

Cleaning Rock Conveyors at Copper Mine

Location	USA	Hydra-Cell model	D35XKBTHFECA
Type of application	High Pressure Cleaning of Conveyor Belts	Flow rate	130 l/min (35 gpm)
Liquid	Water	Pressure	83 bar (1200 psi)
Application details	Replacement of rubber wiper blades on rock conveyors at an opencast copper mine in Arizona, USA, was costing a major mining company an estimated \$10,000 per year on each conveyor for blade replacements alone. The conveyors, up to ¾ mile (1.2 km) long, carry crushed ore to acid separation fields and the function of the blades, which are 6ft (1.3m) wide and several inches thick, is to remove constantly accumulating residual dirt and rock dust from the belts. However, unaided they were inefficient as well as expensive to replace.		
	Mine engineers decided to tackle the problem by spraying the conveyors with high-pressure water, calling in pumping specialists Texas Pump to advise. The skid-mounted systems supplied incorporate Hydra-Cell D35 pumps with brass head and buna diaphragms. The pumping systems are still in use after several years in service – saving not only the cost of replacement wiper blades, but also extending the life of rollers under the conveyor. These costly components were previously subject to frequent failure due to rock dust getting into the bearings.		
Advantages of Hydra-Cell pump on this application	Seal-less design. High pressure perform	ance. Abilty to handle w	ater with abrasive solids.

www.hydra-cell.co.uk