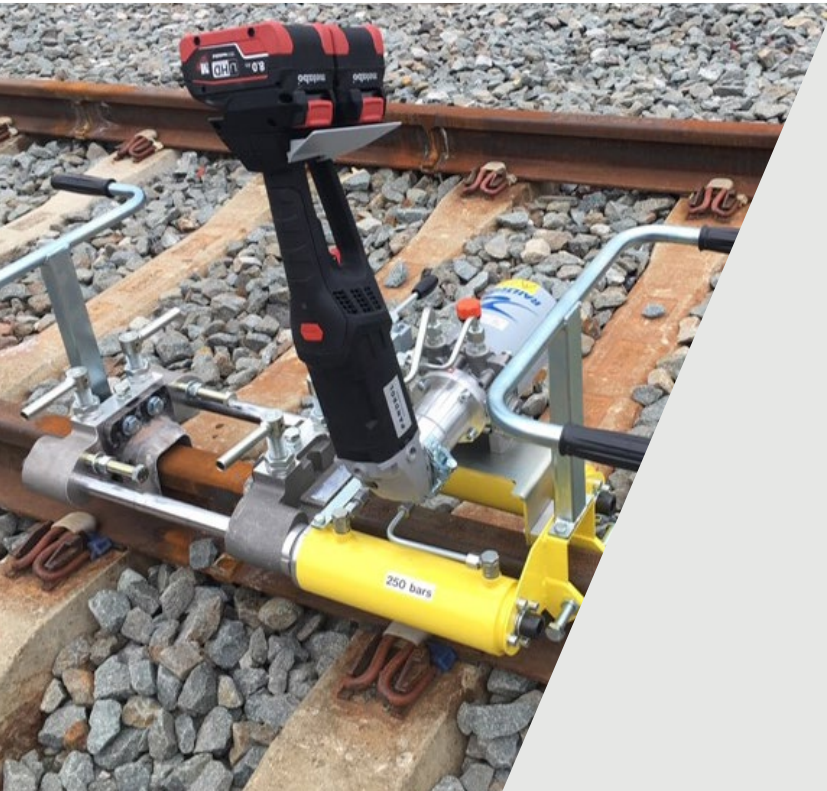


Battery-Operated Weld Shear EMB1 – EMB2 – EMB2 RAG

Rail Welding Equipment



Pandrol's battery-operated weld shearing machines are designed for the easy removal of excess metal following an aluminothermic weld. The shearing process takes place after mould release.

The battery-operated weld shearers are available in two versions:

- EMB1 – a narrow model, for Vignole rails, ideal for use in tunnels and closed environments
- EMB2 – a wider unit, for Vignole rails, which is more comfortable for use when shearing through the mould.
- EMB2 RAG – a wider unit, for Grooved rails, which is more comfortable for use when shearing through the mould.

These machines are rigid, powerful and designed to consistently deliver fast and accurate results. They are compatible with vignole and double-head rails.

→ TECHNICAL FEATURES

Battery operated

The shearing machines are powered by two batteries, using lithium HD technology. There is no carbon emission during operation. Battery autonomy allows for more than 12 shearing operations before the batteries need to be recharged.

Hydraulic cylinder

The shearer is fitted with two hydraulic cylinders that are able to produce a force of 21 metric tons under a pressure of 250 bars.

Fully adjustable, hydraulic blades

Two hydraulically-operated blades on either side of the weld move and cut off the excess metal. Five types of blades are available, all adapted to different vignole rail profiles. Screws are used to adjust the blades' height, lateral position and stroke.

Retractable locking system

A retractable locking system, fixed under the rail head, prevents the shearing machine from rising up in use.

Manual control lever

A manual lever controls a hydraulic distributor that allows the blades to move.

Compact and lightweight

The shearing machine comes in one piece and is lightweight – around 60kg.

→ ADVANTAGES

- The battery-operated shearing machine is fully autonomous, providing flexibility and freedom in the working environment.
- The machine does not produce emissions, so can be used in tunnels and closed environments. The narrow design of the EMB1 makes it particularly suitable for this.
- The shearing operation is extremely accurate, thanks to the adjustability of the blades and the guiding rollers.
- The accuracy of adjustments means that 2mm of weld metal can be left above the running surface, so the quality of profile grinding is not impaired.
- The shearer is quick and powerful, minimising the time spent grinding the rail and maximising uptime.
- The machine is safe to use. It is lightweight and easy for two people to pick up and place on the rail. The upper positioning of the handles protects hands from the heat.



→ COMPONENTS

1. Ergonomic handles
2. Integrated battery pump
3. High pressure cylinders
4. Strong bi-material blades (not included)
5. Lateral adjustment system
6. Height adjustment system

→ SPECIFICATIONS

Technical data			
Description	EMB1 Narrow shearing machine	EMB2 Wide shearing machine	EMB2 RAG Wide shearing machine
Item number	11334014	11334015	11334019
Application (including switches and crossings)	For use in Vignol rails		For use in Grooved rails
Inner distance between cylinders	210 mm	325 mm	325 mm
Shearing force	212 kN (21.5 tons)	212 kN (21.5 tons)	212 kN (21.5 tons)
Maximum hydraulic power	250 bar	250 bar	250 bar
Opening between blades	175 mm	175 mm	175mm
Energy	Battery	Battery	Battery
Power	2600 W	2600 W	2600 W
External dimensions (mm)	1200 x 470 x 480	1200 x 470 x 480	1200 x 470 x 480
Minimum width dimension (rail level)	315 mm	455 mm	455 mm
Weight without blades	57 kg	60 kg	60 kg

Accessories

11335018	Vignole pair of blades type 32
11335019	Vignole pair of blades type 36
11335024	Vignole pair of blades type 40
11335022	Vignole pair of blades type 45
11335044	Vignole pair of blades type 40 GOLD
11335043	Vignole pair of blades type 45 GOLD
11335042	Vignole pair of blades type 48 GOLD

Standard compliance

- Machinery directive 2006/42/CE
- European norm NF EN 13977

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