



JAQUET's complete measurement chain guarantees maximum protection & safety and optimized availability.

CUSTOMIZED SOLUTIONS

STANDARD PRODUCTS

RETROFIT PROGRAMS

POWER INDUSTRY

PAPER & PULP INDUSTRY

LARGE DIESEL ENGINES

From hydro-electric power stations in the Pyrenees, to nuclear powered submarines at the bottom of the ocean, you'll find JAQUET equipment measuring, controlling and protecting rotating machines. So you can be safe in the knowledge that we understand your world and how to protect it.

The quality of the measurement and protection chain is determined by the weakest link. Type tested and qualified for demanding applications, JAQUET products provide availability with safety, because where the protection of valuable investments is concerned compromise is out. JAQUET offers the complete measurement and protection chain.

- Speed measurement
- 1,2 or multichannel overspeed protection and measurement systems
- Complete 3 channel overspeed protection systems

Please let us know how we can assist you in selecting the optimal product - or in creating a turn key solution utilizing JAQUET's complete measurement chain. Drawing on our tried and tested experience, we can be sure to give you an immediate suggestion that matches your individual requirements. We take pride in providing you with an efficient solution which also helps reduce your total costs. Let JAQUET's expert application knowledge, long experience and top product quality protect your investment.

Pole wheels and pole bands

JAQUET pole wheels and pole bands represent the highest quality of target technology and complement the chain of speed measurement. Please refer to the pole wheels and pole bands brochure for further information.

Speed sensors

JAQUET speed sensors are designed to endure the most demanding ambient conditions and are used in a multitude of applications e.g. turbochargers, hydraulic motors, diesel and gas engines, turbines, pumps and compressors, just to name a few. Our platform approach enables us to take an appropriate sensing technology and package it in either one of our huge array of existing housings or in something matched to your specific requirements.

1-2 channel tachometers

JAQUET T400 series

Single channel tachometers, with or without display; frequency to analog converter & speed switch in one; Relay and open collector frequency output.

JAQUET Dualtach T500

DualTach tachometer with 2 frequency & 2 binary inputs; 2 analog, 4 relay and 2 open collector outputs; for complex measurement, control and protection.

Dual channel multifunction tachometers

JAQUET MultiTasker T600

MultiTasker with 2 frequency, 1 analogue & 2 binary inputs; 2 analogue, 4 relay and 2 open collect or outputs; CAN bus and Ethernet interfaces; event recorder and trip data-logger; for complex measurement, control, protection and communication.

The T500 and T600 series take tachometers to a higher level. Both feature a System Limit capability that allows the logical combination of input parameters to form an alarm or trip command.

JAQUET Display D211

5 digit display option for T600. Either direct cable connection of 1 display or connection of 1...7 displays via Bluetooth® master module and Bluetooth® enabled displays.

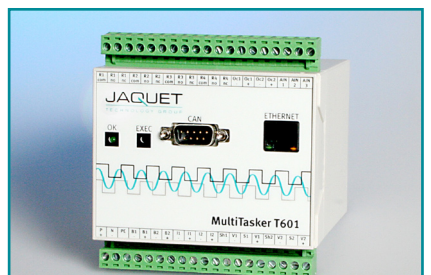
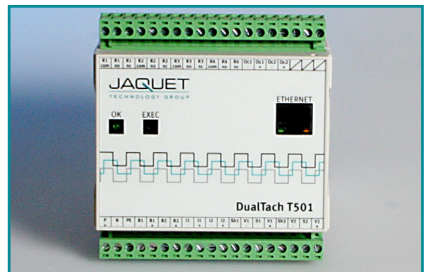
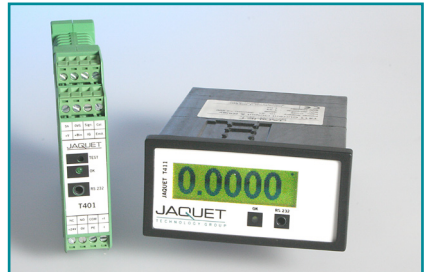
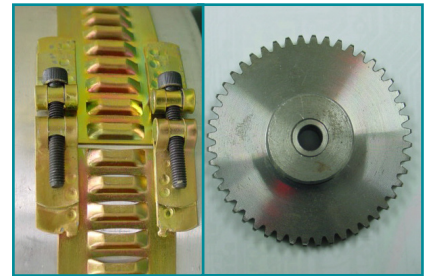
Multichannel overspeed protection systems

JAQUET FT3000 Standard

Overspeed protection system. 19" rack only. Standard 1 (STD01): 3 channel with 2 out of 3 voting; Analog card; comms card. Standard 2 (STD02): 3 channel with 3 x 1 out of 1; Comms card. All FT3000 systems enable on-line system testing and service (hot replacement).

