

|   |        | PPF S10-10 | PPF S10-12 | PPF S18-10 | PPF S18-12 | PPF S20-12 | PPF 18-12 | PPF 20-12 | PPF 25-12 | PPF 35-12 | PPF 45-12 | PPF 60-12 | PPF 80-12 | PPF 120-12 |
|---|--------|------------|------------|------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| A | Width  | 1200       | 1200       | 1200       | 1200       | 1500       | 1500      | 1500      | 1500      | 1500      | 1500      | 1500      | 1500      | 1500       |
| B | Depth  | 1000       | 1200       | 1000       | 1200       | 1200       | 1200      | 1200      | 1200      | 1200      | 1200      | 1200      | 1200      | 1200       |
| C | Height | 920        | 920        | 920        | 920        | 970        | 415       | 415       | 415       | 515       | 515       | 645       | 645       | 645        |

- The version for skid steer loader is equipped with protection grid

The Fork Carriage M3 can be attached to any type of skid steer loader, backhoe and wheel-loader, telehandler or excavator Available in various lifting capacities ranging from 1.000 KG up to 12.000 KG with both forks. Upon request available also with lifting capacity up to 30.000 kg. The version

for skid steer loader (PPF SXX) is equipped with protection grid.

## OPTIONALS

Hydraulic side shifter



| MODEL                    | PPF<br>S10-10 | PPF<br>S10-12 | PPF<br>S18-10 | PPF<br>S18-12 | PPF<br>S20-12 | PPF<br>18-12 | PPF<br>20-12 | PPF<br>25-12 | PPF<br>35-12 | PPF<br>45-12 | PPF<br>60-12 | PPF<br>80-12 | PPF<br>120-12 |
|--------------------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| Working width<br>[mm]    | 1200          | 1200          | 1200          | 1200          | 1500          | 1500         | 1500         | 1500         | 1500         | 1500         | 1500         | 1500         | 1500          |
| Forks dimensions<br>[mm] | 80x30x1000    | 80x30x1200    | 100x35x1000   | 100x35x1200   | 120x35x1200   | 100x35x1200  | 120x35x1200  | 120x40x1200  | 120x45x1200  | 120x50x1200  | 150x60x1200  | 200x60x1200  | 200x70x1200   |
| Load capacity<br>[kg]    | 1000          | 1000          | 1800          | 1800          | 2000          | 1800         | 2000         | 2500         | 3500         | 4500         | 6000         | 8000         | 12000         |
| Weight**<br>[kg]         | 150           | 160           | 170           | 180           | 420           | 195*         | 215*         | 230*         | 290*         | 305*         | *****        | *****        | *****         |



SIDESHIFT

\* weight without machine coupling / \*\* weight without hydraulic side shifter

## GROUND LEVELLING

- Extremely tough and rugged
- Heavy cylinders
- Pneumatic floating wheels for high adaptability to the ground
- Coupling to the machine

### GRADER BLADE



On/off distributor

ST52 steel structure

Manual flow regulator

Electrical control kit



### DUAL GRADER BLADE



Proportional and on/off distributor

It works both as a grader blade and as a tilt dozer blade

Double bevel curved blade

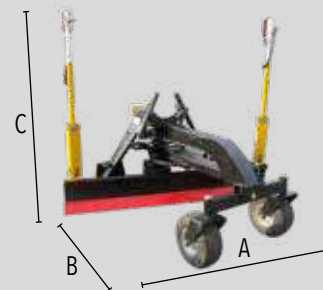
Over center valve on wheel lifting cylinder



Control joystick







## DIMENSIONS

|   |        | GR 230 | GR 250 | GR 270 |
|---|--------|--------|--------|--------|
| A | Width  | 2300   | 2500   | 2700   |
| B | Depth  | 2360   | 2360   | 2360   |
| C | Height | 1480   | 1480   | 1480   |

The Grader Blade M3 can be fitted to small skid steer loaders with power ranging from 50 to 120 HP. It is ideal for the preparation and the leveling of lands, roads and yards. It is equipped with the tilt system 32°, oscillation 40° and shift 450 mm of the blade with hydraulic functioning through a control panel, manual flow regulator on the distributor on / off, ST52 steel structure, coupling to the machine, hydraulic hoses and electric control kit.

## OPTIONALS

Laser Control System (1)

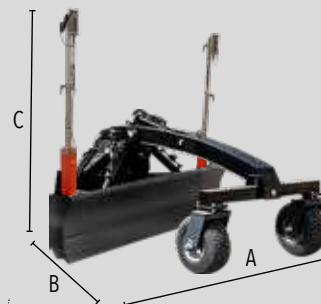
Proportional distributor (2)

Left/right closing plate (3)



| MODEL                            | GR 230         | GR 250         | GR 270         |
|----------------------------------|----------------|----------------|----------------|
| Blade width [mm]                 | 2300           | 2500           | 2700           |
| Weight [kg]                      | 670            | 690            | 710            |
| Hydraulic blade inclination R/L  | $\pm 38^\circ$ | $\pm 38^\circ$ | $\pm 38^\circ$ |
| Hydraulic blade oscillation R/L  | $\pm 32^\circ$ | $\pm 32^\circ$ | $\pm 32^\circ$ |
| Hydraulic blade translation [mm] | $\pm 450$      | $\pm 450$      | $\pm 450$      |





## DIMENSIONS

### GR 220/270

|   |        |           |
|---|--------|-----------|
| A | Width  | 2200/2700 |
| B | Depth  | 2500      |
| C | Height | 1900      |

The Grader Blade M3 Model Dual can be fitted to small skid steer loaders with power ranging from 50 to 120 HP. IT is ideal for the preparation and the leveling of lands, roads and yards.

It is equipped with a hydraulic control panel of the 26° inclination system, of the oscillation at 15°, of the blade height adjustment  $\pm 150\text{mm}$ , of the lifting of the front wheels, a distributor on / off, blade extensions, coupling to the machine, hydraulic hoses and electric control kit.

## OPTIONALS

Laser Control System (transmitter excluded) (1)

Left/right closing plate (2)

Wi-fi control system



1



1



2

| MODEL                           | GR 220/270       |
|---------------------------------|------------------|
| Blade width [mm]                | 2200/2700        |
| Weight [kg]                     | 850              |
| Hydraulic blade inclination R/L | $\pm 26^{\circ}$ |
| Hydraulic blade oscillation R/L | $\pm 15^{\circ}$ |
| Blade height [mm]               | 540              |



## GROUND MOVING

- Extremely tough and rugged
- 30° angle
- Heavy cylinders
- Bolt-on reversible blade made of steel HBW450
- Coupling for skid loader



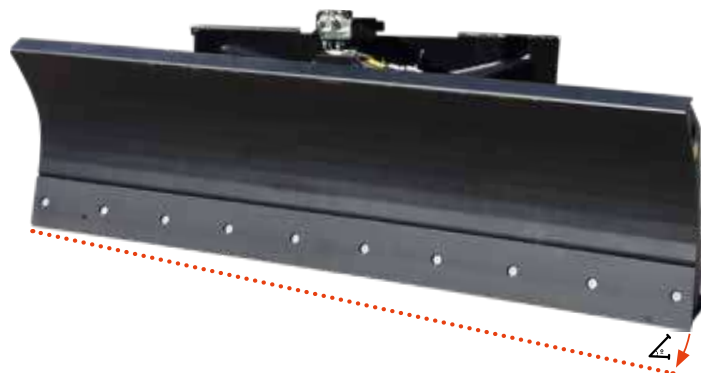
### DOZER BLADE



Hydraulic hoses with quick couplings

Shockproof valve

## TILT DOZER BLADE



Hydraulic hoses with quick couplings

Shockproof valve

1/2" electrovalve

Hydraulic oscillation +/- 8°

Standard electric kit

## LEVELING BOX DOZER BLADE



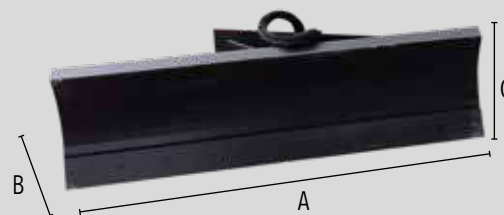
Proportional distributor

Rear pad with hydraulic control which neutralizes the riding effect

Laser control system

Bolt-in blade

Standard electric kit



## DIMENSIONS

|   |        | DB 150 | DB 180 | DB 210 | DB 240 | DB 270 |
|---|--------|--------|--------|--------|--------|--------|
| A | Width  | 1510   | 1810   | 2110   | 2410   | 2710   |
| B | Depth  | 600    | 600    | 600    | 600    | 600    |
| C | Height | 730    | 730    | 730    | 730    | 730    |

- It is equipped with shockproof valve
- Bolt-on blade made of steel 450HBW

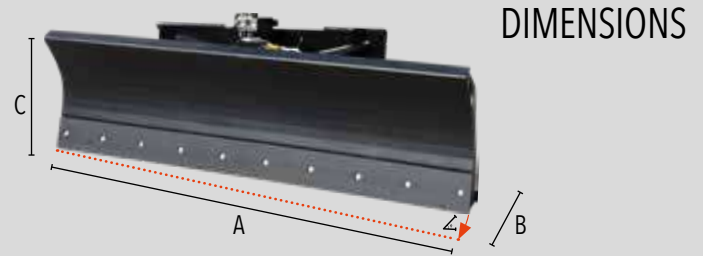
The M3 dozer blade can be easily fitted to any kind of skid steer loader, wheel loader and telehandlers up to 80HP.

