



Peristaltic hose pumps for purification of cobalt

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Verderflex peristaltic hose pumps will fulfill an essential role at refining the cobalt. The hose pumps are used for the transfer of sulfuric acid solution (30%) and ammonia (25%) from the storage and dilution tanks to several reactors and baths. The peristaltic hose pumps will pump these fluids, and especially the sulfuric acid, to rinse the cobalt and to eliminate impurities and separate the cobalt from other materials such as nickel, iron and arsenic in the ore.

This stage in the production process is called electrolysis. The electrolysis ensures that the cobalt is being produced purer and more concentrated.

The capacity of the peristaltic pumps must be adjusted continuously to the pH value of the mined cobalt. In this way the exact concentration of sulfuric acid for exactly that



specific quantity of cobalt is being pumped. To achieve this precise dosing automatically the pump speed is controlled by a frequency control, that is driven by a pH meter.

Feed pump for filter press

The process rinsing water, left over from the band filtration process, results in a filter cake with residues. The fluids –acidic and abrasive - are caught in collection basins. Another

Verderflex peristaltic hose pump functions as a feed pump for a centrifuge. A very fine powder is separated from the process waste water.