

RINGHALS A600

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2.2 RINGHALS ALLOY 600 REPAIR

Ringhals ordered a test block from Trueflaw to verify the feed water nozzle safe-end inspection. Crack sizing using TOFD was qualified. In this case, the inspection was done from ground pit with depth of 3.9 mm. Inspection was performed from the cracked side. Inspection was performed by WesDyne TRC.

It was decided to use Trueflaw cracks, to avoid any welding to the specimen. Trueflaw manufactured three cracks to Inconel 600 mock-up provided by the client. As per normal Trueflaw procedure the case required manufacturing of validation cracks, which were destructively examined to reveal the true crack depth. After production of validation cracks, cracks of known size could be produced.

By mutual discussions, it was decided, that Ringhals would do initial qualification with the validation cracks. The NDE results of the initial qualification on the validation cracks showed that the inspection procedure can meet the inspection target and set tolerances (Table 1).

Destructive depth	Inspection depth
3.2 mm	2.9 mm
2.5 mm	2.3 mm
2.3 mm	2.6 mm

Table 1
Inspection results on TOFD sizing of Inconel 600 cracks.