Nowadays, instead of producing continuous welded rails for new railway tracks, often only short sections of worn rails are replaced with new rail sections. This results in an increase in the number of closure welds, which consequently also increases the demand for distressing in one operation together with the welding process. Replacing only short rails even results in every second weld being a closure weld that requires distressing.
Distressing and the flash butt welding process in one operation

The AMS200 is the latest development in mobile rail welding machines, a new generation which enables the distressing and the flash butt welding process to be carried out in one operation, without an additional pulling device.

AMS200

This welding machine features the necessary force to achieve the required calculated dilatation. The loss of material due to the welding process is taken into account in the calculation. The machine offers a long travel in order to allow a reliable distressing even at low temperatures.

The AMS200 has an integrated deburring unit independent from the moveable machine side which deburrs directly after welding while the rail ends remain firmly clamped. The distressing force acts in the neutral zone of the rail, which increases the weld quality and protects the machine from unwanted stress. Free space around the rail foot avoids collision with sleepers and track fasteners and minimizes the need to raise the rail ends.

Product characteristics

- Exact lateral alignment of the rail ends by means of an electronic measuring system with the possibility to check and adjust if necessary.
- Prior to clamping, an integrated hydraulic lifting device presses both rail ends vertically to the crown stops for perfect alignment.
- The excentric web clamping system is self-closing and increases the clamping force when welding force is applied.
- The electrodes act in the web. They are actuated with separate hydraulic cylinders and are completely independent from the clamping system.
- Force for distressing and welding: 1400 kN.
- Total travel for distressing and welding: 300 mm.

System types

The AMS200 is available in two system variants. The Supra Roadflex is a highly flexible truck-based system for road/rail operation.

The Supra Multiflex system allows all the equipment to be incorporated into a compact and space-saving 30-foot container. As an alternative, there is also a system available whereby two 20-foot containers (the energy container and the welding container) comprise a single unit.