It is equipped with shockproof valve, hydraulic angle  $\pm 30^\circ$ , hydraulic hoses, bolted bracket in wear-resistant steel 450 HBW and coupling to SSL.



| MODEL                           | DB 150 | DB 180 | DB 210 | DB 240 | DB 270 |
|---------------------------------|--------|--------|--------|--------|--------|
| Working width [mm]              | 1299   | 1560   | 1820   | 2075   | 2330   |
| Weight [kg]                     | 340    | 370    | 400    | 420    | 450    |
| Hydraulic blade inclination R/L | ±30°   | ±30°   | ±30°   | ±30°   | ±30°   |





|   |        | TDB 180 | TDB 210 | TDB 240 | TDB 270 |
|---|--------|---------|---------|---------|---------|
| A | Width  | 1810    | 2110    | 2410    | 2710    |
| B | Depth  | 600     | 600     | 600     | 600     |
| C | Height | 730     | 730     | 730     | 730     |

- It is equipped with shockproof valve
- Bolt-on blade made of steel 450HBW
- Electric valve complete with hydraulic hoses

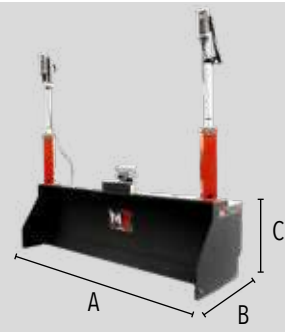
The M3 dozer blade can be easily fitted to any kind of skid steer loader, wheel loader and telehandlers up to 80HP.

It is equipped with shockproof valve, hydraulic angle  $\pm 30^\circ$ , hydraulic hoses,  $\pm 8$  hydraulic oscillation, bolted bracket in wear-resistant steel 450 HBW and coupling to SSL.



| MODEL                           | TDB 180        | TDB 210        | TDB 240        | TDB 270        |
|---------------------------------|----------------|----------------|----------------|----------------|
| Working width [mm]              | 1560           | 1820           | 2075           | 2330           |
| Weight [kg]                     | 360            | 390            | 430            | 490            |
| Max pressure [bar]              | 250            | 250            | 250            | 250            |
| Oil flow [L/min]                | 100            | 100            | 100            | 100            |
| Hydraulic blade inclination R/L | $\pm 30^\circ$ | $\pm 30^\circ$ | $\pm 30^\circ$ | $\pm 30^\circ$ |
| Hydraulic blade oscillation R/L | $\pm 8^\circ$  | $\pm 8^\circ$  | $\pm 8^\circ$  | $\pm 8^\circ$  |





# DIMENSIONS

LL 240

|   |        |      |
|---|--------|------|
| A | Width  | 2430 |
| B | Depth  | 830  |
| C | Height | 790  |

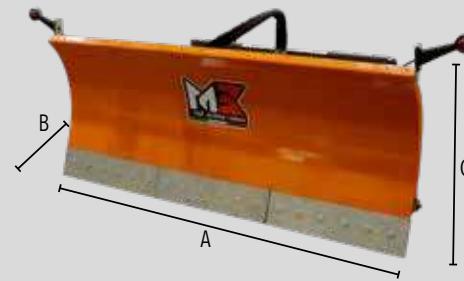
The leveling blade M3 is suitable for backfilling works, drafting of landfill materials and indoor ground levelling with excellent finishing level. Equipped with horizontal plane inclination system controlled by two hydraulic cylinders which allow the blade up and down movement. Moreover it is equipped with an innovative rear skate managed by hydraulic cylinders with relief valve, which, keeping the pressure of the skate constant on the ground, allows a perfect leveling, neutralising the riding effect.

Supplied with proportional distributor, relief valve calibrated to keep the pressure constant, laser leveling system and receivers support poles. It can be supplied with a control system with wifi remote control **A**.



| MODEL                | LL 240 |
|----------------------|--------|
| Blade width<br>[mm]  | 2400   |
| Weight<br>[kg]       | 950    |
| Blade height<br>[mm] | 740    |





## DIMENSIONS

|   |        | SB 150 | SB 180 | SB 210 | SB 240 | SB 270 |
|---|--------|--------|--------|--------|--------|--------|
| A | Width  | 1500   | 1800   | 2100   | 2400   | 2700   |
| B | Depth  | 710    | 710    | 710    | 710    | 710    |
| C | Height | 730    | 730    | 730    | 730    | 730    |

- Shockproof system with spring return straight on the plow allowing a faster use
- Marker lights
- It is equipped with shockproof valve

The snow plow M3 can be easily fitted to any skid steer loaders, wheel loaders and telehandlers up to 80 HP. It is supplied with shockproof valve, shockproof system with spring return straight on the plow allowing a faster use, marker lights, hydraulic angle  $\pm 30^\circ$ , oscillation  $\pm 7^\circ$ , hydraulic hoses and coupling to the machine.

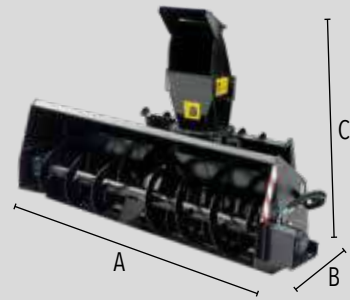
## OPTIONALS

|                    |                     |                                  |
|--------------------|---------------------|----------------------------------|
|                    | Skid shoes          | Sectors in polyurethane          |
| Support wheels kit | Moldboard extension | Floating system, wheels included |



| MODEL                           | SB 150         | SB 180         | SB 210         | SB 240         | SB 270         |
|---------------------------------|----------------|----------------|----------------|----------------|----------------|
| Working width [mm]              | 1299           | 1560           | 1820           | 2075           | 2330           |
| Weight [kg]                     | 340            | 370            | 400            | 420            | 450            |
| Hydraulic blade inclination R/L | $\pm 30^\circ$ | $\pm 30^\circ$ | $\pm 30^\circ$ | $\pm 30^\circ$ | $\pm 30^\circ$ |
| Hydraulic blade oscillation R/L | $\pm 7^\circ$  | $\pm 7^\circ$  | $\pm 7^\circ$  | $\pm 7^\circ$  | $\pm 7^\circ$  |





# DIMENSIONS

|   |        | MFN 150 | MFN 180 | MFN 210 | MFN 245 |
|---|--------|---------|---------|---------|---------|
| A | Width  | 1750    | 2050    | 2350    | 2450    |
| B | Depth  | 980     | 980     | 980     | 1300    |
| C | Height | 1250    | 1250    | 1250    | 1250    |

- Helix Ø 370 mm
- Electrical rotation deflector

The snow blower M3 is the perfect equipment for snow. It is produced in different models to fit machines with different widths and it can be attached to all types of skid steer loaders and backhoe loaders up to 80/100 HP. Thanks to its turbine which can blow the snow at a max distance of 15 m, the snow blower can be used for cleaning walkways, driveways, sidewalks or in town centers where only a skid loader can effectively work. It is supplied with electric rotation deflector, 370 mm flight and coupling to the machine.

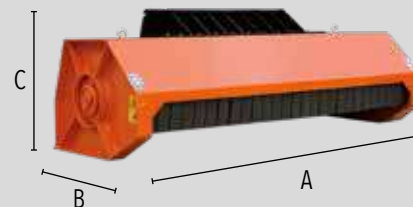
## OPTIONALS

Chute height mt 2,75



| MODEL                     |            |            |            |            |
|---------------------------|------------|------------|------------|------------|
|                           | MFN 150    | MFN 180    | MFN 210    | MFN 245    |
| Working width [mm]        | 1500       | 1800       | 2100       | 2450       |
| Flight diameter [mm]      | 370        | 370        | 370        | 370        |
| Working speed [km/h]      | 0/2        | 0/2        | 0/2        | 0/2        |
| Rotating deflector        | electrical | electrical | electrical | electrical |
| Rotating deflector angle  | 240°       | 240°       | 240°       | 240°       |
| Max snow level [mm]       | 600        | 600        | 600        | 600        |
| Oil flow req. min [L/min] | 65/80      | 65/80      | 65/80      | 65/80      |
| Discharge distance [m]    | 15         | 15         | 15         | 15         |
| Weight [kg]               | 380        | 400        | 420        | 650        |





## DIMENSIONS

|   |        | MDC 10 | MDC 13 | MDC 16 | MDC 19 | MDM 10 | MDM 13 | MDM 16 | MDM 19 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| A | Width  | 1460   | 1500   | 1800   | 2200   | 1460   | 1500   | 1800   | 2200   |
| B | Depth  | 700    | 780    | 780    | 780    | 700    | 780    | 780    | 780    |
| C | Height | 450    | 570    | 570    | 570    | 450    | 570    | 570    | 570    |

- Cutting diameter from 60 to 120 mm
- Direct drive hydraulic motor
- Rotor with knives MDC
- Rotor with hammers MDM

The hydraulic bush cutter M3 stands out for its strong structure and is specifically designed to be used on skid steer loaders. It is manufactured in 2 versions. The version MDC is equipped with a couple of "Y" knives and a third central knife to reduce any treated material treated material to fine grains. It is supplied with bolted bracket to fit any skid loader (the model MDC10/MDM10 is supplied with a welded hook). The version MDM is equipped with HD rotor with HD hammers, with the possibility to mount heavy knives. **Drain is recommended for counter-pressures > 7 bar.** Rotation speed 3000 rpm.

