Competence in Rail Welding Plants
Nencki machines for rail processing in stationary welding plants for long welded rails are in operation all over the world. The range includes the machinery and equipment before and after the welding process: brushing machine, grinding machine, 4-way straightening press and test press for welded joints. Nencki is able to design and supply complete rail welding plants including rail transportation equipment and integration of all control systems involved. Nencki equipment has a long lifespan. In numerous welding plants, machines continue to function reliably for more than 20 years and still require little maintenance.
The Nencki rail brushing machine is for the preparation of rails for the flash butt welding process. Corrosion and other impurities are being removed at two rail ends in a single step. The top and bottom surfaces of the rail are cleaned in order to achieve a perfect electrical contact for the welding electrode. The front area is also cleaned by a separate brushing unit.
The Nencki rail grinding machine is for grinding the welded rail joint after the flash butt welding operation. The grinding is carried out on top as well as on the sides of the rail head. The process meets the latest standards. Semi- and fully automatic version featuring video camera supervision.
The Nencki rail straightening press is used for straightening rail profiles after the flash butt welding process. After removing the weld burr by the rail grinding machine, the rail is moved to the straightening press. The rail joint is straightened by two hydraulic cylinders in horizontal and vertical direction. The process meets the latest standards.
Competence for Stationary Rail Welding Plants

1. STORAGE OF SHORT RAILS
   - SR

2. RAIL END BRUSHING
   - NRB

3. FLASH BUTT WELDING
   - NRT

4. WELD TEST
   - NRT

5. MANUAL WEB GRINDING
   - NRM

6. FOOT MILLING
   - NRM
The Nencki test press is for proving that the welds are within the permitted tolerances and the rails are in accordance with the safety requirements. The test piece can easily be lifted onto the supports by crane and then shifted manually into the machine. All necessary steps are released and supervised by a PC control.
The rail inspection system of Nencki is for checking the straightness of rails at the end of a rail welding line. This control ensures that the dimensions are within the permitted tolerance and meet the required safety standards.
**LINE CONTROL**

The Nencki Line control connects the single machine in the welding line with the conveyor system. It secures that rails are only forwarded if machines and conveyors are free. In addition, it provides an overview of the machine status and error messages. It can be combined with survey cameras.

**CONVEYOR**

Nencki can provide specific conveyors such as motorized, non-motorized, movable, pinch-roller and twin rollers etc., according to the design and layout of the factory.

**FLASH BUTT WELDING MACHINES**

Nencki machines can be combined with famous flash butt welding machines, e.g. Schlatter, Holland, Progressrail etc.
With our partners in all the important railway markets, we are able to offer optimum advice for new testing and workshop concepts or for the modernisation of such, even at an early stage. We work out solutions with our specialists of the engineering departments and the customer.

Because of our international service outlets guided from Langenthal, Nencki is able to offer fast customer support and therefore ensure high machine availability. Our multi-cultural team has language knowledge in German, English, French, Spanish, Chinese, Arabic etc.

Our services include commissioning, trainings, maintenance contracts, trouble shooting by remote maintenance, calibration, spare parts, upgrades, documentation etc. during the entire life time of the machine.