



■ Mining



Reference Details:

Owner Goldfields Mine Management, WA, Australia

DSI Unit DSI Pty. Ltd., Bennetts Green, Australia

DSI Scope Supply of OMEGAGEWI[®]-Bolts



First application of OMEGA[®]-Bolts in Australia

The Otter Juan nickel mine is one of the oldest mines in the Kambalda region in Western Australia, about 630 kilometers east of the city of Perth. After it had been shut down temporarily and successfully sold, the highly profitable Otter Juan mine has been operated by Goldfields Mine Management for some years. With operations extending beyond 1,250 m below the surface, it is one of the deepest mines in Western Australia.

The general conditions in the mine render extraction of the pentlandite mineral, which is a nickel sulphide compound and contains about 4% nickel, extremely difficult. The mine has an environment of high stress and a weak talcchlorite ultramafic hanging wall rock mass. The mined ore is transported to the Kambalda Nickel Concentrator for processing.

The problematic soil conditions in the Otter Juan mine are made more difficult by increased seismic activities. Therefore, Goldfields Mine Management has chosen to use the flexible OMEGA[®]-Bolt with a load-bearing capacity of 24 tons to stabilize the extraction surfaces. Due to its physical

properties, the OMEGA[®]-Bolt is predestined for use in seismically active mining regions, since it provides a high level of deformability to accommodate ground movement.