## OPTIONALS

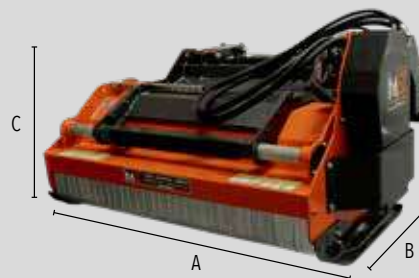
Hydraulic hoses kit



| MODEL                     | MDC 10               | MDC 13               | MDC 16               | MDC 19               | MDM 10               | MDM 13               | MDM 16               | MDM 19               |
|---------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Working width [mm]        | 1080                 | 1300                 | 1600                 | 1900                 | 1080                 | 1300                 | 1600                 | 1900                 |
| Weight [kg]*              | 270                  | 450                  | 550                  | 650                  | 295                  | 460                  | 560                  | 660                  |
| Oil flow required [L/min] | 26/36/44/55          | 55/66/80/100         | 66/80/100            | 66/80/100            | 26/36/44/55          | 55/66/80/100         | 66/80/100            | 66/80/100            |
| Max pressure [bar]        | 250                  | 250                  | 250                  | 250                  | 250                  | 250                  | 250                  | 250                  |
| Cutting diameter [mm]     | 60                   | 80/100               | 80/100               | 80/100               | 60                   | 100/120              | 100/120              | 100/120              |
| Motor displacement [cc]   | 8/11/14/17           | 17/22/26             | 22/26/33             | 26/33                | 8/11/14/17           | 17/22/26             | 22/26/33             | 26/33                |
| Motor type                | aluminium gear motor | aluminium gear motor | aluminium gear motor | aluminium gear motor | aluminium gear motor | aluminium gear motor | aluminium gear motor | aluminium gear motor |
| Rotor standard            | knives               | knives               | knives               | knives               | hammers              | hammers              | hammers              | hammers              |
| Knives sets [n°]          | 24                   | 20                   | 24                   | 28                   | *****                | *****                | *****                | *****                |
| Hammers sets [n°]         | *****                | *****                | *****                | *****                | 24                   | 28                   | 32                   | 40                   |



\* weight without coupling; weight coupling included only for MDC10/MDM10



## DIMENSIONS

|   |        | MHC5<br>160 | MHC5<br>180 | MHC5<br>200 | MHC10<br>160 HD | MHC10<br>180 HD |
|---|--------|-------------|-------------|-------------|-----------------|-----------------|
| A | Width  | 1820        | 2020        | 2220        | 2000            | 2200            |
| B | Depth  | 1200        | 1200        | 1200        | 1000            | 1000            |
| C | Height | 1100        | 1100        | 1100        | 1600            | 1600            |

- Cutting diameter: 8 cm - 25 cm (HD series only)
- Hydraulic motor with belt transmission
- MKF knives rotor
- MHF hammers rotor

The M3 MHC series bush cutter, featured by its solidity, is designed to fit skid loaders, wheel loaders and telehandlers up to 80/90 HP. Available in 2 versions, standard and HD. **The standard version** is equipped with universal oscillating and floating coupling, mechanical side movement, valve block, sturdy and reinforced structure, helical rotor with tempered hammers (standard) or knives (optional), hydraulic motor with V-belt transmission. **The HD version** is equipped with universal fixed coupling, rotor with fixed width teeth, reinforced wear-resistant structure, pressure gauge for working pressure control, double rear chains for greater protection, piston motor and high performance HTD single belt transmission. **Drain is recommended for counter-pressures > 5 bar.** Rotation speed 2200/2500 rpm.

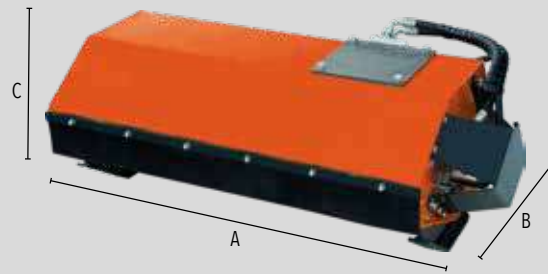
## OPTIONALS

|                 |                                                           |                                    |
|-----------------|-----------------------------------------------------------|------------------------------------|
|                 | Hydraulic side shifter                                    | Electrovalve                       |
| Hydraulic hoses | Coupling for wheel loaders, backhoe loaders, telehandlers | Variable displacement piston motor |



| MODEL                      | MHC5 160             | MHC5 180 | MHC5 200 | MHC10 160 HD | MHC10 180 HD |
|----------------------------|----------------------|----------|----------|--------------|--------------|
| Working width [mm]         | 1600                 | 1800     | 2000     | 1600         | 1800         |
| Weight [kg]                | 890                  | 930      | 970      | 1285         | 1420         |
| Oil flow [L/min]           | 60/120               | 60/120   | 60/120   | 100/180      | 100/180      |
| Pression [bar]             | 200/220              | 200/220  | 200/220  | 200/350      | 200/350      |
| Skid loader class [hp]     | 50/90                | 50/90    | 50/90    | 70/120       | 70/120       |
| Rotor standard             | MHF16                | MHF16    | MHF16    | MHF14        | MHF14        |
| Rotor optional             | MKF3                 | MKF3     | MKF3     | MHF15        | MHF15        |
| Motor displacement [cc]    | 27/51                | 27/51    | 27/51    | 45/80        | 45/80        |
| Motor type                 | cast iron gear motor |          |          | piston motor |              |
| Hammers/Knives number [n°] | 18                   | 20       | 22       | 42           | 54           |





# DIMENSIONS

|   |        | MH3 70 | MH3 90 | MH5 105 | MH7 105 | MH7 125 | MH11 130 | MH11 160 |
|---|--------|--------|--------|---------|---------|---------|----------|----------|
| A | Width  | 950    | 1150   | 1300    | 1250    | 1450    | 1450     | 1850     |
| B | Depth  | 550    | 550    | 600     | 750     | 750     | 900      | 1000     |
| C | Height | 450    | 450    | 400     | 500     | 500     | 600      | 700      |

The Hydraulic Mulcher STD M3 is designed with a strong and reliable structure and can easily fit any type of excavators. It is manufactured in different models, depending on the use and size of the excavator. It is supplied complete with hydraulic motor, levelling roller with adjustable height, direct transmission (up to MH7), belt transmission (MH11), anti-cavitation valve, priority shockproof valve, adjustable support slides and drilled flat plate. **Drain is recommended for counter-pressures > 5 bar.** Rotation speed 2200/2500 rpm.

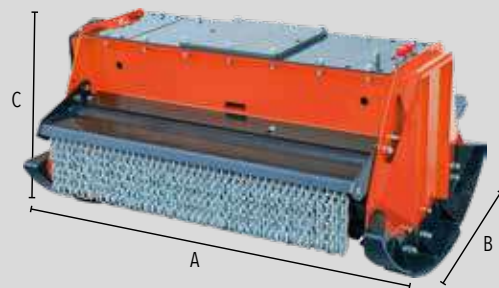
## OPTIONALS

|                |                 |                                                  |
|----------------|-----------------|--------------------------------------------------|
|                | Floating system | Hydraulic hoses                                  |
| Support roller | Bracket         | Front and rear chain protection (MH5 only front) |



| MODEL                      | MH3 70      | MH3 90      | MH5 105     | MH7 105               | MH7 125  | MH11 130 | MH11 160  |
|----------------------------|-------------|-------------|-------------|-----------------------|----------|----------|-----------|
| Working width [mm]         | 700         | 900         | 1050        | 1050                  | 1250     | 1300     | 1600      |
| Weight [kg]                | 130         | 150         | 190         | 220                   | 250      | 345      | 420       |
| Oil flow [L/min]           | 20/40       | 30/40       | 40/60       | 60/80                 | 60/80    | 60/90    | 80/90     |
| Pression [bar]             | 170/220     | 170/220     | 170/220     | 200/220               | 200/220  | 200/220  | 200/220   |
| Excavator class [T]        | 1,5-5,0     | 2,0-5,0     | 4,0-6,0     | 6,0-8,0               | 6,0-8,0  | 6,0-12,0 | 10,0-12,0 |
| Rotor standard             | MHF2        | MHF2        | MHF2        | MHF3                  | MHF3     | MHF6     | MHF6      |
| Rotor optional             | MHC1 / MKC1 | MHC1 / MKC1 | MHC1 / MKC1 | MKF3                  | MKF3     | MKF7     | MKF7      |
| Motor displacement [cc]    | 08/11/16    | 11/16       | 16          | 22/27/34              | 22/27/34 | 34/44/51 | 44/51     |
| Motor type                 | gears       |             |             | cast iron gear motor* |          |          |           |
| Hammers/knives number [n°] | 12          | 16          | 16          | 16                    | 20       | 20       | 20        |

\* Upon request, a piston motor is available too



# DIMENSIONS

|   |        | MH1 60 | MH1 80 | MH9 70 | MH9 90 | MH9 105 | MH13 105 | MH13 130 | MH15 130 | MH15 160 |
|---|--------|--------|--------|--------|--------|---------|----------|----------|----------|----------|
| A | Width  | 850    | 1000   | 850    | 1050   | 1250    | 1250     | 1450     | 1600     | 1900     |
| B | Depth  | 500    | 500    | 800    | 800    | 800     | 950      | 950      | 800      | 800      |
| C | Height | 350    | 350    | 600    | 600    | 600     | 850      | 850      | 850      | 850      |

The Hydraulic Mulcher M3 is designed with a strong and reliable structure and can easily fit any type of excavators. It is manufactured in different models, depending on the use and size of the excavator. It is supplied complete with hydraulic motor (piston motor starting from MH15), support skids with adjustable height in 3 positions, direct transmission (MH1), belt transmission (MH9/13/15), anti-cavitation valve, priority shockproof valve, adjustable support slides and drilled flat plate. MH15 series is equipped with hydraulically-driven hood. **Drain is recommended for counter-pressures > 5 bar.** Rotation speed 2200/2500 rpm.

