

Metallipalvelu Hartikainen Oy is a multifunctional metal manufacturer founded in Juuka, Finland in 2006. In addition to versatile machine and steel construction services, the company designs, manufactures and sells several metal products for industrial and agricultural use. We also handle installation services for steel construction sites.

As the result of the knowledge, we have received the following certifications:

manufacturing load bearing structures



manufacturing Rajax landmarks according to SFS4940

ENPERT SERVICES LTC

9070-12

BODUCT CERTIFICA









Metallipalvelu Hartikainen (MPH) is a daughter company for Tampereen Konepajat. The Group employs 220 people in eight factories in different parts of Finland.

Metallipalvelu Hartikainen manufactures Peatmax peat machines (www.peatmax.com).

MPH designs, manufactures and sells own products for contractors and agriculture usage under brand name MPH products. The products are called like grader, screw leveler, bale trailer, snow blower, ditch plough, small wood collector and mulcher.



Metallipalvelu Hartikainen manufactures according to ISO9001 and ISO14001 standards.



The production consists of plasma cutting, welding in a 2500 m2 floor hall with a lift capacity of 5 tonnes and a 800 m2 assembly hall with the same lifting capacity. The production facilities also include 7 x 15 x 5 m wet painting room.

GRADER 5.3

The multipurpose trailed grader for leveling roads, agricultural fields, peat production areas and other areas. High strength steel is used in manufacturing of the equipment to ensure a long service life also in harsh operating conditions. All functions are hydraulically adjustable. The wings are equipped with overload valves to prevent damages in case of collisions. Both wings can be individually adjusted and the frame can be tilted to enable cambering.

Optional equipment:

- Wing extensions
- Double-tilt leveling laser
- Pin blades
- Firefighting equipment
- Extra-long cylinders for wings
- Stone collector including 2x800 kg additional weights (road version), total weight 4200 kg





TECHNICAL SPECIFICATIONS



| Maximum working width | 4,5 / 5,3 m |
|-----------------------|-----------------------|
| Transport width | Under 3 m if required |
| Length | 7,0 m |
| Weight | 2 800 · 4 200 kg |
| Hydraulics | 3 pcs 2-action valves |

GRADER 7.0

MPH Grader 7.0 trailed grader is intended for the same use as the smaller MPH Grader 5.3. The difference is that this bigger grader has two-element wings and the maximum working width is 7 meters. Thanks to the versatile hydraulics controls, the two-element wings are easy to use and quick to swing to the transport position. And of course it's bigger and heavier than the smaller grader.

Optional equipment:

- Double-tilt leveling laser
- Trimble GPS height automation





TECHNICAL SPECIFICATIONS



| Maximum working width | 7,0 m |
|-----------------------|-----------------------|
| Transport width | Under 3 m if required |
| Length | 7,2 m |
| Weight | 5 800 kg |
| Hydraulics | 4 pcs 2-action valves |

SNOW BLOWER

MPH Snow Blower is developed in cooperation with the most demanding contractors and made for professional use. Snow blower is equipped with fixed spiral and throwing impellers or with centrifugal floating impeller wings. Its' structure is designed for maximum throughput of snow. Wear-resistant plastic in the inner surfaces of the side structure contribute to the smooth snow flow. The snow blower is built for tough long time use and it's structure is designed with using high strength structural steels. The frame is short and wide from the back, which helps the snow flow going through the throw base, which is over 1 meter in diameter. This feature also makes it easier for blowing snow in the narrow areas.









centrifugal impeller

TECHNICAL SPECIFICATIONS

MR [SNOW BLOWER]

| Working width | 2,6 (2,9) m |
|---------------------|-------------|
| Reduction gear for | 540 rpm PTO |
| Throw base diameter | 102 cm |
| Weight | 910 kg |

DITCH PLOUGH

The ditch plough is a cost-effective alternative for opening and cleaning ditches on the agricultural and peat production areas. It can also be used for making ditches in forests for drainage. Since no power from PTO is required, the ditch plough operates with low fuel consumption. It's productivity is superior to other ditching methods since the driving speed can be up to 8 km/h. The ditch plough has versatile hydraulics controls for the plowing angle, depth, side wings and the cutter disc. The equipment works well also on stony and woody areas and is designed to withstand the high loads of the modern large tractors.





TECHNICAL SPECIFICATIONS

MA-DITCH PLOUGH

| Maximum width of the ditch | 1,4 m |
|----------------------------|-----------------------|
| Maximum depth of the ditch | 1,3 m |
| Weight | 1 300 kg |
| Hydraulics | 3 pcs 2-action valves |

SMALL WOOD COLLECTOR

The small wood collector is an effective machine for removing wood from a peat production area or from an agricultural field. The spiked drum at the front of the machine picks up wood pieces from the field surface and drops them into the container mounted on the front of the machine. When the container is full it can be discharged at a suitable location. The small wood collector facilitates the removal of wood pieces from the production area to improve the quality of peat, especially for the horticultural peat and pneumatic harvester production. It also speeds up significantly the preparation of an agricultural field - compared to the manual wood removal.





TECHNICAL Specifications

ME SMALL WOOD COLLECTOR

| | and set of the set of |
|------------------------|---|
| Capacity | 3 ha/h |
| Operating speed | 1–15 km/h |
| Working width | 2,4 m |
| Required engine output | 40–50 kW |
| Hydraulics | 1 pc 1-action valve 1 pc 2-action valves |
| Weight | 2 500 kg |
| Tyres | 21.3 · 24 |

SCREW LEVELER

The robust screw leveler that can be hydraulically adjusted to 3,5 m wide road transport position. Long frame structure reduces significantly the risk of sideways jump. The screw element is made of a wear proof steel including a self-sharpening edge. The power train is equipped with an over-torque limiter.



MPH



TECHNICAL SPECIFICATIONS

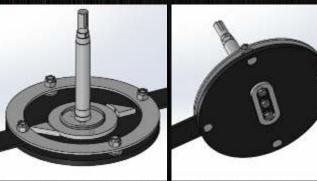
ME-SCREW LEVELER

| Working width | 6,0 m |
|------------------------|-----------------------|
| Transport width | 3,5 m |
| Length | 8,8 m |
| Screw diameter | 0,65 m |
| Required engine output | 80–180 kW |
| Weight | 4 000 kg |
| Hydraulics | 3 pcs 2-action valves |

MULCHER

MPH Mulcher is intended for demanding contractor use, trimming for example the roadsides. The cutting head spins by a hydraulic motor and it is equipped with three quickly and easily interchangeable discs, that can be equipped either with blades or with chains. The cutting chains are quickly replaceable without any tools. The mulcher has an excavator or tractor boom fastening.







TECHNICAL SPECIFICATIONS

MH-[MULCHER]

| Working width | 2,25 m |
|------------------|---------------|
| Weight | 510 kg |
| Hydraulic engine | Parker F12-60 |
| Oil requirement | 110 I/min |

We have also a smaller version of the MPH-mulcher with working width

blade

blade underside

1,7 m

BALE TRAILER

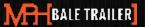
MPH Bale Trailer is used for collecting and transportinground round bales effectively. It is easy to load and unload the bales with the trailer's own mechanism. Due to the efficient design, the user does not need to tie up the load or exit the cabin during the work cycle.

The trailer is safe to use and does not damage the load/bales in any way during the transport. The size of the load space is adjustable according to the size of the bale.





TECHNICAL SPECIFICATIONS



| Load space | 10 bales |
|------------|--------------|
| Length | 8,3 m |
| Width | 2,55 m |
| Height | 3 m |
| Weight | 3 800 kg |
| Tyres | 550/45 R22,5 |

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