Remote Field Technology (RFT) Mainscan® was introduced as a commercial operation to the Australian Water Industry in 1996. Since that time more than 26000 metres of cast iron pipe has been inspected and the data analysed.

The individual results of the analysis of several pipelines are presented in graphical form, as well as the overall results for 26 pipelines, averaging 45 years in age and totalling approximately 13600 metres in length. These results show that only a small proportion of existing pipeline elements are in need of urgent replacement.

The cost-benefit on RFT Mainscan is briefly discussed, and a graph presented showing the economic feasibility of using the technology. The results for inspection of 13 mains earmarked for replacement in Sydney shows that the use of RFT Mainscan® allowed for a 42% saving in the capital for replacement costs of these mains.

Future development of the system to enable capability of the assessment of large diameter mains is possible, but will depend on continued usage of the existing range of tools by Australian water authorities.

Keywords: pipelines, condition assessment, intelligent pigging, asset management

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