

Stationary Flash Butt Rail Welding Machine K1000/K1100





K1000 K1100

KZESO stationary rail welding machines use more than a dozen innovations protected by international patents in the field of welding technology, control systems and programming of welding processes, as well as designs of the main units of welding machines, which are distinguished by the original layout of mechanical elements, welding circuit, the use of high-speed hydraulic drives and new principles of rail centering. The quality of welded joints meets the requirements of international standards.

The K1000 machine is designed for flash-butt welding of rails with a cross-section of 5000 mm² up to 10000 mm² using continuous flashing or pulsed flashing in stationary conditions with deburring immediately after welding. By special order, the machine can be manufactured for welding other profiles with a cross-section of up to 18,000 mm².

The K1100 machine is a modernization of the K1000 machine for welding rails made of alloy steels as well as for welding rail sections with insulated joints.

In order to weld rail sections containing insulated joints, preliminary alignment by external roller centralizers is carried out along the base of the rail instead of the neck, as in the K1000 machine.

In order to enable unobstructed flow of the section with insulated joints in K1100 machine through the welding zone of the machine, the design of the deburring unit and protective shutters has been changed.

The K1000, K1100 machines are equipped with a welding process control system, built on the latest Siemens programmable controller and provides computerized certification of the technological parameters of welding of each joint.



Specifications

| | K 1000 | K 1100 |
|--|--|--|
| Rated mains voltage, V | 380 | 380 |
| Mains current frequency, Hz | 50 | 50 |
| Maximum secondary current, kA | 84 | 84 |
| Rated continuous secondary current, kA | 19 | 19 |
| Short circuit power, kVA | 600 | 600 |
| Welding power at DC = 50%, kVA | 180 | 180 |
| Output at welding of rails 60E1, weld/h, not less | 21 | 21 |
| Maximum operating pressure in the hydraulic system, MPa | 20 | 20 |
| Maximum upset speed, mm/s | 100 | 100 |
| Maximum upset force, kN | 800 | 800 |
| Maximum clamping force, kN | 2000 | 2000 |
| Weight of welding machine, kg | 9350 (12850 set) | 12850 set |
| Overall dimensions, mm - welding machine - control cabinet - pump station - recording system cabinet | 5660x1640x2782 1290x690x1730 1300x745x1420 690x690x1750 | 5660x1640x2782 1290x690x1730 1300x745x1420 690x690x1750 |