Innovative and Reliable Technology.
Water-operated Fluid Couplings.

The increasing demands made by the international mining industry regarding throughput, safety and environmental protection are applied by Voith as the basis of the company’s continuous development of fluid couplings for surface and underground operation.

Voith is the worldwide market leader for hydrodynamic couplings. Voith also holds a leading position in the further development and application of water-operated fluid couplings for belt conveyor and AFC drives. The advantage of pure water as operating medium lies in its general availability and environmental friendliness.

Hydrodynamic or fluid couplings are components transmitting power via the dynamic force presented by operating medium. Using a simple concept, the water coupling transmits power smoothly and virtually wear-free, without any mechanical contact between the torque-transmitting components.
Performance diagram

Voith fluid coupling type TW...

Main use

- Belt conveyors
- Armoured face conveyors (AFCs)
- Fans, centrifuges
- Wood chippers
- Defibrators
- Mills
- Pumps

The advantages of Voith fluid couplings

+ Smooth acceleration of heaviest masses
+ Use of standard asynchronous motors
+ Relieved motor start and run-up
+ Motor over-dimensioning is not necessary
+ Torque limitation during start-up
+ Effective damping of shocks and vibrations
+ Overload protection for motor and driven machine
+ Load compensation for multi-motor drives
+ High reliability and availability