

2. True-rms current and frequency measurements of ac/low-pass filter drive

With the help of the i410 current clamp, Mr. Pieretti can accurately calibrate instrumentation during new equipment testing, and avoid instrumentation damage during testing and troubleshooting in the quarry. He can also collect and monitor operating parameters of the asynchronous motors that drive diamond wire and belt equipment with inverters.

3. Temperature measurement

The CSM 962 chain saw is controlled by a complex and highly integrated hydraulic circuit that must withstand extremely harsh operating conditions. The Fluke 289 allows hydraulic transmission and epicyclic reduction gear operating temperatures to be collected, which is particularly useful during troubleshooting.

4. Event logging

Diamond wire saws operate at very high power (up to 75 kW) and their fixed shaft start-up result in high starting currents. There are frequent mains quality problems because of on-site electric generators, including uncharacteristically long response times and interference with nearby equipment.

The Fluke 289's MIN/MAX/AVG function allowed Pieretti to detect and report on customer problems with mains quality and/or free distribution line dimensioning, which caused malfunctions that were not correctly attributed to the machines. This included inverter alarms for overvoltage or undervoltage, start-up problems, and damaged contacts.

5. Monitoring diamond wire and belt sawing machine operating parameters

The Fast 735 and 736 stationary diamond belt saws are much like a laboratory for stone abrasion testing, as the equipment management software optimizes performance parameters according to the force exerted on the tool. The sharpness and efficiency of the tool may vary over time, making fine tuning of machine and tool composition a long and costly process.

In this context the Fluke 289's key Event Logging feature with a variable sample time after the minimum period of one second, has repeatedly proved to be extremely useful. It can record a signal corresponding to the effort required by the tool over time (even a full work shift) and present the data efficiently using the FlukeView® Forms software.

"The Fluke 289 has proved to be an extremely efficient tool over the relatively brief period in which I have used it" remarked Pieretti. "As a non-specialized user, I particularly appreciate its accuracy and easy-to-use features, which give me a problem-solving tool for a variety of situations. Last but not least, I value sharing with other technicians the experience I gain on quickly fine tuning machines and tools in the field. Congratulations on your products and thank you!"



Temperature measurement.



The Fluke 289's MIN/MAX/AVG.

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