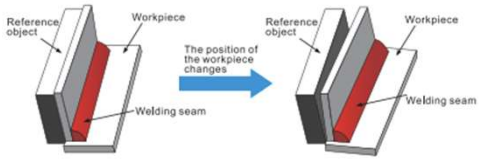
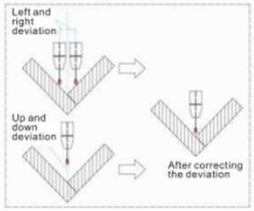
NJITSU

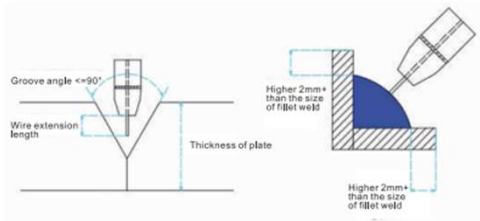
"Efficient, Flexible, and Collaborative Automation"

Arc Tracking Sensor

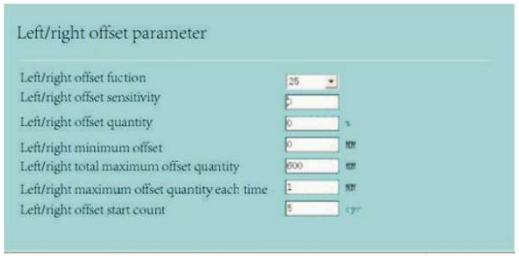
nFA-CAW-V2

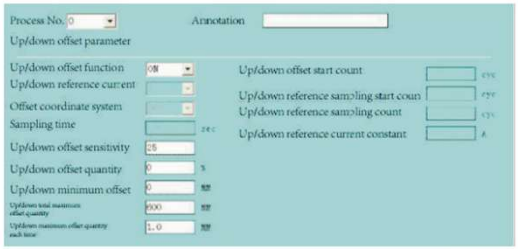






PROCESS AND INTERFACE





TECHNICAL CHARACTERISTICS

CRP-CAW-V2 is a universal arc tracking sensor researched and developed independently by CRP Automatic, not affected by arc light and dust during the working process, so it has high reliability. It can be used for welding seam tracking under different welding conditions by fuzzy control.
This sensor can work with CROBOTP robot control system to track fillet weld, butt weld, lap weld and other weld types. Under the situation of no changing the mechanical structure, it can achieve the seam tracking function only through simple installation and commissioning, thus it is convenient and easy to use, and improves the welding production efficiency of medium and thick plates with low precise incoming materials and assembly.

- This sensor is used when the welding seam of medium and thick plate workpiece is deformed or deviated in CO2/ MAG welding process;
- The arc seam tracker samples the current of swing welding in the welding seam in real time;
- The system judges the difference between the current weld and the preset current according to the current amplitude, and confirms its up, down, left, and right deviation values;
- The system automatically corrects the trajectory of the current robot;

APPLICATION CONDITIONS

- Gas: CO2 ,MAG
- Welding wire diameter: 1.0mm-1.6mm
- Wire extension length: 15mm-25mm
- Type of welded joints: T -type fillet weld (1-2mm gap is allowed), V -type groove (30, 459)
- Welding conditions: current >180A, welding speed <15mm/s, welding length >100mm
- Swing conditions: width: 1.5mm-5mm, swing frequency: 1.5HZ-4Hz
- Swing type: Z shape
- Welding form: DC / pulse