

PORT KEMBLA GAS MAIN HDD RELOCATION

OIL/GAS | SEWER | STORMWATER | POWER | WATER | TELCO

PROJECT OVERVIEW

As a part of the refurbishment of Port Kembla copper fabrication facility, the existing gas main needed to be relocated to make way for new infrastructure. The original main was attached to buildings, concrete ramps and steel structures that all needed to be demolished. As the facility was in operation since 1912, UEA undertook extensive investigation of the geotechnical conditions and structural elements – both below and above ground – around the vicinity of the underbore.



LOCATION

Port Kembla NSW



CLIENT

Kembla Metals



PIPE

125mm PN16 SDR 11 HDPE



GEOLOGY

Rock



LENGTH

300 metres



TECHNIQUE

HDD

SCOPE OF WORKS

Works included the design of underbore after extensive service location, the installation of 312 metres of 125mm PN16 SDR 11 HDPE in rock ground conditions, the supply and weld carrier pipe, and pressure testing of installed mains.

CHALLENGES

UEA mobilised a Vermeer D100 HDD rig to deliver the works. With depths ranging up to twelve metres in rock ground conditions and beneath reinforced concrete slabs, UEA successfully utilised a Digitrack tracking system with varying high signal strength to track the underbore by walkover techniques. In order to undertake the works while maintaining the copper facilities operations, UEA constructed the underbore whilst set up on the concrete ramp therefore minimising the construction footprint.

COMPLETION

Once HDD works finished, UEA continued to work with the client to ensure that the connection of the new gas main was successfully completed. UEA also undertook pressure testing on the installed gas main and completed the works as executed drawings and Inspection Test Plans (ITPs) as part of UEA's Quality Assurance Accreditation ISO 9001.