# **Project Case Study**

### **Port Pirie** Slag Fuming **Thickner Plant** SA













## **Project Summary**

#### Substrate

Mild Steel

Surface Preparation

Abrasive Blasting

System

3mm Polyurea

# **Project Description**

Poly-Tech's focus in steel protection is to coat metal items primarily for corrosion protection, resistance to chemicals and abrasion resistance.

Slag furning plants are subjected to regular attack due to the movement of waste acids through the tanks.

Poly-Tech were approached by this leading mining and metals business to find a long term protective lining solution for slag fuming thickner tanks. The previous rubber lining had failed causing the mild steel to corrode. Poly-Tech's specialist experience with mining site conditions enabled a rapid solution using a spray polyurea system.

Site conditions were complex with the project requiring appropriate PPE for high lead levels, detailed QA and strict adherence to safety systems for elevated access using scaffold.

As with all effective coatings the preparation of the substrate was critical to the success of ensuring adhesion. This involved dry abrasive blasting using garnet then the application of polyurea at 3mm thick.

Compared to epoxies and urethanes, polyurea coatings are of superior durability and high performance. They typically have 90% more elongation than epoxies therefore mitigating the risk of coating failures from substrate movement.

Poly-Tech polyurea systems are revolutionary hybrid systems applied by specialised plural proportioners that mixes a specially formulated chemical with a catalyst. The coating is touch dry within seconds so your surface can be ready for use within a few hours of application.

Using our experience with elastomeric systems we will always ensure only the correct preparation methods and products are used in each environment offering peace of mind and unbeatable protection.

Surface Protection & Restoration Specialists

South Australia, Tasmania, Victoria & Northern Territory