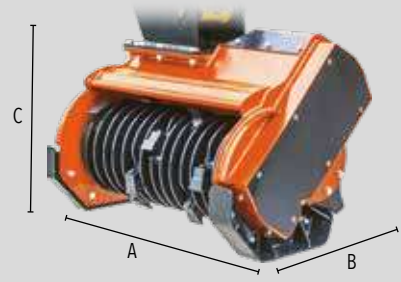
## OPTIONALS

|                |                 |                                 |
|----------------|-----------------|---------------------------------|
|                | Floating system | Hydraulic hoses                 |
| Support roller | Bracket         | Front and rear chain protection |



| MODEL                      | MH1 60    | MH1 80    | MH9 70    | MH9 90    | MH9 105        | MH13 105              | MH13 130   | MH15 130     | MH15 160    |
|----------------------------|-----------|-----------|-----------|-----------|----------------|-----------------------|------------|--------------|-------------|
| Working width [mm]         | 600       | 800       | 700       | 900       | 1050           | 1050                  | 1300       | 1300         | 1600        |
| Weight [kg]                | 70        | 80        | 180       | 260       | 310            | 480                   | 540        | 650          | 750         |
| Oil flow [L/min]           | 20/30     | 30/40     | 30        | 40/50/60  | 40/50/60/80/90 | 70/80/90              | 70/80/90   | 100/125/160  | 100/125/160 |
| Pression [bar]             | 170/220   | 170/220   | 170/220   | 170/220   | 200/220        | 200/220               | 200/220    | 200/250      | 200/250     |
| Excavator class [T]        | 1,0 - 3,0 | 2,0 - 3,0 | 3,0 - 4,0 | 4,0 - 8,0 | 6,0 - 10,0     | 8,0 - 16,0            | 8,0 - 16,0 | 10,0 - 25,0  | 12,0 - 25,0 |
| Rotor standard             | MHF1      | MHF1      | MHF3      | MHF3      | MHF3           | MHF6                  | MHF6       | MHF6         | MHF6        |
| Rotor optional             | MKF1      | MKF1      | MKF3      | MKF3      | MKF3           | MKF7                  | MKF7       | MKF7         | MKF7        |
| Motor displacement [cc]    | 8/11      | 8/11      | 16        | 22/27/34  | 22/27/34/44/51 | 44/51                 | 44/51      | 32/64        | 32/64       |
| Motor type                 | gears     |           |           |           |                | cast iron gear motor* |            | piston motor |             |
| Hammers/knives number [n°] | 12        | 16        | 10        | 14        | 16             | 16                    | 20         | 20           | 20          |

\* Upon request, a piston motor is available too



# DIMENSIONS

|   |        | MH9<br>70HD2 | MH9<br>90HD2 | MH9<br>105HD2 | MH11<br>130HD2 | MH13<br>105HD2 | MH13<br>130HD2 | MH15<br>130HD2 | MH15<br>160HD2 |
|---|--------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|
| A | Width  | 850          | 1050         | 1250          | 1450           | 1250           | 1450           | 1600           | 1900           |
| B | Depth  | 800          | 800          | 800           | 900            | 950            | 950            | 800            | 800            |
| C | Height | 600          | 600          | 600           | 600            | 850            | 850            | 850            | 850            |

The Hydraulic Mulcher M3 is designed with a strong and reliable structure and can easily fit any type of excavators. It is manufactured in different models, depending on the use and size of the excavator. It is supplied complete with hydraulic motor (piston motor from the MH15 series), anti-cavitation valve, priority shockproof valve, adjustable support slides and drilled flat plate. **Drain is recommended for counter-pressures > 5 bar.** Rotation speed 2200/2500 rpm.

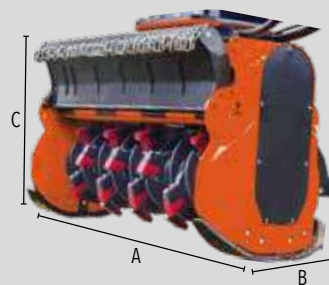
## OPTIONALS

|                |                 |                 |
|----------------|-----------------|-----------------|
|                | Floating system | Hydraulic hoses |
| Support roller | Bracket         |                 |



| MODEL                   | MH9 70HD2      | MH9 90HD2      | MH9 105HD2  | MH11 130HD2           | MH13 105HD2 | MH13 130HD2 | MH15 130HD2  | MH15 160HD2 |
|-------------------------|----------------|----------------|-------------|-----------------------|-------------|-------------|--------------|-------------|
| Working width [mm]      | 700            | 900            | 1050        | 1300                  | 1050        | 1300        | 1300         | 1600        |
| Weight [kg]             | 220            | 330            | 400         | 440                   | 580         | 650         | 920          | 1020        |
| Oil flow [L/min]        | 40/50/60/80/90 | 40/50/60/80/90 | 50/60/80/90 | 60/80/90              | 70/80/90    | 70/80/90    | 100/125/160  | 100/125/160 |
| Pression [bar]          | 200/220        | 200/220        | 200/220     | 200/220               | 200/220     | 200/220     | 200/250      | 200/250     |
| Excavator class [T]     | 5,0-8,0        | 6,0-8,0        | 6,0-12,0    | 8,0-12,0              | 10,0-16,0   | 10,0-16,0   | 12,0-25,0    | 15,0-25,0   |
| Rotor standard          | MHF17          | MHF17          | MHF17       | MHF19                 | MHF19       | MHF19       | MHF11        | MHF13       |
| Rotor optional          | *****          | *****          | *****       | *****                 | *****       | *****       | MHF10        | MHF12       |
| Motor displacement [cc] | 22/27/34/44/51 | 22/27/34/44/51 | 27/34/44/51 | 44/51                 | 44/51       | 44/51       | 32/64        | 32/64       |
| Motor type              | gears          |                |             | cast iron gear motor* |             |             | piston motor |             |
| Hammers number [n°]     | 12             | 18             | 22          | 18                    | 16          | 18          | 26           | 32          |

\* Upon request, a piston motor is available too



## DIMENSIONS

|   |        | MH9<br>70HD3 | MH9<br>90HD3 | MH9<br>105HD3 | MH13<br>105HD3 | MH13<br>130HD3 | MH15<br>130HD3 | MH15<br>160HD3 | MH20<br>130HD3 | MH20<br>160HD3 |
|---|--------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|
| A | Width  | 850          | 1050         | 1250          | 1250           | 1450           | 1600           | 1900           | 1700           | 2000           |
| B | Depth  | 800          | 800          | 800           | 950            | 950            | 800            | 800            | 1000           | 1000           |
| C | Height | 600          | 600          | 600           | 850            | 850            | 850            | 850            | 900            | 900            |

The Hydraulic Mulcher HD3 M3 is designed with a strong and reliable structure and can easily fit any type of excavators. It is manufactured in different models, depending on the use and size of the excavator. It is supplied complete with hydraulic motor (piston motor from the MH15 series), anti-cavitation valve, priority shockproof valve, adjustable support slides and drilled flat plate. **Drain is recommended for counter-pressures > 5 bar.** Rotation speed 2200/2500 rpm.

## OPTIONALS

|         |                 |                 |
|---------|-----------------|-----------------|
|         | Floating system | Hydraulic hoses |
| Bracket | Support roller  |                 |

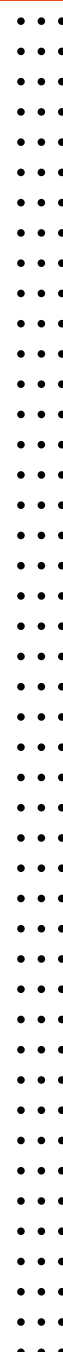


| MODEL                   | MH9 70HD3      | MH9 90HD3   | MH9 105HD3  | MH13 105HD3           | MH13 130HD3 | MH15 130HD3 | MH15 160HD3  | MH20 130HD3 | MH20 160HD3 |
|-------------------------|----------------|-------------|-------------|-----------------------|-------------|-------------|--------------|-------------|-------------|
| Working width [mm]      | 700            | 900         | 1050        | 1050                  | 1300        | 1300        | 1600         | 1300        | 1600        |
| Weight [kg]             | 340            | 400         | 460         | 685                   | 745         | 950         | 1050         | 1050        | 1185        |
| Oil flow [L/min]        | 40/50/60/80/90 | 50/60/80/90 | 50/60/80/90 | 80/90                 | 80/90       | 100/125/160 | 100/125/160  | 100/130/180 | 100/130/180 |
| Pression [bar]          | 200/220        | 200/220     | 200/220     | 200/220               | 200/220     | 200/250     | 200/250      | 200/350     | 200/350     |
| Class excavatore [t]    | 5,0-12,0       | 6,0-12,0    | 6,0-12,0    | 10,0-16,0             | 10,0-16,0   | 12,0-25,0   | 16,0-25,0    | 16,0-30,0   | 18,0-30,0   |
| Rotor standard          | MHF14          | MHF14       | MHF14       | MHF14                 | MHF14       | MHF14       | MHF14        | MHF14       | MHF14       |
| Rotor optional          | MHF15          | MHF15       | MHF15       | MHF15                 | MHF15       | MHF15       | MHF15        | MHF15       | MHF15       |
| Motor displacement [cc] | 22/27/34/44/51 | 27/34/44/51 | 27/34/44/51 | 44/51                 | 44/51       | 32/64       | 32/64        | 45/60/80    | 45/60/80    |
| Motor type              | gears          |             |             | cast iron gear motor* |             |             | piston motor |             |             |
| Hammer number [n°]      | 18             | 24          | 30          | 30                    | 36          | 36          | 42           | 36          | 42          |

