voith.com



Adding digital intelligence Dtect



Predict – Protect – Prevent Dtect

Voith Dtect adds digital intelligence to your torque limiting couplings to get real-time monitoring of the driveline performance, productivity and status. The system is designed to communicate coupling status and support better decision-making to predict potential problems, protect the driveline and prevent costly downtime. This will increase the productivity and reduce maintenance.

Voith Dtect makes it easy to supervise and monitor your torque limiting couplings. The system is built on a PLC-based platform using industrial communication standards for easy integration in your existing process monitoring systems.

Dtect detects coupling slippage that is caused by high torque peaks in a driveline. By monitoring slippage, it is possible to adjust the load of the driveline or to perform a controlled shutdown instead of releasing a coupling. This saves valuable uptime, maintenance time and spare parts cost.

Data collected from Dtect can also tell if your driveline is running at its best. By monitoring the current status of the driveline, you can increase the productivity if possible.

Multi monitoring

The new Dtect system allows monitoring of one or more couplings within one system. This makes it possible to monitor all connected drivelines and get real-time status information by

Benefits

- + Real-time monitoring of the driveline status
- + Possibility to optimize driveline performance
- + Integration with existing process monitoring systems enables platform independent supervision of data
- + Prevent costly downtime with proactive maintenance of a coupling
- + Visual and audio warning indicators can be used for making decisions and actions
- + Increase uptime of the driveline

using one central system. The Dtect monitors each coupling individually and communicates the different parameters through one common interface.

Integrated HMI touch panel

The new Dtect system can be fitted with an integrated touch panel. The HMI touch panel gives you the current status information on-site for even better control and overview.

System integration

Dtect is supplied with Modbus TCP/IP for easy integration to the existing process information network. Thanks to its flexibility, it can be adopted for other communication standards depending on your needs.

Design features

- Modbus TCP/IP standard
- Slip angle measurement
- · Relay outputs
- Speed measurement
- Service indicator
- Ethernet connection

Optional features (on request)

- GSM module
- Multi monitoring
- Integrated HMI touch panel



Intelligent torque limiting couplings in industry applications

Beside ordering Voith Dtect with your new couplings, you can also upgrade your existing couplings with the intelligent system. Voith Dtect can be added in the following areas:

			Mini	ng		Energy			Steel		
Coupling	Gyratory crusher	Cone crusher	Roller crusher	Sizer	Conveyors	Tunnel boring	Gas turbine	Compressor	Windmill	Leveler	Rolling
Dtect + SafeSet	~	~	~	~	~	~	~			~	~
Dtect + SmartSet	~	~	~	~			~	~			
Dtect + SlipSet					~				~		
Dtect + AutoSet										~	

Voith Dtect is designed to maximize productivity and increase uptime of the driveline. Here is an example of the potential savings.

sting open only

If the hourly production is worth

€10 000

and an unplanned restart of the drive-line usually takes

HOURS

and unexpected downtime happens

ø

to

a year

the potential savings solution is vith our Voith

3 every year

3 mili



Technical data				
Power supply	20.4 VDC to 28.8 VDC			
Internal fuse	5 x 20 mm, 2A			
Power consumtion, max	1500 mA at 24 VDC			
Working temperature range	-30° to +45°C			
Storage temperature range	-20° to +65°C			
Relay output, common voltage, max	30 VDC			
Relay output, current, max	2.0 A			
Relay output, power out, max	30 W			
Sensor current supply, max	300 mA			
Dimensions of control unit (WxHxD)	min 200x200x128 mm			
Enclosure material	Steel cabinet			
Protection grade	IP66			
Sensor cable length, max	25 m			

By adding Voith Dtect, you get real-time monitoring of your driveline status.

Multi monitoring: adding multiple connections to one interface

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