

Coffs Harbour water feature

The northern New South Wales

coastal town of Coffs Harbour is one of the fastest growing regions in Australia and Coffs Harbour Water has been very busy upgrading its infrastructure to cope with this growth. Part of this is a major up grade of the water supply and reclaimed water systems. A 500 mm trunk water main and a 500 mm reclaimed water main have been installed as part of this system and the authority has trialed and now specifies the series 55 gate valve with integral by-pass.

Formally the authority installed metal seated gates and fabricated the adjoining pipe work to include a by-pass. The by-pass function is to reduce the differential head to enable easier opening of the valves, as well as to protect the pipe work from surges when filling the line.

The use of resilient gate valves over DN 375 in Australia has only been available since introduced by AVK Australia in the late 1990's.

Coffs Harbour Water Operations' Manager Simon Thorn said that since converting to the series 55 valve with by-pass, over 20 have been installed and the benefits to the authority and value to the ratepayers have been numerous.

Coffs Harbour Water Operations' Manager Simon Thorn high-lighted the main features of these benefits as:

- Up to 30% cost savings when compared to fabricated units.
- Smaller pit size
(Take up less space even if buried)
- Savings on labour for installation
- Less leakage points
(no tapers or connectors)



The lower torque of the AVK valve has enabled Coffs Harbour Water to open the main valve much earlier than they experienced with other valves, thus resulting in less strain on operators. When the valves are positioned on a high point (position of lowest pressure) they install DN 80 air valves on both up and downstream sides. They find that this helps prevent air entrapment on opening the valve as well as fulfilling the normal functions in the pipe system.

Coffs Harbour Water is a very innovative authority and its acceptance of the series 55 has been replicated by other water bodies in Australia, who have found similar benefits when using this product.

