AC Split-Core Transducer Applications

You don't have to sacrifice accuracy to take advantage of the easy installation provided by using an AC current transducer with a split-core design instead of a solid-core design. Any load from 200 to 800 amps can be monitored accurately using NK Technologies' AT or ATR current transducers in the MS case. The split-core case allows the conductors to remain in place, and the base can be snapped on to a DIN rail, attached with screws to a control panel or suspended from the conductors using nylon cable ties. Some applications where the use of this type of transducers is ideal include:

Pump Monitoring:
Monitoring the current used by a pump will help to detect several problems that need immediate attention: Loss of head pressure and open discharge will cause the current to drop, and either can damage the equipment or the environment quickly. Bearing wear and impeller cavitation will be reflected in a rise in current. By mapping this increase over time, the equipment can be maintained or repaired before a catastrophic failure occurs.

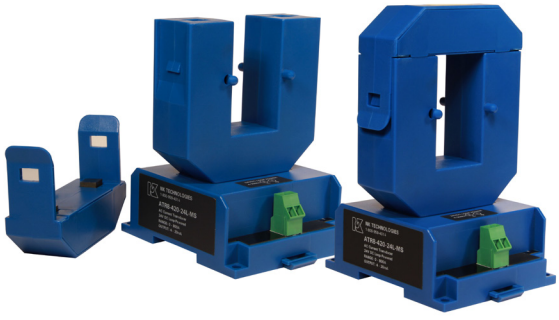
Crusher/Grinder/Shredder Operation:
Crushers, shredders, and grinding processes are notoriously hard on the drive components. Inconsistent material density, foreign objects, and over loading the in feed can cause the drive motor current to spike. If these spikes occur without sufficient time to dissipate the heat generated, the motor insulation will suffer. With enough over loading a shaft might break, and the drop in current will indicate the motor is still turning but the rest of the operation is at a stand still.

Lumber Milliing and Processing:
Lumber processing requires heavy duty machines, using massive hydraulic, pneumatic and electrical systems. Monitoring the current used by a log carriage will help the operator feed the cut with little burning. The saw blade can also be monitored as it will draw more current as the teeth become dulled.

AT/ATR-MS Current Tranducers with a Split-Core Design Provide Both Accuracy and Convenient Installation

The AT/ATR-MS AC current transducers from NK Technologies measure AC circuits from 0-200 amps to 0-800 amps. The large, easy-to-install, split-core design allows installation over existing conductors without the need to disconnect the load, even in applications where there are multiple conductors per phase. Whether installing over existing conductors or in a new control system, installation is very simple and quick.

The two-wire, loop powered output signal provides a very simple connection approach. The 4-20 mA output is highly resistant to electrical noise found in control cabinets, and the base of the transducer can be snapped onto a DIN rail, or attached to a control panel with screws.



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