\* Upon request, a piston motor is available too

| DESCRIPTION                                                                         |                                   | MODEL                       |
|-------------------------------------------------------------------------------------|-----------------------------------|-----------------------------|
|    | Hammers MHF2 max cut Ø 5 cm       | MH3-5                       |
|    | Hammers MHF1 max cut Ø 3 cm       | MH1                         |
|    | Knives MKF1 max cut Ø 2 cm        | MH1                         |
|    | Hammers MHC1 max cut Ø 4 cm       | MH3-5                       |
|    | Knives MKC1 max cut Ø 3 cm        | MH3-5                       |
|    | Hammers MHF3 max cut Ø 8 cm       | MH7-9                       |
|    | Knives MKF3 max cut Ø 6 cm        | MH7-9 - MHC5                |
|    | Hammers MHF6 max cut Ø 8 cm       | MH11-13-15                  |
|    | Knives MKF7 max cut Ø 6 cm        | MH11-13-15                  |
|   | Fixed hammer MHF14 max Ø 25 cm    | MH9/13/15/20<br>HD3 - MHC10 |
|  | Fixed hammer MHF15 max Ø 20 cm    | MH9/13/15/20<br>HD3 - MHC10 |
|  | Hammer MHF16 max Ø 8 cm           | MHC5                        |
|  | Rotating hammer MHF17 max Ø 12 cm | MH9 HD2                     |

| DESCRIPTION                                                                         |                                          | MODEL       |
|-------------------------------------------------------------------------------------|------------------------------------------|-------------|
|   | Rotating hammer MHF19 max Ø12 cm         | MH11-13 HD2 |
|   | Rotating hammer MHF10/12 max Ø 25 cm     | MH15 HD2    |
|   | Rotating hammer MHF11/13 max Ø 25 cm     | MH15 HD2    |
|   | Complete spare kit of knives for MDC 10  | MDC10       |
|                                                                                     | Complete spare kit of knives for MDC     | MDC13       |
|                                                                                     |                                          | MDC16       |
|                                                                                     |                                          | MDC19       |
|  | Complete spare kit of hammers for MDM 10 | MDC10       |
|                                                                                     | Complete spare kit of hammers for MDM    | MDC13       |
|                                                                                     |                                          | MDC16       |
|                                                                                     |                                          | MDC19       |





Rotor with hammers (standard)



Rotor with knives (optional)



Rotor with rotating hammers (HD2)



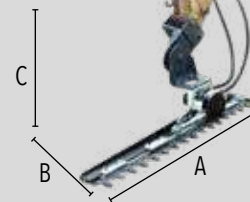
Rotor with fixed hammers (HD3)

| MODEL      |  (Ton) |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |  |
|------------|------------------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|--|
|            | 1.0                                                                                      | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 10.0 | 12.0 | 14.0 | 16.0 | 18.0 | 20.0 | 25.0 | 30.0 |  |
| MH1        | Ø3                                                                                       |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |  |
| MH3        | Ø5                                                                                       |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |  |
| MH5        |                                                                                          |     |     | Ø5  |     |     |     |     |      |      |      |      |      |      |      |      |  |
| MH7        |                                                                                          |     |     |     | Ø8  |     |     |     |      |      |      |      |      |      |      |      |  |
| MH9        |                                                                                          |     | Ø8  |     |     |     |     |     |      |      |      |      |      |      |      |      |  |
| MH9 HD2    |                                                                                          |     |     |     | Ø12 |     |     |     |      |      |      |      |      |      |      |      |  |
| MH9 HD3    |                                                                                          |     |     |     | Ø25 |     |     |     |      |      |      |      |      |      |      |      |  |
| MH11       |                                                                                          |     |     |     |     | Ø8  |     |     |      |      |      |      |      |      |      |      |  |
| MH11 HD2   |                                                                                          |     |     |     |     |     |     | Ø12 |      |      |      |      |      |      |      |      |  |
| MH13       |                                                                                          |     |     |     |     |     |     | Ø8  |      |      |      |      |      |      |      |      |  |
| MH13 HD2   |                                                                                          |     |     |     |     |     |     |     | Ø12  |      |      |      |      |      |      |      |  |
| MH13 HD3   |                                                                                          |     |     |     |     |     |     |     | Ø25  |      |      |      |      |      |      |      |  |
| MH15       |                                                                                          |     |     |     |     |     |     |     | Ø8   |      |      |      |      |      |      |      |  |
| MH15 HD2/3 |                                                                                          |     |     |     |     |     |     |     |      | Ø25  |      |      |      |      |      |      |  |
| MH20 HD3   |                                                                                          |     |     |     |     |     |     |     |      |      |      | Ø30  |      |      |      |      |  |

The set-up of the auxiliary hydraulic line is of exclusive pertinence and responsibility of the client. In case the client would like to connect the bush cutter / mulcher on already existing lines (i.e. PTO), he must be aware that the performance of the bush cutter / mulcher may decrease with the movements of the arms, or the wheels/tracks.



## DIMENSIONS



|   |        | MC 120 | MC 160 | MC 180 |
|---|--------|--------|--------|--------|
| A | Width  | 1265   | 1725   | 1875   |
| B | Depth  | 220    | 220    | 220    |
| C | Height | 365    | 365    | 365    |

- Mechanical shock absorber
- Hirth coupling
- Blades protection
- Orbital motor protected by anti-shock and anti-cavitation valve

The hedge trimmer M3 MC series can be fitted to mini excavators and is suitable to cut hedges (light pruning) up to a maximum Ø of 3 cm.

The blades are in wear resistant steel. It is equipped with hirth coupling, orbital motor protected by anti-shock and anti-cavitation valve, mechanical shock absorber and blades protection, direct coupling to the machine. Adapters for quick hitch are available upon request.

## OPTIONALS

Spare blades kit

Hydraulic hoses kit



| MODEL                     | MC 120    | MC 160    | MC 180    |
|---------------------------|-----------|-----------|-----------|
| Weight [kg]               | 42        | 55        | 64        |
| Max pressure [bar]        | 180       | 180       | 180       |
| Max flow rate [L/min]     | 26/40/50  | 26/40/50  | 26/40/50  |
| Excavator class [T]       | 1,0 - 5,0 | 2,0 - 5,0 | 2,0 - 5,0 |
| Working width [mm]        | 1200      | 1600      | 1800      |
| Max cutting diameter [mm] | 30        | 30        | 30        |





## DIMENSIONS



|   |        | MBT<br>50-150 | MBT<br>50-180 | MBT<br>50-210 | MBT<br>100-158 | MBT<br>100-188 | MBT<br>100-218 | MBT<br>150-160 | MBT<br>150-190 | MBT<br>150-220 |
|---|--------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|
| A | Width  | 1600          | 1900          | 2200          | 1665           | 1965           | 2265           | 1715           | 2015           | 2315           |
| B | Depth  | 231           | 231           | 231           | 231            | 231            | 231            | 231            | 231            | 231            |
| C | Height | 936           | 936           | 936           | 975            | 975            | 975            | 1014           | 1014           | 1014           |

- Sturdy structure
- Brass wear-resistant bar
- Blades in steel 450HBW
- Flow valve
- 360° swivel joint

The hedge trimmer MBT allows you to cut branches, hedges and brushes up to Ø 15 cm. Its sturdy structure allows continuous and heavy uses. The special milling, along with the specific inclination of the coupling tube, makes the branch entrance easier, ensuring a clean and precise cut. The ergonomic casing eases the uses in areas with thick vegetation. Suitable for excavators up to 20T and backhoe loaders. Equipped with: flow valve, antishock valve, 360° swivel joint, blades in steel 450 HBW, brass wear-resistant bar.

## OPTIONALS

Hydraulic hoses

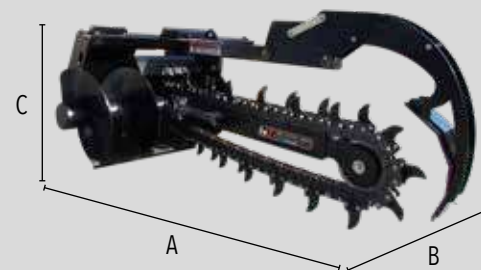
Bolted bracket\*

\*The hedge trimmer is supplied with a flat drilled plate



| MODEL                     | MBT 50-150 | MBT 50-180 | MBT 50-210 | MBT 100-158 | MBT 100-188 | MBT 100-218 | MBT 150-160 | MBT 150-190 | MBT 150-220 |
|---------------------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Working width [mm]        | 150        | 180        | 210        | 158         | 188         | 218         | 160         | 190         | 220         |
| Weight [kg]               | 195        | 208        | 223        | 230         | 250         | 260         | 260         | 280         | 290         |
| Max cutting diameter [cm] | 5          | 5          | 5          | 10          | 10          | 10          | 15          | 15          | 15          |
| Cuts/minute               | 200        | 200        | 200        | 84          | 84          | 84          | 63          | 63          | 63          |
| Oil flow required [L/min] | 60         | 60         | 60         | 60          | 60          | 60          | 60          | 60          | 60          |
| Max pressure [bar]        | 250        | 250        | 250        | 250         | 250         | 250         | 250         | 250         | 250         |
| Excavator class [T]       | 2,5 - 13   | 2,5 - 13   | 2,5 - 13   | 4-16        | 4-16        | 4-16        | 6,5 - 20    | 6,5 - 20    | 6,5 - 20    |





## DIMENSIONS

|   |        | M 900 | M 1200 XD |
|---|--------|-------|-----------|
| A | Width  | 140   | 160       |
| B | Depth  | 110   | 110       |
| C | Height | 80    | 80        |

- Danger bar
- Barrel & spoil auger
- Scraper shoe
- Head start crumber
- Three-position adjustable shoe

A compact yet powerful trencher fitted with a quality planetary drive, Eaton hydraulic motor, 3 position-adjustable skid foot and single spoil removal auger for the spoil removal. Our unique design also gives the operator consistent digging depth for efficient spoil removal and finely crumbled spoil for effective compaction back into the trench. This provides minimal ground disturbance to surrounding conditions and results in a cleaner finish. Suitable for pipe laying for irrigation, underground power & communications, road repairs and general construction.

