

RAIL PROFILE GRINDER

MODEL MP23

The Rail Profile Grinder model MP23 is designed to grind the whole profile of flat bottom rails (running surface, sides & radii of curvature) in one operation.

It is ergonomic, safe and simple to use and requires only one operator who does not have to support the weight of the machine during the grinding operation.



S.N.C.F. official approval number : IMT 07041

1. DESCRIPTION AND OPERATION

The outstanding features, easiness of use and robustness of the Rail Profile Grinder model MP23 afford the operator total control, safety and comfort during the grinding operation whilst delivering an excellent finish to the weld.

Thanks to the rotation system of the grinding head, the Rail Profile Grinder model MP23 can work on the complete rail profile without the need for the operator to turn the machine. Moreover, during the grinding operation, the operator is always located safely between the running rails.

Irrespective of the position of the grinding head the engine remains in a vertical position.

1. DESCRIPTION AND OPERATION (Cont'd)

The machine is fitted with:

- A control system limiting the lowering of the grindstone, which avoids over-grinding (hollowing) of the weld;
- An adjustment wheel (in an ergonomic position near the operator) allows the operator to modify at any time the angle of the grinding head;
- An electric driving control of lowering and raising of the grindstone; the control of this device and the control of the start of the engine are located in an ergonomic position convenient to the operator;
- A removable outrigger that is not in the axis of the grindstone thus avoiding interference with unground welds on the adjacent rail;
- A working bar for the operator. This bar is almost parallel to the rail to be ground and faces the operator.
- Six rollers (three on each side of the grindstone) which ensure a perfect planarity during the grinding operation;
- Four carrying foldable handles allowing the machine to be easily handled by 2 men;
- The machine can be supplied with two optional bump stops to be fixed to the rail at either end of the grinding area outside the machine (see section 3 – Accessories and options at extra price). These bump stops aid in changing the direction of the machine whilst grinding.

2. TECHNICAL DATA

– Petrol engine Honda GX270 , four stroke, recoil starter:	9	hp (6.6 kW) at 3,600 rpm
– Engine speed:	3 600	rpm
– Grindstone rotation speed:	4 000	rpm
– Distance between centers of rolling rollers:	from 1,000 to 1,120	mm
– Angular range of inclination of the grindstone:	180	°, $\pm 90^\circ$ (according to the vertical axis) (a wheel turn corresponds to an inclination variation of $3^\circ 30'$)
– Grindstone down feed:	2	mm per rotation
– Maximum grindstone diameter:	150	mm
– Acoustic level:	≈ 84	dB
– Dimensions:		
Length:	1 600	mm
Width:	640	mm
Height:	880	mm
– Mass of the machine:	95	kg
– Mass of the machine in working conditions:	102	kg (97 + 5 kg equilibrating bar which can be fastly removed)

3. ACCESSORIES AND OPTIONS (at extra price)

- **M20 one-screw stone holder plate**
(replaces 4-screw stone holder plate)
- **Turning device allowing grinding of the other rail**
(working with screwed pivoting supports mounted at each end of the machine and bearing stand)
The machine is turned in less than two minutes.
- **6 screw stone holder plate**
(replaces 4-screw stone holder plate)
- **Tool holder end piece 5/8"**
- **Set of two bump stops with rubber parts allowing to limit the movement of the MP23 along the rail during grinding operation**
(rubber parts allow a longitudinal bounce of the machine thus reducing the effort of the operator during the grinding operation)



4. CONSUMABLES (at extra price)

- **Straight cup grindstone type 6, Ø 150 x 65 mm – 5/8" nut**
- **Recessed grinding wheel with countersunk nuts type 36, Ø 150 x 72 mm – 4 M8 holes**
- **Recessed grinding wheel with countersunk nuts type 36, Ø 150 x 65 mm – 6 M8 holes**

*We reserve the right to modify any equipment specification of the present offer to take into account the latest technical improvements and working conditions at the date of manufacturing.
Pictures and drawings may include some options and are not contractual.*