

SYMBLO RAIL



ELECTRO PERMANENT MAGNETIC SYSTEM FOR RAILS PROCESSING

THANKS TO ITS HIGH FLEXIBILITY IT CAN REVOLUTIONIZE
THE PROCESSING OF RAILS OF DIFFERENT TYPES AND OTHER COMPONENTS
OF THE RAILWAY SWITCHES.

ECO-FRIENDLY
POWERFUL
COMPACT
FAST
FLEXIBLE



APPLICATION SECTOR: PRODUCTION OF RAILWAY COMPONENTS

Locking system SYMBLO-RAIL is used specifically in the processing of rails that are intended to be installed in railway switches areas. These rails are modified for a part of them (a few meters), reducing their size until they become thinner like needles, from which it derives the typical definition of "processing of needles for rails". The magnetic clamping concept has largely replaced the mechanical and hydraulic conventional clamping, being more practical, quick and uniform.

WHAT KIND OF CUSTOMER'S NEEDS CAN IT MEET

The companies in the field that produce rails have now identified in the magnetic system the most effective and advantageous method of clamping. The uniformity with which the rail is held, the speed with which the production setup is modified, the strength with which the piece is clamped lead the customers to wards the magnetic system SYMBLO RAIL, especially for the most targeted and industrially important investments.

FEATURES

The fundamental magnetic structure of the system is based on the electropermanent technology. The magnetic polarity with square pole, with vertical magnetic action (clamping of the foot of the rail) and lateral (holding of the web) allows management of the magnetic flux and the resulting force in an optimal way. The various rails with different shapes for different railway applications (tracks for trains, trams and others) are clamped by small shaped polar expansions suitable to profile that are easy to be replaced. The magnetization operation lasts few seconds and the general control unit allows selection of needed magnetic zones according to the rail area being processed.

CUSTOMIZATION

There are standard versions with solutions that have been tested for a long time with costumers in the sector. However, it is possible to easily customize the system, to make it more adaptable and reusable for different pieces and even for applications in different sectors from the starting one.



The high safety of the workholding magnetic system is guaranteed by electropermanent technology by SPD. Right side: geometry of the rail to be machined.



First operation of the rail head. Right side: profile of the rail being machined in one set-up only.



Machining operation of the foot. Right side: second processing of the rail head. Processing that requires a safe clamping condition.

ADVANTAGES

- **Homogeneous holding force along the entire rail** that solves the problem of vibrations during the processing of such long and narrow pieces
- **Setup speed** with change and adaptation to different rails in a few minutes
- Natural safety of the EPM TECHNOLOGY that **maintains the magnetic force** even if the supply voltage goes off
- **Zero energy consumption** as the system only consumes only when it is magnetized or demagnetized. During work, no consumption
- **Environment - friendly** method because it works with electricity and has easy and clean maintenance (unlike hydraulic systems)
- **Controlled process:** in fact, machine can be started in safety only after having magnetized



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