## OPTIONALS

Bracket for excavators up to 8t.

Bracket for skid loader



| MODEL                    | M 900                                                                                                   | M 1200 XD         |
|--------------------------|---------------------------------------------------------------------------------------------------------|-------------------|
| Working width [mm]       | 100/150/200                                                                                             | 150/200/250/300   |
| Foot depth presets [mm]  | 600/750/900                                                                                             | 600/800/1000/1200 |
| Recommended flow [lpm]   | 50/95                                                                                                   | 60/115            |
| Hydraulic motor type     | 2K Bell Danfoss                                                                                         | 2K Bell Danfoss   |
| Max pressure [bar]       | 240 bar @ 60 lpm                                                                                        | 240 bar @ 60 lpm  |
| Max flow rate [L/min]    | 95 lpm @200 bar                                                                                         | 95 lpm @200 bar   |
| Max continous power [kw] | 25 (34HP)                                                                                               | 25 (34HP)         |
| Length [mm]              | 1920                                                                                                    | 2530              |
| Horizontal height [mm]   | 670                                                                                                     | 780               |
| Total width [mm]         | 1212                                                                                                    | 1212              |
| Weight [kg]              | 265                                                                                                     | 405               |
| Machines class           | Skid Loader and excavators up to 4t. Skid loaders, backhoe loaders, telehandlers & excavators up to 8 t |                   |

## WHY A TRENCHER OVER A BUCKET?

**EFFICIENT:** narrower trenches to greater depths can be achieved.

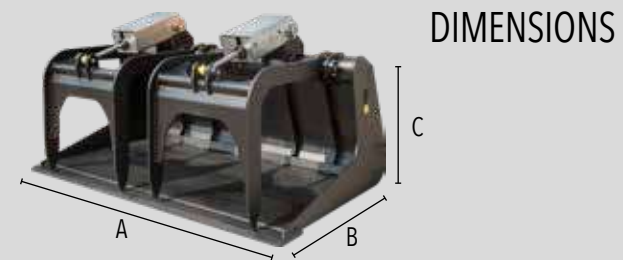
**FASTER:** a Trencher will cut ground faster than an excavator bucket as it cuts in a continuous movement.

**EASIER:** the spoil is excavated more finely with a Trencher so the trench can be easily backfilled with better compaction. As the spoil is much finer it is suitable for the bedding of pipes and cables etc...

**ACCURATE:** various size trench widths means you don't have to excavate any more than is required. Leaves the bottom of the trench flat and clean.

**COST EFFECTIVE:** digs 3 to 4 times faster than an excavator, backhoe with less mess. Spoil is easier to backfill with better compaction.





DIMENSIONS

|   |        | MPI 125 | MPI 140 | MPI 155 | MPI 170 | MPI 185 | MPI 200 |
|---|--------|---------|---------|---------|---------|---------|---------|
| A | Width  | 1250    | 1400    | 1550    | 1700    | 1850    | 2000    |
| B | Depth  | 970     | 970     | 970     | 970     | 970     | 970     |
| C | Height | 800     | 800     | 800     | 800     | 800     | 800     |

- Low sides allows to load wider materials
- Heavy duty construction
- Twin cylinder with ram protection and block valve

The industrial bucket with grapple M3 is ideal both for the collection of waste, and construction or industrial scrap, and for the handling in paper mills.

It is equipped with no. 2 upper hydraulic clamps and coupling to the machine.

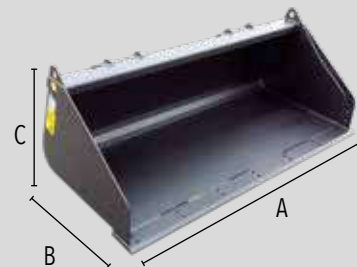


## OPTIONALS

Side panels

| MODEL       | MPI 125 | MPI 140 | MPI 155 | MPI 170 | MPI 185 | MPI 200 |
|-------------|---------|---------|---------|---------|---------|---------|
| Weight [kg] | 280     | 300     | 320     | 340     | 360     | 380     |





## DIMENSIONS

|   |        | BSK 110 | BSK 125 | BSK 140 | BSK 155 | BSK 170 | BSK 185 | BSK 200 |
|---|--------|---------|---------|---------|---------|---------|---------|---------|
| A | Width  | 1100    | 1250    | 1400    | 1550    | 1700    | 1850    | 2000    |
| B | Depth  | 900     | 900     | 900     | 900     | 900     | 900     | 900     |
| C | Height | 600     | 600     | 600     | 600     | 600     | 600     | 600     |

- Steel drilled blade
- Steel bottom reinforcements

The Standard Bucket M3 shows a very strong structure and it is easily attached to all types of skid steer loaders.

It is equipped with drilled blade configured for the installation of teeth, steel bottom reinforcements and coupling to SSL.

## OPTIONALS

Reversible screwed blade

Bolted teeth kit



| MODEL              | BSK 110 | BSK 125 | BSK 140 | BSK 155 | BSK 170 | BSK 185 | BSK 200 |
|--------------------|---------|---------|---------|---------|---------|---------|---------|
| Capacity [L]       | 317     | 360     | 381     | 447     | 493     | 579     | 626     |
| Weight [kg]        | 135     | 150     | 160     | 175     | 190     | 205     | 215     |
| Teeth number [no.] | 5       | 5       | 6       | 6       | 7       | 8       | 8       |



## GROUND DRILLING

- Compact gearbox with high torque
- Highly efficient design with less moving parts
- Customized Eaton hydraulic motor to reduce the overall dimensions
- No drain required
- Shaft locking system for heavy uses
- The auger can totally enter the hole to increase the drilling depth
- Low maintenance with a 5yr gearbox and 3yr motor warranty



### AUGERS DRIVES: MINI EXCAVATORS FROM 0,75T TO 5T - SKID STEER LOADER



## AUGERS DRIVES: EXCAVATORS FROM 4T TO 10T - SKID STEER LOADER



## AUGER DRIVES: 10T - 20T EXCAVATORS





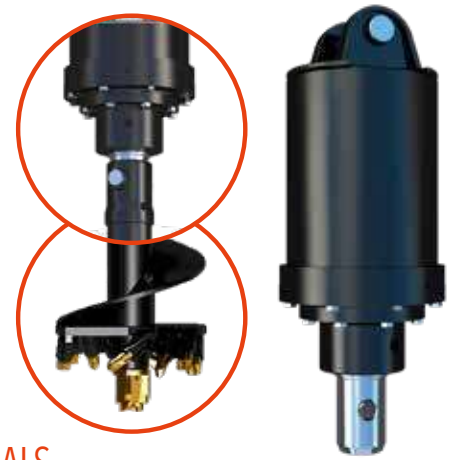
**5YR GEAR BOX WARRANTY**

**3YR MOTOR WARRANTY**

Compact gearbox with high torque / Highly efficient design with less moving parts/ Customized Eaton hydraulic motor to reduce the overall dimensions / No drain required / Shaft locking system for heavy uses / The auger can totally enter the hole to increase the drilling depth / Low maintenance with a 5yr gearbox and 3yr motor warranty.



| MODEL                  | MPDD                      | MPDX 2  | MPD 3   |
|------------------------|---------------------------|---------|---------|
| Horse power [kw]       | 25                        | 25      | 25      |
| Max flow rate [L/min]  | 15/45                     | 30/50   | 45/75   |
| Min/max pressure [bar] | 125/240                   | 125/240 | 175/240 |
| Max torque [Nm]        | 1197                      | 1320    | 3591    |
| Rotation speed [rpm]   | 49/148                    | 41/83   | 41/83   |
| Motor type             | gearbox + hydraulic motor |         |         |
| Shaft [mm]             | Ø65                       | Ø65     | Ø65     |
| Weight [kg]            | 41                        | 45      | 57      |
| Excavator class [T]    | 0,75-2                    | 1,5-2,5 | 2-5     |



**OPTIONALS**

|                         |               |
|-------------------------|---------------|
| Wood splitter           | Stump grinder |
| Bracket for skid loader | Cradle hitch  |

Included are no. 2 hydraulic hoses 1/2", L=2200 mm, quick couplings M/F F.P. 1/2"



**5YR GEAR BOX  
WARRANTY**

**3YR MOTOR  
WARRANTY**

Compact gearbox with high torque / Highly efficient design with less moving parts/ Customized Eaton hydraulic motor to reduce the overall dimensions / No drain required / Shaft locking system for heavy uses / The auger can totally enter the hole to increase the drilling depth / Low maintenance with a 5yr gearbox and 3yr motor warranty.



