

1.3.34. GUIDED WAVE EXPERIENCE IN THE REQUALIFICATION OF THE HEATING NETWORK OF BRESCIA CITY

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The city of Brescia started to build the underground heating network in the late 1965.

Today more than 75% of the heating service is developed by pressured hot water at 130°C in the underground tubes. Special rigid coating surrounded the tubes to avoid heat dispersion.

After more that 30 years it comes the needs to verify the integrity of the tubes and in particular the great of corrosion.

Sample of tubes with artificial reduction sections have been prepared for calibration equipment.

In parallel some tubes with natural carrion have been added to the new tubes in order to have a better understating of the real capabilities of the system

The paper resume the result of the first experience carryout on the old network.

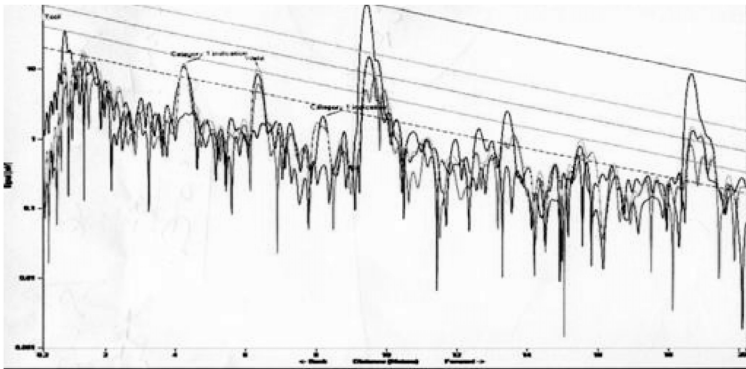


Fig. 1. Typical A scan Diagram during in field examination with Guided Wave



Fig. 2. Samples of heating tube take out from the network due to heavily corrosion level