

Inspection of pipe weld seams

Middle East Tube Company (Metco) is Israel's largest manufacturer of steel pipe. The pipes are used for carrying sewage, water, oil or gas. Therefore, the weld seams produced during the manufacture of the pipe must be absolutely leak tight.

The sections of pipe are joined using spiral welding techniques. The positioning of the metal sheets for this process used to be carried out manually. However, the difficulties associated with precisely aligning the pipe ends resulted in constant quality issues.

Using the scanCONTROL 2710, this positioning process is now performed automatically. The calculated profile information is used directly to position the pipes for welding. The sensor output unit, available as an accessory, performs data conversion using FireWire.

The measuring object rotates at a speed of 1.5m/min. The ambient temperature at the sensor reaches a maximum of 40°C. The scanner is positioned so that no special cooling is required.

System design:

- scanCONTROL 2710-100
- 20m sensor cable SC2700-20
- Output unit
 - Basic output unit
 - 4-channel digital output
 - 2-channel analogue output



Measuring Object:

- Water pipes with diameters between 600mm and 2,032mm
- Gas pipes with diameters up to 1,422mm

Benefits for the customer:

- Very large base distance (300 – 600mm)
- Plug & Play software
- Precise measurement through protection glass
 - Simultaneous profile display and calculation of results