| MODEL                  | MPD 5                     | MPD 7   | MPD 10  | MPD 6 HF | MPD 8 HF |
|------------------------|---------------------------|---------|---------|----------|----------|
| Horse power [kw]       | 25                        | 25      | 25      | 60       | 60       |
| Max flow rate [L/min]  | 60/95                     | 75/115  | 85/115  | 60/150   | 80/200   |
| Min/max pressure [bar] | 175/240                   | 175/240 | 175/240 | 175/240  | 175/240  |
| Max torque [Nm]        | 5166                      | 6048    | 8568    | 5670     | 7175     |
| Rotation speed [rpm]   | 41/70                     | 43/73   | 38/52   | 41/102   | 43/107   |
| Motor type             | gearbox + hydraulic motor |         |         |          |          |
| Shaft [mm]             | Ø 75                      | Ø 75    | Ø 75    | Ø 75     | Ø 75     |
| Weight [kg]            | 67                        | 90      | 110     | 149      | 149      |
| Excavator class [T]    | 4-8                       | 5-10    | 5-10    | 5-10     | 5-10     |

Included are no. 2 hydraulic hoses 1/2", L=2200 mm, quick couplings M/F F.P. 1/2"



## OPTIONALS

|                         |               |
|-------------------------|---------------|
| Wood splitter           | Stump grinder |
| Bracket for skid loader | Cradle hitch  |



CATALOGUE

AUGERS DRIVES: EXCAVATORS FROM 4T TO 10T - SKID STEER LOADER



**5YR GEAR BOX WARRANTY**

**3YR MOTOR WARRANTY**

Compact gearbox with high torque / Highly efficient design with less moving parts/ Customized Eaton hydraulic motor to reduce the overall dimensions / No drain required / Shaft locking system for heavy uses / The auger can totally enter the hole to increase the drilling depth / Low maintenance with a 5yr gearbox and 3yr motor warranty.



| MODEL                  | MPD 18                    | MPD 22  |
|------------------------|---------------------------|---------|
| Horse power [kw]       | 60                        | 60      |
| Max flow rate [L/min]  | 130/230                   | 140/230 |
| Min/max pressure [bar] | 175/240                   | 175/240 |
| Max torque [Nm]        | 17620                     | 22257   |
| Rotation speed [rpm]   | 26/50                     | 21/40   |
| Motor type             | gearbox + hydraulic motor |         |
| Shaft [mm]             | Ø 75                      | Ø 75    |
| Weight [kg]            | 176                       | 176     |
| Excavator class [T]    | 10-20                     | 10-20   |

Included are no. 2 hydraulic hoses 1/2", L=2200 mm, quick couplings M/F F.P. 1/2"



**OPTIONALS**

Cradle hitch

### AUGER DRIVES: MPDD / MPDX 2 / MPD 3

| MFT - SOFT/MIXED SOIL    |       |                  |
|--------------------------|-------|------------------|
| MODEL                    | SHAFT | DIMENSIONS<br>mm |
| MFT4-10                  | Ø65   | 100x1200         |
| MFT4-15                  | Ø65   | 150x1200         |
| MFT4-20                  | Ø65   | 200x1200         |
| MFT4-25                  | Ø65   | 250x1200         |
| MFT4-30                  | Ø65   | 300x1200         |
| MFT4-40                  | Ø65   | 400x1200         |
| MFT4-50                  | Ø65   | 500x1200         |
| MFT4-60                  | Ø65   | 600x1200         |
| MFT4-75                  | Ø65   | 750x1200         |
| MRC - MIXED / ROCKY SOIL |       |                  |
| MODEL                    | SHAFT | DIMENSIONS<br>mm |
| *****                    | ***** | 100x1200         |
| MRC4-15                  | Ø65   | 150x1200         |
| MRC4-20                  | Ø65   | 200x1200         |
| MRC4-25                  | Ø65   | 250x1200         |
| MRC4-30                  | Ø65   | 300x1200         |
| MRC4-40                  | Ø65   | 400x1200         |
| MRC4-50                  | Ø65   | 500x1200         |
| MRC4-60                  | Ø65   | 600x1200         |
| MFT4-75                  | Ø65   | 750x1200         |
| EXTENSIONS SHAFT ONLY    |       |                  |
| MODEL                    | SHAFT | DIMENSIONS<br>mm |
| MX4-05                   | Ø65   | 500              |
| MX4-10                   | Ø65   | 1000             |
| MX4-15                   | Ø65   | 1500             |

### AUGER DRIVES: MPD 5 / MPD 7 / MPD 10 / MPD 6 HF / MPD 8 HF

| MFT - SOFT/MIXED SOIL    |       |                  |
|--------------------------|-------|------------------|
| MODEL                    | SHAFT | DIMENSIONS<br>mm |
| MFT6-15                  | Ø75   | 150x1500         |
| MFT6-20                  | Ø75   | 200x1500         |
| MFT6-25                  | Ø75   | 250x1500         |
| MFT6-30                  | Ø75   | 300x1500         |
| MFT6-40                  | Ø75   | 400x1500         |
| MFT6-50                  | Ø75   | 500x1500         |
| MFT6-60                  | Ø75   | 600x1500         |
| MFT6-75                  | Ø75   | 750x1500         |
| MFT6-90                  | Ø75   | 900x1500         |
| MFT6-100                 | Ø75   | 1000x1500        |
| MRC - MIXED / ROCKY SOIL |       |                  |
| MODEL                    | SHAFT | DIMENSIONS<br>mm |
| MRC6-15                  | Ø75   | 150x1500         |
| MRC6-20                  | Ø75   | 200x1500         |
| MRC6-25                  | Ø75   | 250x1500         |
| MRC6-30                  | Ø75   | 300x1500         |
| MRC6-40                  | Ø75   | 400x1500         |
| MRC6-50                  | Ø75   | 500x1500         |
| MRC6-60                  | Ø75   | 600x1500         |
| MRC6-75                  | Ø75   | 750x1500         |
| MRC6-90                  | Ø75   | 900x1500         |
| EXTENSIONS SHAFT ONLY    |       |                  |
| MODEL                    | SHAFT | DIMENSIONS<br>mm |
| MX6-10                   | Ø75   | 1000             |
| MX6-15                   | Ø75   | 1500             |
| MX6-20                   | Ø75   | 2000             |

### AUGER DRIVES: MPD 18 / MPD 22

| MFT - SOFT/MIXED SOIL    |       |                  |
|--------------------------|-------|------------------|
| MODEL                    | SHAFT | DIMENSIONS<br>mm |
| MFT8-20                  | Ø75   | 200x1500         |
| MFT8-25                  | Ø75   | 250x1500         |
| MFT8-30                  | Ø75   | 300x1500         |
| MFT8-40                  | Ø75   | 400x1500         |
| MFT8-50                  | Ø75   | 500x1500         |
| MFT8-60                  | Ø75   | 600x1500         |
| *****                    | ***** | 750x1500         |
| MFT8-80                  | Ø75   | 800x1500         |
| *****                    | ***** | 900x1500         |
| MFT8-100                 | Ø75   | 1000x1500        |
| MFT8-120                 | Ø75   | 1200x1500        |
| MFT8-150                 | Ø75   | 1500x1500        |
| MRC - MIXED / ROCKY SOIL |       |                  |
| MODEL                    | SHAFT | DIMENSIONS<br>mm |
| MRC8-20                  | Ø75   | 200x1500         |
| MRC8-25                  | Ø75   | 250x1500         |
| MRC8-30                  | Ø75   | 300x1500         |
| MRC8-40                  | Ø75   | 400x1500         |
| MRC8-50                  | Ø75   | 500x1500         |
| MRC8-60                  | Ø75   | 600x1500         |
| MRC8-75                  | Ø75   | 750x1500         |
| *****                    | ***** | 800x1500         |
| MRC8-90                  | Ø75   | 900x1500         |
| MRC8-100                 | Ø75   | 1000x1500        |
| MRC8-120                 | Ø75   | 1200x1500        |
| MRC8-150                 | Ø75   | 1500x1500        |
| EXTENSIONS SHAFT ONLY    |       |                  |
| MODEL                    | SHAFT | DIMENSIONS<br>mm |
| MX8-10                   | Ø75   | 1000             |
| MX8-15                   | Ø75   | 1500             |
| MX8-20                   | Ø75   | 2000             |
| MX8-25                   | Ø75   | 2500             |
| MX8-30                   | Ø75   | 3000             |

# SALES CONDITIONS

## Clause 1. Scope

1.1 These General Terms and Conditions form an integral part of the contracts of sale of all products (hereinafter the "Products") of M3 Metal Meccanica Moderna S.r.l., with Tax code and VAT number 00458190345 and registered office in Strada della Pace 23, Sorbolo Mezzani (Parma, Italy), (hereinafter "M3") and apply without the need for any express reference to them. Any deviating conditions or terms shall only apply if accepted in writing by M3.

1.2 These General Terms and Conditions are attached to each Order Confirmation sent by M3.

## Clause 2. Offers and Order Confirmations

2.1 Offers, quotations and any other similar documents containing possible contractual terms and conditions of sale that may be transmitted by M3 shall not be deemed to be contractual proposals nor acts that are in any event capable of generating any obligation on the part of M3.

