



Sensing AC Current Using Flexible Loop Transducers

One of the challenges installers face when they need to monitor current or power is placing a current transformer or other sensing device over existing conductors. Space is always at a premium inside any switchgear or control panel, and the size and shape of the conductors must be known before any sensor is selected.

It is much more difficult when the conductors are large wires or bus bar and the time allowed for the system to be de-energized is limited. Large wire is bent and formed to fit during an original installation, often using special tools designed for that purpose. Trying to push 500 MCM copper wire through a sensing ring is very difficult and time consuming. Adding current sensing to a distribution point comprised of bus bar forces the installer to use expensive and less accurate split core current transformers, or find a splice plate in the bus assembly where a standard CT can be inserted.

Monitoring AC Current

- **Irrigation Pumps**
Detect loss of head pressure, cavitation, bearing wear
- **Main Power Feed**
Monitor current use at switchgear or distribution point
- **Overhead Crane Drives**
Large current use makes CT installation a challenge
- **Submersible Pumps**
Perfect for tight spaces in control cabinets
- **Lumber Processing**
Monitor bandmills, debarkers, chippers, planers
- **Recycling Operations**
Monitor crushers, grinders, sorting belts
- **Aluminum Processing**
Monitor power use of pit furnaces
- **Material Processing**
Measure current use of shredders and conveyors

Now a Convenient and Easy Method to Monitor AC Current up to 2000 Amps

NK Technologies' flexible cable current sensors wrap around the conductor using very little space. The cable is connected to a signal conditioner located up to several feet away from the conductor, and produces an industry standard 4 to 20 mA signal in proportion to the AC current. With ranges of 0-500 to 0-2000 amps and frequencies to 400 hertz, the ATCR series is well suited for a wide range of applications.

With just two wires providing the power supply and output signal, current sensing doesn't get much easier than this!

