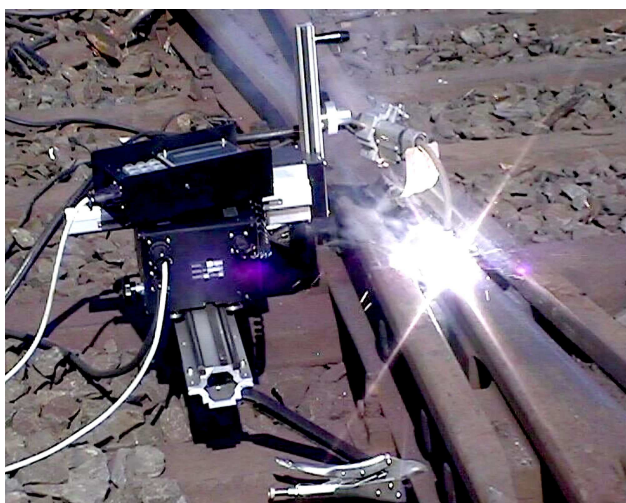


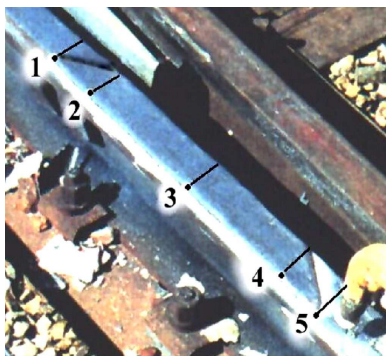
## RD500AS / RD200

For all kind rails and all kind welding methods  
 Lightweight units for easiest handle by one man.  
 Remote Pendant Control with easy to learn functions.  
 Cost reduction and saving of time by the highest quality.  
 Production-accompanying computer-aided quality assurance.

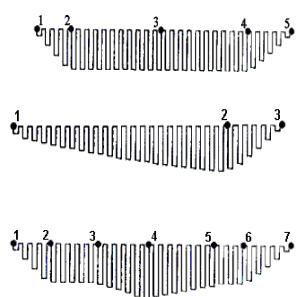


### Welding Methods

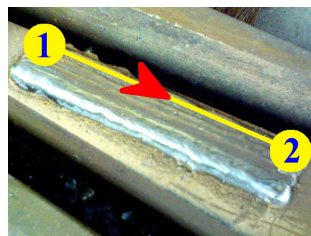
For Standard Surfacing



Welding Sequences



For Hard Facing



with Multiple Areas

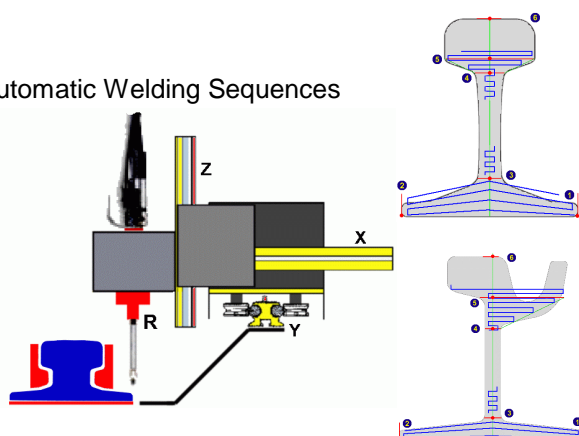


For Joint Welding

Type	
MEM 1	R 65
MEM 2	U 36
A 75	U 36
A 100	JIS 60
A 120	JIS 60N
A 150	P 60
UIC 54	P 60
UIC 60	U71Mn
CR 73	U75V
CR 100	By IX
S 41	INI 73
S 49	B 123
S 54	B 140
S 60	Ri 52
S 64	Ri 60

30 Standard rail types selectable.  
 Easy expandable with other type.

Automatic Welding Sequences





## **RD 500J / RD 200J Joint Welder**

4-Axis "Welding Robot" for  
automatically joint welding of all kind rails



Highest quality welding because of none interrupted work  
from bottom to top of rail.

Effectively material- and time-saving because of minimum joint space of only 12 mm.

Easiest clamp-mounting with insignificant preparation of work.  
All welding parameters are memorised permanently,  
only one point has to be set.

Support for your quality management system and documentation  
across standard USB-port.



**Aluminium Housing**  
as electromagnetic shield

**25 Pin D-Sub** screw able  
Plug Connector

**Touch-Screen**  
with removable acrylic  
glass plate as protection  
against welding spatter.  
Easy touch adjustment at  
internal use.

**Keyboard**  
with protection against water  
and dust by seal for every key.

**ON/OFF Switch**  
for remoted switch off power supply.

**USB-Interface**  
compatible with all PC's for easy transfer of  
welding data or special program.  
Stand-alone use for 3 hours with internal  
rechargeable Battery.

Support for your quality management system and documentation  
with **Computer Aided Quality Assurance**.

