BROKK

NEWS from around the world

July 2007

Brokk 90 cleaning torpedo at Port Kembla steel plant, Australia

BHP Billiton, based in Australia and in the UK is one of the world's top producers of iron ore and coal. The company is also involved with petroleum products such as crude oil and natural gas as well as aluminium, base metals, diamonds, manganese, and stainless steel.

At the steelworks at Port Kembla, the company was facing difficulties with the torpedo cars. The torpedo cars have a 250 ton capacity and are used for transporting molten steel from one side of the plant to the other. The molten steel and slag are building up inside the torpedo, reducing the total carrying capacity by up to 25%. Also, the refractory inside the torpedo needs to be replaces on a regular basis. Due to the confined space, the plant has been limited to manual jackhammers for cleaning the torpedoes. This tough job took 6 to 10 days and resulted in frequent injuries of staff. There are in total 38 torpedoes on the worksite and they are on a rotation of one and a half repairs per year.

BHP Billiton wanted to reduce the cleaning time, increase production and eliminate the human accidents when cleaning the torpedo. Contractor Donnelly Civil was contacted to accomplish the work differently. The contractor started using the Brokk 90 Radio Controlled Demolition Robot, manufactured by the Swedish company Brokk AB, to clean out the torpedoes.

The machine requires less than 1.4 meter diameter for the opening and weighs only 1.1 ton so it can easily be lifted into the torpedo on a specially made "Brokk carrier" fitted to a forklift.

With this small but highly efficient machine, the job takes only 1 to 2 days compared to the original 6 to 10 days. At the same time, the number of accidents was reduced significantly. This increased efficiency of cleaning allows the plant to clean the torpedoes more frequently to further increase the productivity of the plant.

Brokk AB ● P.O. Box 730 ● SE-931 27 Skellefteå ● Sweden
Tel +46 910 711 800 ● Fax +46 910 711 811
E-mail: info@brokk.com ● www.brokk.com