2.2 Orders sent by the Purchaser shall contain the Products of its interest. Subsequently, M3 shall include in any Order Confirmation a summary of the Products ordered, the corresponding consideration, the terms of payment of the consideration, the delivery time and, if applicable, the delivery terms through reference to one of the Incoterms in their latest version (subject to the provisions of Clause 4 with regard to delivery time and delivery terms). Furthermore, these General Terms and Conditions shall be attached to the Order Confirmations. Order Confirmations constitute a contractual proposal of sale and become a contract of sale (hereinafter also the "Contract") only upon receipt by M3 of the Order Confirmation and these General Terms and Conditions signed by the Purchaser, within 30 days after the Order Confirmation is sent to the Purchaser. In this case, the Contract shall be governed by these General Terms and Conditions.

If the Purchaser does not accept the Order Confirmation, in full compliance with the foregoing, within 30 days of its receipt, the Order Confirmation shall automatically cease to be valid and to constitute a contractual proposal.

## Clause 3. Prices and Payment Terms

3.1 The consideration to be paid by the Purchaser under the Contract shall be the amount indicated in the Order Confirmation. Such amount is to be considered net of any other applicable taxes or charges, including customs duties.

3.2 The terms of payment of the consideration are stated in the Order Confirmation.

3.3 In the event that the Purchaser fails to make payment on the due date, M3 shall be entitled to obtain payment, in addition to the consideration, of default interest pursuant to Italian Legislative Decree 231/2002. Furthermore, in the event of failed, delayed and/or partial payment of the consideration, M3 may suspend the performance of the Contract and not deliver the Products and/or (even after suspension) terminate the Contract pursuant to Article 1456 of the Italian Civil Code. In the same cases and notwithstanding the suspension and/or termination of the Contract, M3 shall be entitled to demand from the Purchaser the payment of 20% of the consideration under the Contract, as a penalty pursuant to Article 1382 of the Italian Civil Code, without prejudice to any higher damages suffered.

## Clause 4. Delivery, Inspection and Acceptance of the Products

4.1 The term for the delivery of the Products, as set out in the Contract, shall be determined by M3 on the basis of the technical time required for producing the Products and, in any case, such term shall not exceed 90 days with respect to the delivery time indicated in the Order Confirmation. Deliveries, unless otherwise provided for in the Order Confirmations, shall take place according to Ex Works - EXW Incoterms 2020.

4.2 M3 shall not be liable in any manner whatsoever for delays in delivery resulting from force majeure or fortuitous event, including, but not limited to, conflicts, armed clashes, strikes, lockouts, government regulations, import and/or export blockades.

4.3 In the event of any Purchaser's default which may affect the delivery time, including defaults under Clause 3.3, and/or defaults resulting from the inaccuracy of any data transmitted by the Purchaser, M3 shall inform the Purchaser of a new delivery time, in respect of which Clause 4.1 shall apply and M3 may require the Purchaser to pay 5% of the consideration under the Contract, pursuant to art. 1382 of the Italian Civil Code, without prejudice to any higher damages and costs.

4.4 If, in case the delivery is determined to be Ex Works (Incoterms 2020), the Purchaser fails to collect the Products within 15 days of M3's notice that the Products are ready for delivery, the Purchaser shall pay to M3, as a penalty pursuant to Article 1382 of the Italian Civil Code and without prejudice to any higher damages, 1% of the consideration under the Contract (in which the delivery of such Products is set out) for each day of non-collection (exceeding the aforesaid 15 days). Should the failure to collect continue beyond 30 days (starting from the expiry of the aforementioned initial 15 days), M3 may terminate the contract pursuant to Article 1456 of the Italian Civil Code and demand, regardless of said termination, the payment of 40% of the consideration under the Contract (in which the delivery of such Products is set out), as a penalty pursuant to Article 1382 of the Italian Civil Code, without prejudice to any higher damages.

4.5 Upon taking delivery of the Products, the Purchaser shall immediately check the quantity, packaging and conformity of the Products and record any discrepancies in the transport document. Notice of any defects must be given within 8 working days after delivery of the Products. The detailed notice of defects must be submitted in writing to M3 within the time limit above. Any communication made by telephone and/or by other means shall have no effect for the purposes of the Contract. Any Product that has not been subject to complaints according to the procedures and instructions given above shall be considered unreservedly approved and accepted by the Purchaser.

## Clause 5. Warranty

5.1 The warranty for defects provided for in Articles 1490 ff. of the Italian Civil Code shall apply to the Products, with the specification that the limitation period of one year for the relative action shall run from the time of delivery of the Products indicated in the transport document. This warranty does not cover parts and components subject to wear and tear (e.g.: bottom, mixing propellers, rubbing parts, unloading trap, brush rings and blades) and electrical parts (e.g.: coil, solenoid valve, cable, switch).

**5.2** If the warranty is legitimately enforced by the Purchaser, M3 shall, at its own discretion, repair or replace the defective Products and/or parts. In addition, M3 may, at its sole discretion, let the Purchaser intervene in order to fix any defects, with the shipment, at the Purchaser's expense, of components and spare parts and the granting of a price reduction equal to the cost of the work necessary to fix such defects, which shall be settled on the basis of M3's time schedules. In both cases (whether in the event of repair/replacement by M3 or in the event of repair by the Purchaser), the Purchaser shall be satisfied and shall have no further claims arising from the defects and the corresponding warranty. These remedies are the only remedies available to the Purchaser under the warranty for defects. No compensation may ever be claimed from M3 for direct/indirect damages caused by or consequential to the sale of the Products, such as, but not limited to: interruptions and/or loss of production, lost or reduced income, financial costs.

**5.3** Before proceeding in accordance with one of the remedies under Clause 5.2. above, M3 shall be entitled to request the Purchaser to ship the Products and/or the affected parts, with delivery Ex Works at M3's site in Sorbolo Mezzani, in order to verify the reported defects.

**5.4** The warranty is excluded if the Products are used outside the declared performance and/or if they are used incorrectly and/or with negligence and/or if breakages and/or failures occur as a result of impact, installation, improper use and/or non-compliance with use and maintenance instructions. The warranty is also excluded in the event of any interventions or modifications by the Purchaser or persons not authorised by M3.

In any case, the warranty for defects is excluded if the Purchaser fails to transmit to M3 the test certificate of the Products, which is contained in the maintenance booklet of the Products, filled out in its entirety, and/or if the Purchaser fails to comply with all maintenance requirements set out in the maintenance booklet.

## **Clause 6. Liability**

**6.1** From the time of delivery of the Products, M3 is not liable for the use of the Products nor for any damage that may arise during the use and/or maintenance of the Products.

## **Clause 7. Retention of Title**

**7.1** The Products remain the full property of M3 until the date on which the Purchaser has paid the full consideration for them and any other sum due to M3.

If, in the State in which the Purchaser is domiciled, administrative or legal formalities are necessary for the retention of title in favour of M3 to be valid, the Purchaser undertakes to cooperate with M3 and to take all necessary steps in order to obtain a valid right for M3 with regard to the retention of title.

## **Clause 8. M3 Intellectual Property**

**8.1** The Purchaser expressly acknowledges that, unless otherwise agreed, the trademarks and other distinctive signs affixed to the Products are the exclusive property of M3 and may not be exploited, altered, modified, removed or deleted. Furthermore, the designs and patents relating to the Products are the property of M3 and the Purchaser undertakes not to exploit them in any way. Any use of M3's intellectual property by the Purchaser in breach of the above and/or, in any case, in violation of the law, unless expressly permitted by M3 in writing, shall entail the Purchaser's obligation to pay M3 a sum equal to 20% of the consideration under the Contract, pursuant to Article 1382 of the Italian Civil Code, without prejudice to any higher damages and without prejudice to M3's right to terminate the Contract with immediate effect pursuant to Article 1456 of the Italian Civil Code by sending written notice.

## **Clause 9. Supervening Costs**

**9.1** In case of events occurring after the conclusion of the Contract which lead to price increases of at least 10% of even only one of the following production factors: raw materials and/or components and/or energy and/or semi-finished products and/or unit labour costs and/or logistics and/or transport necessary for the performance of the Contract, M3 shall be entitled to request the Purchaser to renegotiate the Contract. If the parties do not reach an agreement within 30 days of the above-mentioned request, M3 may terminate the Contract with immediate effect.

## **Clause 10. Personal Data Processing**

**10.1** The Purchaser's personal data shall be processed in accordance with the provisions of Italian and European legislation on personal data processing (Italian Legislative Decree No. 196/2023 and EU Regulation No. 679/2016). M3 informs that the Purchaser's personal data are collected and processed exclusively for the execution of the Contracts.

## **Clause 11. Governing Law, Arbitration and Court of Competent Jurisdiction**

**11.1** All Contracts shall be governed by the Italian Law.

**11.2** All disputes, including non-contractual disputes, arising out of the Contracts or these Terms and Conditions relating to or in connection with the same shall be settled by binding arbitration ("arbitrato rituale") in accordance with the Rules of the Milan Chamber of Arbitration, by a sole arbitrator appointed in accordance with such Rules. The language of the arbitration shall be Italian and the seat shall be the Milan Chamber of Arbitration. This arbitration clause shall only apply if the contractual counterparty of M3 has its registered office in a State which is not a member of the European Union.

**11.3** If, on the other hand, the contractual counterparty of M3 has its registered office in a Member State of the European Union, all disputes referred to in Article 11.2 above shall be exclusively brought before the Court of Parma.

## **Clause 12. Italian Language Prevailing**

**12.1** If these General Terms and Conditions are sent by M3, with the Order Confirmation, both in Italian and in another language, the Italian language version shall prevail in the event of any discrepancy between such versions.



**M3 MetalMeccanica Moderna s.r.l.**

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