

# SAW SPIRAL PIPE-ON LINE BODY LAMINATION INSPECTION BY ULTRASONIC METHOD

The body lamination test can take place just after the welding during the pipe manufacturing process and can operate at high scanning speed.

## Meets specifications :

API 5L 2000  
ISO 3183-3  
ARAMCO

## Pipe manufacturing range :

Pipe diameter range : 500mm to 3000mm  
Wall thickness range : 5mm to 25mm  
Coil width range : 900mm to 2000mm

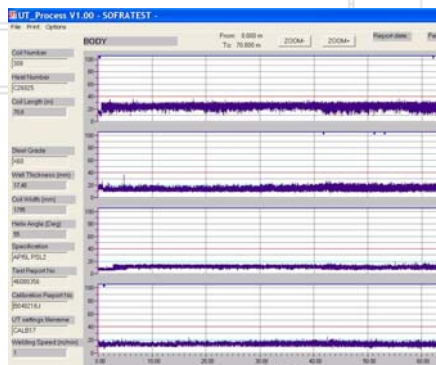
## The system includes :

- UT probes (4 to 8)
- Multi-channel UT system (2000 meas/s)
- Fully programmable settings
- Marking on tube for :
  - Lamination detection
  - Loss of coupling
- Mechanical head oscillator and probe holder (600mm/s)
- Data capture :
  - First printout : produce scanning information for each probe
  - Second printout : summary and full report, traceability of each defect or loss of coupling detected for a complete coil
  - Storing on CD-Rom
  - Network

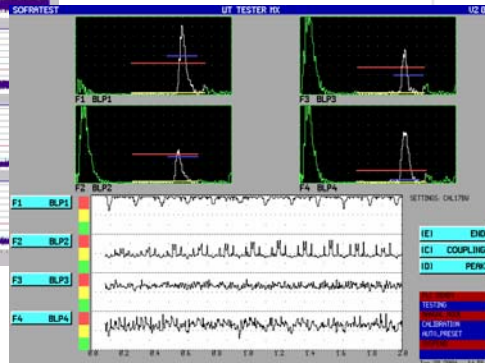


Mechanical System and Remote Control  
4 channels (extendable to 8)

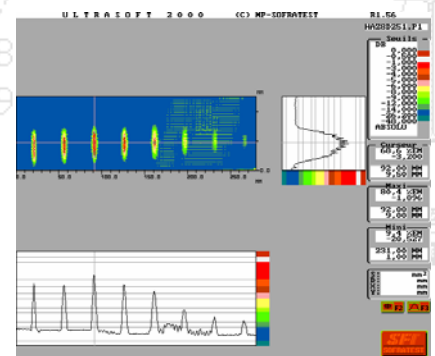
- Twin crystal probes : focal length at 50% of the wall thickness
- 25% minimum of the surface coil tested
- Lamination control detects a 6.3mm flat bottom hole at 1/2 plate thickness
- Coupling stability control at each shot



PC\_Process – Length of Scanning  
Up to 700m



UTTMX Software Multi-channel UT system  
event envelope linked to mill speed



8 FBH Ø 6.3mm at different  
depths in a 25mm thick plate

## Environment

The UT system is designed to be placed very close to possible noise sources (Plasma cutters, welding machines, 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 %)

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