

ERW PIPES ULTRASONIC ON-LINE WELD SCARFING MONITORING

The I/O Profile is designed to be placed during the manufacturing process just after the scarfing process. The system allows to control the inside and outside profile and start off alarms if the tolerances are exceeded. A material thickness measurement is done in the same time.

Tube manufacturing range :

Pipe diameter range : 114.3 mm to 824 mm
Wall thickness range : 3.5 mm to 16 mm

The system includes :

- mechanical head
- Pre-cooling integrated
- high stability
- adaptability for a large tube diameter range



Scarfing process

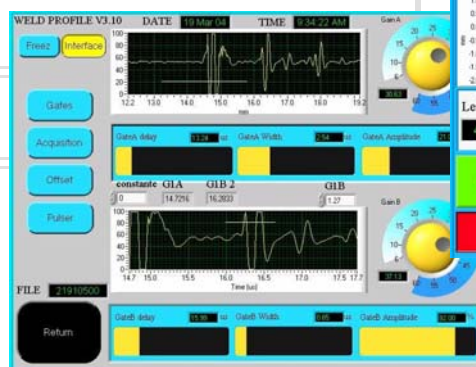


Example of weld after scarfing process

- ultrasonic probe
 - single crystal immersion probe
 - focused transducer
 - high resolution
- ultrasonic board
 - high pulse rate frequency
 - high resolution

- software
 - display of outside and inside profile
 - thickness measurement
 - rejects alarm on profile
 - reject alarm on thickness
 - coupling check alarm
 - temperature alarm
 - printing function
 - easy of using and settings
 - touch screen

Settings screen



Measurement screen

Environment

The UT system is designed to be placed very close to possible noise sources (welder, seam annealer, frequency inverters...)

The possible electromagnetic interference peaks are lowered and not detected. Besides, the system can operate in difficult conditions (room temperature up to 50°C and humidity up to 98 %).