



NICKEL WEST OXYGEN PLANT COATINGS

KALGOORLIE NICKEL SMELTER
12KM SOUTH OF KALGOORLIE, WA

MAINTENANCE - PROTECTIVE COATINGS

PROJECT

BHP Billiton Nickel West Kalgoorlie Nickel Smelter Oxygen Plant Protective Coatings

CLIENT

BHP Billiton Nickel West
Roger Crouch 08 9093 5899

DURATEC CONTACT

Chris Black 0417 031 425

DESCRIPTION

Opened in 1973, the Kalgoorlie Nickel Smelter uses a flash smelting method. Dry concentrate is transported from Kambalda and Leinster to the smelter which produces granulated nickel matte. This is then railed to the Kwinana Nickel Refinery to produce premium nickel briquettes.

Duratec was engaged by BHP Billiton to perform blasting and painting to the pipes and steel work situated in the oxygen plant.

The scope of works included:

- ▶ Preparation of the steel by ultra high pressure water blasting.
- ▶ Application of a two component modified epoxy barrier coat.
- ▶ Application of a two component acrylic polyurethane finish.

HIGHLIGHTS

- ▶ Duratec used full encapsulation to protect the surrounding structures.
- ▶ A Torbo wet abrasive blast system was utilised. This innovative system combines the right amount of water to abrasive media with the flexibility to control each component. It is also safer, environment and operator friendly and is a fast, efficient and superior alternative to other means of surface treatment preparation.
- ▶ An elevated work platform was used to reach areas which were difficult to access by scaffold.
- ▶ Works were successfully completed during a shutdown period.



IMAGES (FROM TOP TO BOTTOM)

- ▶ Full encapsulation of the work site.
- ▶ Pipework prior to treatment.
- ▶ Completed coatings.