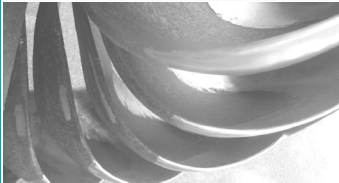
JAQUET FT 3000 customized

Multi-channel modular systems in 19" or 24" racks.




Speed measurement chains

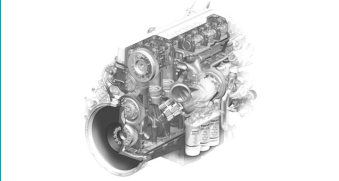
Measurement chain example 1 - Hydro turbine / pump

Application	Measurement chain	Benefit
	<ul style="list-style-type: none"> • Pole band • 2x DSF Hall sensor, Hi-Temp • T601 tachometer 	Large shaft diameters of hydro turbines require pole bands. The measurement chain allows overspeed protection plus giving sense of rotation of the pump or turbine in use. Creep detection during maintenance without lubrication injection.


Measurement chain example 2 - Steam turbine overspeed protection

Application	Measurement chain	Benefit
	<ul style="list-style-type: none"> • Pole wheel • 3x DSD Hall sensor, Hi-Temp • FT3000 STD03 	Overspeed protection with fast reaction time of about 10 ms. At the same time the FT3000 guarantees availability (MTBF measured in 100's of years). All this allows to run the turbine faster and therefore more efficient.


Measurement chain example 3 - Diesel engine overspeed protection

Application	Measurement chain	Benefit
	<ul style="list-style-type: none"> • Existing flywheel • 1x GreenLine Hall sensor • T401 tachometer 	For starting up the diesel engine, an electrical motor turns the engine until 250 rpm is reached. The T401 tachometer then activates the injection system and switches to parameter set B for overspeed protection.

Measurement chain example 4 - Differential speed in paper production machine

Application	Measurement chain	Benefit
	<ul style="list-style-type: none"> • 2x Pole wheels • 2x DSD Hall sensor • T601 tachometer • Up to seven D211 displays 	In paper production, multiple drums rotate with different speeds, driven by the process control unit. A T600 Multitasker tachometer with one sensor per drum, allows differential speed control with extensive parameter and limit setting possibilities (logical / mathematical).

Measurement chain example 5 - Industrial mixer speed control

Application	Measurement chain	Benefit
	<ul style="list-style-type: none"> • Pole band • DSF Hall sensor, Hi-Temp • T501 tachometer • D211 display 	Speed control of an industrial mixer. Analogue output to local digital display and to the process control unit. Under speed alarm with adjustable set point and different parameter settings for each process.

JAUQUET TECHNOLOGY GROUP offers the world's most versatile and advanced range of solutions for the detection, measurement, diagnosis and management of rotational speed.

Our industry and application specific expertise ensures that you will achieve an optimum solution. Completely matched to your individual requirements, meeting key industrial standards and certifications, our products help boost the performance of your machinery while reducing cost of ownership.



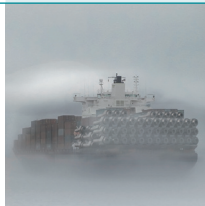
TYPICAL INDUSTRIES SERVED

- Automotive and truck
- Aerospace
- Diesel / Gas engines
- Hydraulics
- Railway
- Turbines
- Turbochargers
- Industrial machinery



PRODUCTS – SPEED SENSORS

- Various technologies
- Standard, custom and OEM models
- For demanding applications, e.g. 300,000 rpm, temperature up to 320 °C / 600 °F, high vibration, shock to 200 g, etc.
- GreenLine speed sensors for general applications
- Ex models for hazardous areas
- Pole bands and target wheels available where needed



PRODUCTS – SYSTEMS

- Multi-channel overspeed protection systems
- 1–2 channel measurement, protection and control modules
- Engine diagnostic systems
- Redundant speed measurement and indication



SPECIAL PROJECT EXAMPLES

- An automotive linear movement sensor
- Integrated power and torque measurement for display and gearbox control
- Naval spec. turbine protection for nuclear submarines
- Speed measurement in turreted, tracked vehicles



QUALITY MANAGEMENT AND STANDARDS

- Quality management: TS 16949 & ISO 9001, ZELM ATEX 1020, KWU, EN/AS/JISQ 9100
- Sensors: GL, KWU, TÜV, ATEX, EN 50155 ,NF F 16-101 102 , ABS, EMC
- Systems: API 670, GL, TÜV, KWU, EX
- Environmental: RoHs - EU directive 2002/95/EC, WEEE - EU directive 2002/96/EC



JAUQUET – YOUR PARTNER

- Efficient and professional service - JAUQUET TECHNOLOGY GROUP is headquartered in Basel, Switzerland and has subsidiaries in Belgium, China, Germany, the Netherlands, United Kingdom and United States along with a worldwide distributor and end-user service network.
- Flexible production quantities; from 1 to millions per project
- Reduction of total costs by intelligent and cost-effective solutions