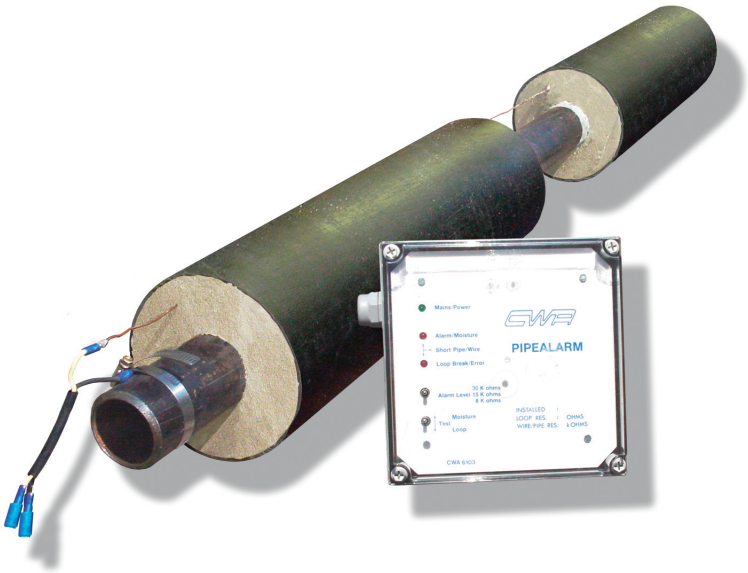
# LEAK DETECTION

ELECTRIC RESISTANCE MONITORING

## DID YOU KNOW that for around 10¢ per foot, your pre-insulated piping system can be manufactured in such a way that you can be confident it has been installed properly, and can be monitored for leaks during the life of the system?

What would you say if your pre-insulated pipe manufacturer could provide a leak detection device to continuously demonstrate that the pre-insulated piping is watertight and free from ground water after it is constructed and installed by adding around 10 cents per foot to the cost of manufacturing. Hopefully any engineer would say, “Why wouldn’t I?”

This is precisely the idea behind an Electric Resistance Monitoring (ERM) system. For a very small cost, your system can incorporate a leak detection device that can be monitored throughout the life of the piping system. The best part is that the ERM system is so simple and easy to install that ANY MANUFACTURER should want to incorporate it into their product line! It is not made from exclusive materials, a patented technology, or even a new idea. In fact, the European market has been including ERM in their products for the past twenty years!

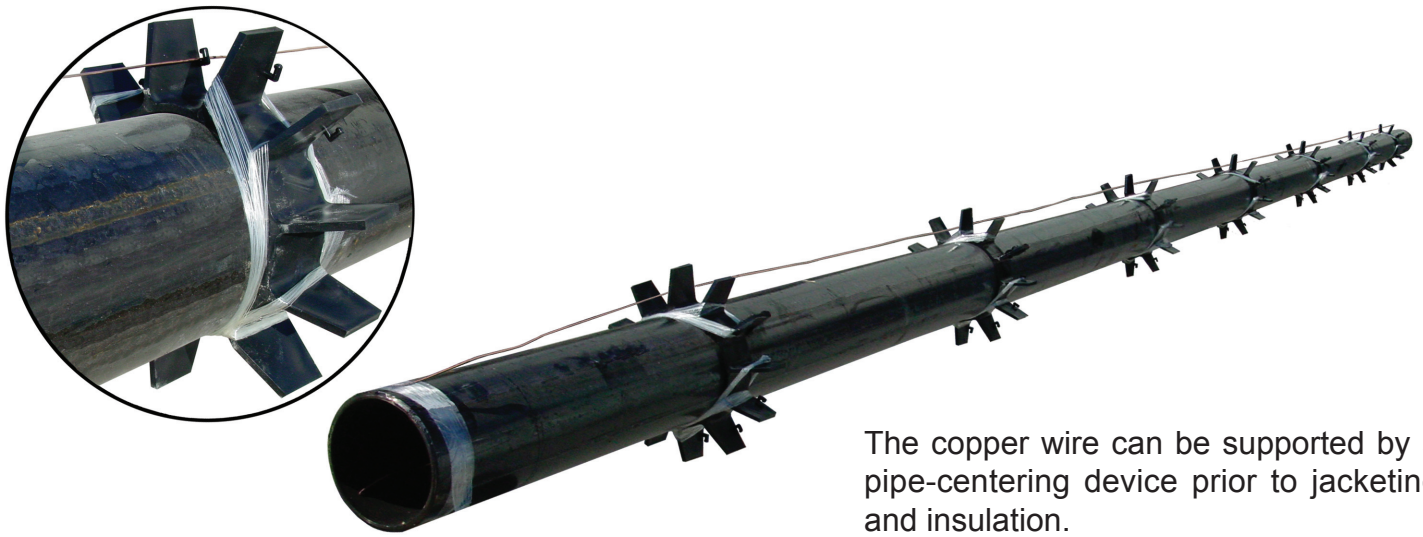



The ERM system is simply a bare copper wire embedded within the insulating foam. At field joints, the installing contractor has to crimp a short jumper cable to tie the adjacent pieces together. The installed piping system will then have a continous copper wire embedded within the foam. Since the foam is not a conductor of electricity, there will be very high resistance between the wire and the metal pipe (reading 100,000+ Ohms). This electrical resistance within the copper wire can be monitored with a simple analog Ohmmeter, purchased at any hardware store, to determine if there is a leak at any time. Alternatively, Thermacor can supply a commercially available panel to allow continuous monitoring. If water should at any time enter the foam insulation, the electrical resistance will drop drastically. Once this drop in resistance is detected, the location of the leak can be found by using a Time Domain Reflectometer (TDR) instrument.

Isn’t it about time that the American market incorporated this technology into its piping systems? Thermacor has spent the past ten years developing it’s product line to the point where they have the utmost confidence in their system’s ability to prevent the ingress of water. Through the use of electro-fusion technology, a seamless HDPE-jacketed system can be created. Thermacor is so confident in their systems that they are willing to put them to the test by providing a monitoring device within the piping system that will show any sign of water penetration. If the piping system is properly installed, the system will be watertight and the monitoring system will detect any leaks if they ever occur.

P.O. BOX 79670 · 1670 HICKS FIELD ROAD EAST · FORT WORTH, TEXAS 76179 · 817 / 847-7300 · FAX 817 / 847-7222

# INSTALLING THE LEAK DETECTION WIRE IS SO EFFECTIVE, IT OUGHT TO BE PROVIDED BY ALL MANUFACTURERS!



The copper wire can be supported by a pipe-centering device prior to jacketing and insulation.

# PLUS, FIELD JOINT CONNECTIONS TAKE LITTLE TIME AND EFFORT FOR THE INSTALLING CONTRACTOR AND DO NOT SIGNIFICANTLY ADD TO INSTALLATION COSTS.

**THERMACOR PROCESS INC.**

1670 Hicks Field Road East
Fort Worth, Texas 76179-5248
P.O. Box 79670

Phone (817) 847-7300
Fax (817) 847-7222
www.thermacor.com

Your Authorized THERMACOR Representative Is: