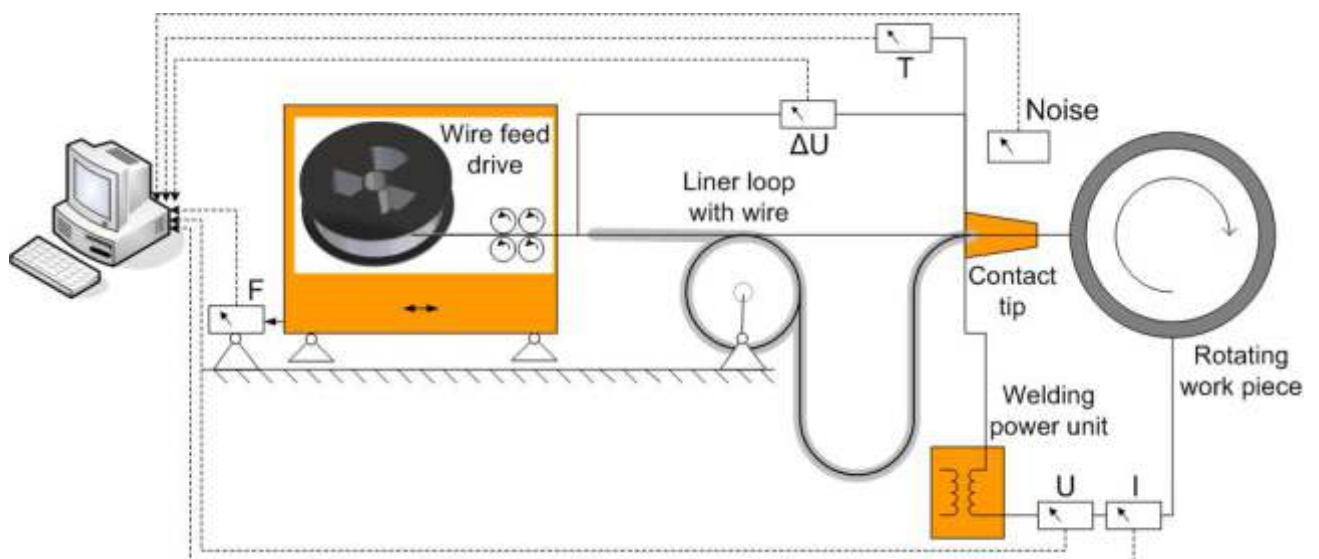


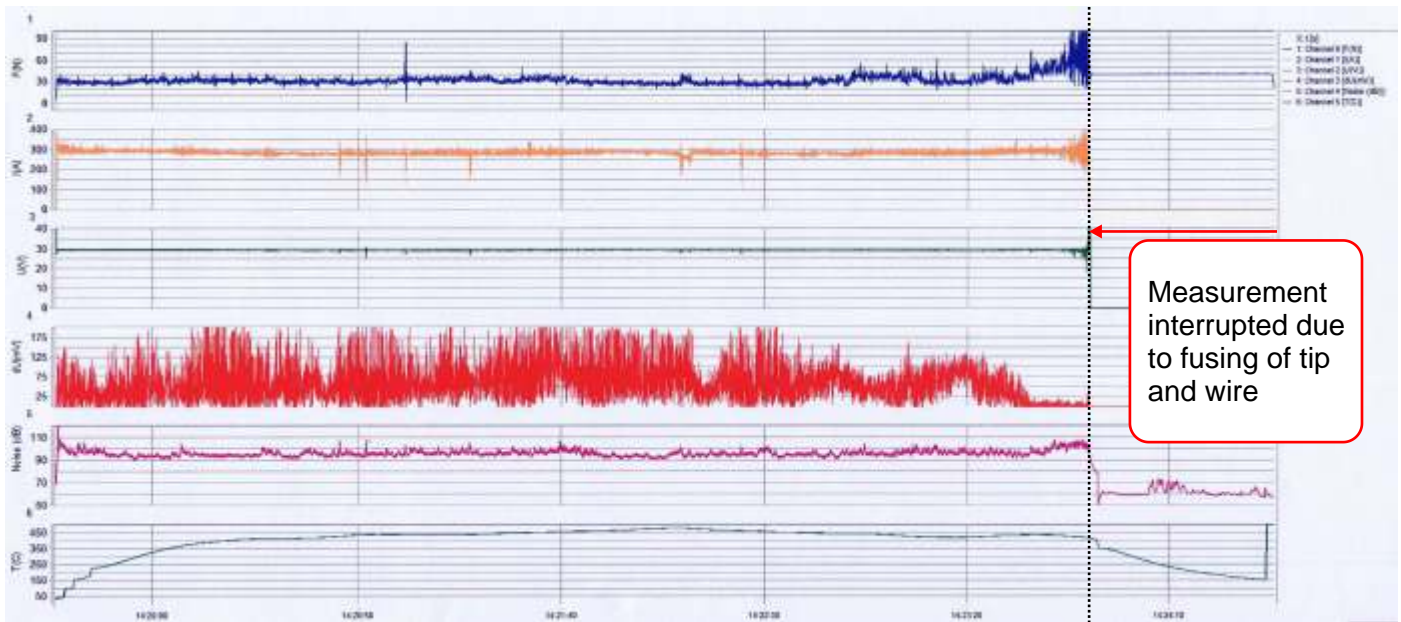


Welding Test Unit



This welding wire test unit allows test welding under controlled and repeatable conditions. During welding, processes are recorded and plotted digitally. The rotating work piece allows for long-time tests, so that variations in wire surface quality regarding particles, roughness and consistency as well as performance in the contact tip and contact tip wear can be detected.





Commercial wire showing bad feedability due to particle contamination

Parameters recorded are:

- welding current
- welding voltage
- voltage loss in the contact tip
- noise level during welding
- temperature of the contact tip
- feeding force

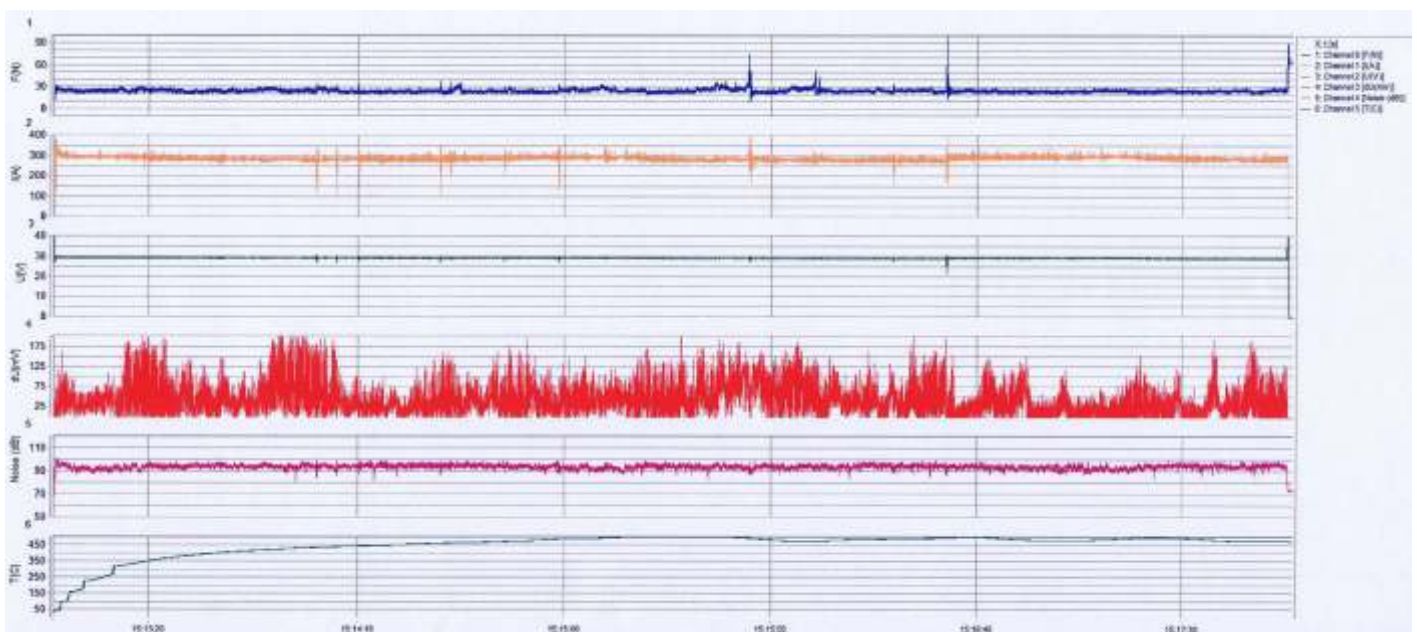
Measurement results provide information and guidelines necessary to systematically improve properties and consistency of welding wires.

The welding current can be set up to 320 A during permanent operation.

Measuring data are recorded at 150,000 samples per second and channel, and an analog digital converter resolution of 16 bit.

The welding speed can be set to up to 3,000 mm/min.

The operator is guided through the measurement by touch screen.



The same commercial wire as above, after removal of particles by HELICORD® without application of Welding Wire Finish