

# Mornington Peninsula Water Supply

## Rapid construction of large diameter pipeline



### Project Need

One challenge faced by Melbourne Water has been to ensure that the expanding eastern suburbs receive an uninterrupted supply of high-quality drinking water. This required the construction of a new pipeline from the Cardinia reservoir to Pearcedale on the Mornington Peninsula, over 30km away.

### Solution

Steel Mains helped Melbourne Water Authority meet the challenge with the completion of a new 30km steel pipeline from the Cardinia Reservoir to Pearcedale, providing up to 150 mega litres per day to the area. In total, the scheme required 9.8km of 1200mm diameter, 9km of 1404mm diameter and 11km of 1750mm diameter pipe. Melbourne Water chose Steel Mains' SINTAKOTE® FBMDPE cement mortar lined steel pipe as the ideal solution for this major project.

Pipes were externally coated with Steel Mains' SINTAKOTE® medium density fusion bonded polyethylene. The technical performances of SINTAKOTE®, combined with the proven reliability of cement mortar lining, will guarantee the pipeline integrity throughout its design life.

All pipe was produced and tested at Steel Mains' Wacol (Queensland) facility before delivery direct to site in 13.5m lengths. The extra pipe length meant less lorry movements, reduced handling costs and the elimination of up to 40% of joint cycles compared to other pipeline materials.

Steel Mains products also offered further cost-saving features during installation. The 1200mm and 1404mm pipe utilised Steel Mains' proprietary steel pipe rubber ring joint - SINTAJOINT®. The joint requires no on-site welding or reinstatement, and is supplied with factory applied cathodic protection points. On the larger 1750mm section, a welded Ball and Socket joint was used, offering reduced welding and reinstatement times over conventional welded joints.

### Achievements

The partnership between Melbourne Water and Steel Mains through all stages of the project resulted in a complete pipeline solution going into the ground, on time and within budget. Offering world-class products, Steel Mains can make a difference from day one of a project, even in the most challenging of situations.

**Project:** Cardinia Reservoir to Pearcedale Pipeline

**Principal:** Melbourne Water

**Location:** Mornington Peninsula - Victoria

**Completion:** 2004

**Supplied:** 1200, 1404 & 1750mm OD Sintakote® Steel Pipe, Fittings