

# Bi-Bloc Weld Shear

EGH1 / EGH2 / EGH2 RAG

Rail Welding Equipment



The Bi-Bloc Weld Shear EGH1/EGH2/EGH2 RAG are hydraulic rail shearing machines designed to shear off excess metal after aluminothermic welding of Vignole rails (EGH1/EGH2) or grooved rail (EGH2 RAG). During aluminothermic welding, excess metal remains above the rail head. This was traditionally removed manually with a hammer and chisel. The Bi-Bloc Weld Shears automate this process and remove the risk of damaging the rail.

The shear is operated by a separate hydraulic unit, either with an electrical motor or a gas power engine, which makes it lighter than other shearing machines as the hydraulic unit is not mounted on top.

## → TECHNICAL FEATURES

### **Available in three versions**

The Bi-Bloc Weld Shear EGH1 is a narrow unit, able to operate in turnouts thanks to its small size. The EGH2 model is wider, bringing more comfort when shearing through the mould for Vignol rail. The EGH2 RAG is the déclinaison of the EGH2 for grooved rail.

### **High power**

The shear is able to produce a force of 21.5 tons under a pressure of 250 bars.

### **Hydraulically-operated, adjustable blades**

Two blades, one on either side of the weld, move and cut off the excess metal. Adjusting screws enable the blades' cutting edge to be adjusted exactly, both laterally and vertically.

### **Hydraulic distributor**

A hydraulic distributor with manual control lever keeps the blades moving. Loosening the action on the distributor control lever stops the translator movement.

### **Retractable locking systems**

Locking systems fixed under the rail head prevent the shearing machine from rising up and adjust the cutting operation to the thickness of the metal deadhead.

### **Separate hydraulic unit**

The shear is operated by a separate hydraulic unit with two power sources; either an electrical motor or a gas power engine.

## → ADVANTAGES

- The hydraulic shearing machine is much safer to use than the traditional hammer and chisel method of reducing excess metal, which was hard work and exposed workers to projections of metal.
- With the shearing machine, there is no risk of damaging the rail.
- The adjustable blades and guiding rollers result in much greater precision than possible when removing the metal deadhead manually.
- The powerful hydraulic unit significantly reduces grinding time, saving money and decreasing downtime.
- The upper positioning of the handles on the shearing machine ensures the operator remains a good distance from the hot area, increasing safety.
- The positioning of the handles and the machine's light weight, thanks to the separate hydraulic unit, make it easy to carry around.



## → COMPONENTS

1. Ergonomic handles
2. Adjustable locking system on both sides
3. Set of adjusting screws to fully adjust the position of the blade
4. Powerful cylinder
5. Blades of different types depending on the rail profile

## → SPECIFICATIONS

Technical data			
Description	Narrow shearing head – EGH1	Wide shearing head – EGH2	Wide shearing head – EGH2 RAG
Item number	11332001	11332002	11332006
Rail type	Vignole	Grooved	Vignole
Shearing force	212 kN / 21.5 tons	212 kN / 21.5 tons	212 kN / 21.5 tons
Hydraulic pressure (max)	250 bar	250 bar	250 bar
Opening between blades	175 mm	175 mm	175 mm
Inner width free space	210 mm	325 mm	325 mm
Dimensions	1200 x 460 x 440 mm	1200 x 460 x 440 mm	1200 x 460 x 440 mm
Mass without blades	45 kg	49 kg	49 kg

Technical data		
Description	Hydraulic unit with gas power engine	Hydraulic unit with electrical motor
Item number	19511007	19511015
Engine / motor type	Honda GX160	Hilti AG230 27DB
Power @ rpm	4 KW @ 3,600 rpm	2.7 KW @ 6,500 rpm
Voltage	N/A	230V Single phase @ 50 Hz
Hydraulic pressure (max)	250 bar	250 bar
Flow	3.6 litre / min	6.4 litre / min
Dimensions	740 x 440 x 420 mm	472 x 230 x 555 mm
Mass	39 kg	20 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
11335023	Vignole pair of blades type 48
11335030	Groove pair of blades
11335039	Groove pair of extended blades

### Standard compliance

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



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