

**DSI References**

Mine Mt Arthur Underground Project, NSW, Australia +++
Owner

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

DSI Scope Supply of rock bolts, resin, anchor plates and special "mambo bolts"



DSI Provides High Quality Mining Products for Australian Exploration Adit

BHP Billiton Adit, New South Wales, Australia

Mt Arthur Coal open cut coal mine south of Muswellbrook, in the Australian region of New South Wales, supplies thermal coal for both export and domestic markets. The mine is operated by Mt Arthur Coal Pty Ltd, a subsidiary of the energy combine BHP Billiton Hunter Valley Energy Coal. The mine was opened in the 1960s and currently consists of three different open cut mining areas.

To meet increased export demand for coal, Mt Arthur Coal is currently investigating the potential for underground mining in some areas of the mine. The Mt Arthur Coal Underground Project will access the coal reserve through existing open cut pits. This allows the use of existing infrastructure, including the coal handling and preparation plant (CHPP) and rail loading facility.

The concept mine plan involves longwall mining in five seams. The relevant underground seams are estimated to have a total reserve of over 160 Million tons. In addition, further, lower coal seams are estimated to assure underground mining for approximately 50 years. The owner is expecting a production rate of up to 8 million tons of coal per annum, with a total production of 23 million tons of coal per annum for Mt Arthur Coal Mine as a whole, i.e. including resources that are already being mined.

As part of the feasibility study, an exploration adit was constructed in the Woodlands Hill coal seam. DSI also participated in the construction of this new adit. The exploration adit borders existing pits and will have a length of approximately 3,600m once completed. In addition, the adit is to be used for mining coal and is expected to produce 200,000 t of run of mine coal within 2 years' time.

In addition to producing coal, the exploration adit will provide valuable information for detailed mine and infrastructure planning. One important aspect is to gather more detailed information about the underground coal mining resource that cannot be gathered by surface exploration techniques. In addition, further information regarding the geological setting, data on coal quality and conditions for exploitation are to be gathered. Collecting geotechnical information for safe underground mining operation is another key aspect of the project.

Due to DSI's high quality products, technical support and excellent logistics network, BHP Billiton selected DSI from all potential ground support suppliers. DSI supplies rock bolts, resins, anchor plates and special "mambo bolts" for this project.

