

CASE STUDY

SUBSEA CORROSION MAPPING OF MARINE BRIDGE PILES

✉ sales@sonomatic.com

🌐 www.sonomatic.com



SONOMATIC

INTRODUCTION

Sonomatic Australia completed an underwater corrosion mapping campaign on a series of marine steel bridge piles to assess structural condition and identify areas of wall loss. The inspection covered multiple pile locations using automated ultrasonic corrosion mapping technology.

CHALLENGES

- Marine growth and tidal conditions limited access to some inspection areas.
- Comprehensive data was required across the full circumference of each pile in a subsea environment.
- Accurate quantification of corrosion was needed to support future integrity planning.

SOLUTION

Automated ultrasonic corrosion mapping was deployed to collect high-resolution wall thickness data and generate detailed 2D and 3D corrosion maps of the inspected areas.

OUTCOMES

- Corrosion-related wall loss was identified and quantified across all inspected locations.
- Detailed condition data provided a clear understanding of pile integrity.
- Inspection results supported informed maintenance and asset management decisions.
- Advanced NDT technology delivered efficient, high-resolution assessment of critical marine infrastructure.

