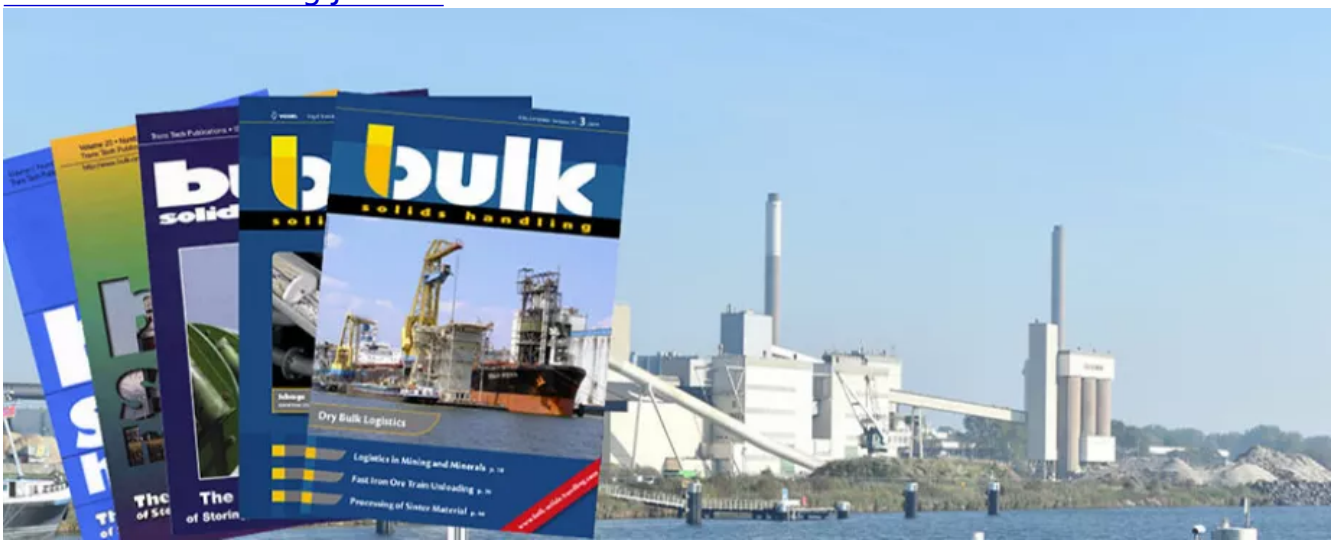
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Fachartikel

Hydrotransport in Coal Mines

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The utilization of water as a transporting medium for coal belongs to a section of technology which is still unfamiliar to large sections of the mining industry. As a function of direction of the hydraulic flow to gravity hydrotransport can be classified into three groups.

1. Hydrotransport in the direction of gravity as applied to inclined coal seams: Water solids mixture movement can be along the mine floor in flumes or pipes.
2. Hydrotransport at zero gravity as applied to flat coal seams and drift mining: Slurry movement is in pressurized pipes for face, mine and long distance haulage.
3. Hydrotransport against gravity as applied in shaft mining: Coal transport can be by direct pumping hydrolift, pipe feeders, or by combined hydraulic and mechanical transport.

Hydraulic transportation in coal mining contributes to safety and mine economics, but also requires handling large quantities of water and larger energy consumption to move coal against gravity.