TELETEST™ FOCUS+ IN BURIED LINE INSPECTION APPLICATIONS

Eddyfi Technologies inspected and assessed the integrity of a buried section of the 61 cm (24 in) Yatagun pipeline which extends from gas fields in the Andaman Sea through Myanmar, into Thailand.

The customer in Thailand made the decision to use guided wave ultrasonic inspection at these locations because it was impossible to use a pig in the buried section—guided waves enable 100% volumetric inspection of a large length of pipe from one location.

Teletest™ FOCUS⁺ guided wave ultrasonic testing was used to inspect the 61 cm (24 in) line, buried 3–5 m (9.8–16.4 ft), and identify areas for possible follow-up inspection.



Location photo of typical excavation

The greatest challenge facing the inspection team was the trilaminate pipe coating made from fusion-bonded epoxy (FBE), adhesive, and an outer layer of high-density polyethylene (HDPE).



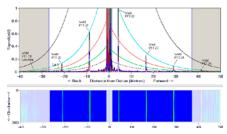
FOCUS⁺ used to inspect the 61 cm (24 in) buried pipeline through HDPE coating

In this particular case the customer was concerned about removing the coating, which would normally be recommended at the transducer tool locations. It was agreed to carry out the inspection directly on the coating.

The customer specified that they would be happy with 30% coverage of the section.

The inspection team managed over 90% coverage with the five-ring tor-

sional tool developed for pipelines exhibiting a high rate of attenuation. At some locations, scans of up to 75 m (246 ft) were diagnosed.



A-scan and A-map showing 70 m (246 ft) inspection achieved from tool location



Close up of HDPE pipe coating