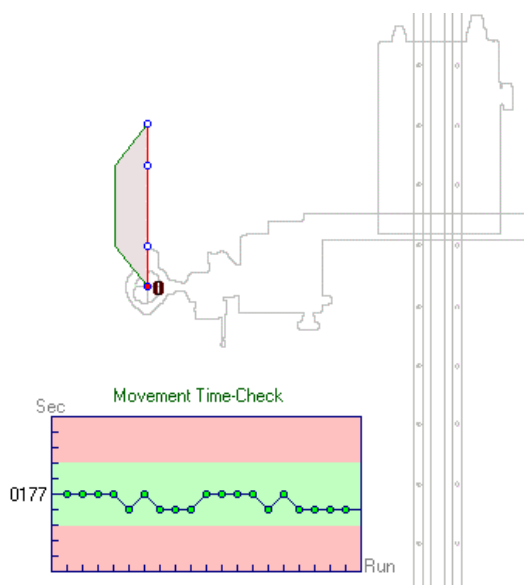
## RD 100 4-Axis-Controller for Linear Movements

Newest generation 8-Bit Computer for real time adjustment of all welding parameters. Auto-*Teach-In* function for all positioning co-ordinates. The graphical display shows all welding parameters and input is done very easy by Touch-Screen or by a 12-time keyboard. Speeds, distances, dwell times, amplitude... can be adjusted in steps by 1 %. For repeated works, all welding parameters are memorised permanently. All calculations and adjustments are done automatically in the background and the welder's support is optimised.

## Quality Management

Especially in the range of the welding technology, the quality assurance and quality preservation is a responsible task. Therefore, our quality management doesn't end already after delivery of the machines, but accompanies the whole period of use.

For the optimum integration in quality management systems, certain circumstances have to be fulfilled. Important points are the ability for reproduction of the processes, the data interchange with documentation and the cost-use-factor of the quality management. Because of highest technical standards and the logical use of all possibilities, the expenditure remains low.



## Computer Aided Quality Assurance

A predefined surface with predefined movement parameters, will be processed for 20 times and the required time of every run is saved.

Even the smallest deviations in the mechanics or electronics are recognized. The whole test needs about 1 hour and runs automatically.

This diagram shows the needed time for every pass. Deviations of 2 seconds causes by mechanical load, more as 2 seconds are not tolerated.

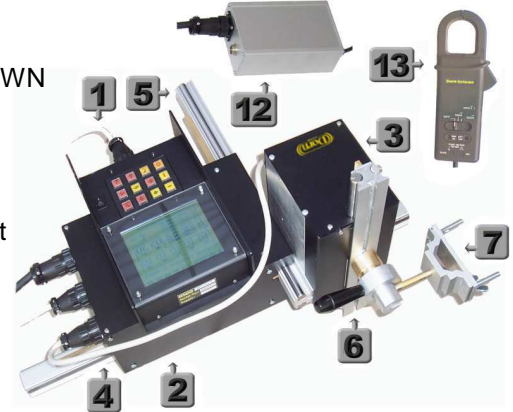
### Systemparts

RD 200

RD500



- 1 Remote Pendant Control
- 2 Drive Unit & Weaver
- 3 Distance Support UP/DOWN
- 4 Drive Rail
- 5 Weaver Rail
- 6 UP/DOWN Rail
- 7 Turn able Gun Holder
- 8 Mounting Knob Drive Unit
- 9 Mounting Knob Support
- 10 USB Port
- 11 ON/OFF Switch
- 12 Power Supply
- 13 Arc-Control



### Technical Data

**Drive Unit:** DC-Motor, 12V/60W

**Speed Y:** 40-1600 mm/min.

**Weaver, Up/Down-Support:** DC-Motors, 12V/20W

**Speed X,Z:** 40-1800 mm/min.

**Motor Controls:** Linear regulated, with computer controlled fuse and adjustment.

**Mechanical Parts:** Ball- and linear bearings, 12 mm hardened steel rails, worm gears and helical racks.

**Control:** Remote with graphical LCD-Screen and 12-time keyboard, 20 programs, up to 1200 Teach-In-Points. Teach-In function with start/stop dwell times and automatically gun lift off. Real time calculation for 3 axis.  
5 different welding patterns and line mode.

**Options:** Multi-Sensor-System for every probe, real time calculation for 4 axis.  
Permanently memorised welding parameters. USB interface to other computer for documentation and quality management. Internal battery for stand alone remote for data transfer.  
Special program for manganese hard facing and Multiple-Area welds.  
Special program for Joint Welding of 30 different rail types, with additional rotary support.

<b>Power Supply</b> .....	prim. 220-240 VAC, 120 VAC, 42 VAC, sec. 2*12 VDC/ 72W
<b>Amplitude</b> .....	1 - 80 mm
<b>Movement</b> .....	Weaver, Up/Down; X,Z rails. 300 mm Drive; Y rail, 1300 mm
<b>Precision per step</b> .....	ca. 0.2 mm
<b>Remote</b> .....	LCD- screen and 12-time keyboard, Up to 1200 Teach-In-Points, 20 Programs
<b>Connections</b> .....	Contact for switching the power source, USB serial interface to PC (optional)
<b>Dimension drive unit (without weaver)</b> .....	270 mm * 170 mm * 140 mm
<b>Dimension drive rail</b> .....	2000 mm * 100 mm * 40 mm
<b>Weight welding unit</b> .....	Approximately 16 Kg
<b>Weight drive rail</b> .....	Approximately 6 Kg



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