

# UNDERGROUND MAINTENANCE RETROFITS & REPAIRS

## INSTANT BTU SAVINGS

### GILSULATE®500XR

**QUICK & EASY SOLUTION FOR PIPE CORROSION, DAMAGED OR WET INSULATIONS**

How sustainable are you really? How many BTU's per hour are you losing right now? One of the quickest ways to achieve instant energy savings is by repairing your damaged or wet insulation.

Insulation that absorbs just 4% moisture by volume, will decrease its thermal efficiency by 70%. Mineral wool, calcium silicate, and foam get wet and moisture will travel the piping system. Wet insulation acts as a thermal conductor rather than an insulator. It actually pulls heat away from (hot systems) or draws heat to (chilled systems) the distribution system.

It is better to have NO insulation around your pipes than wet insulation. Inefficient, damaged, wet or corroded systems can be quickly and easily repaired with Gilsulate®500XR; the one product handles it all. There is no waiting for special factory fabricated parts to arrive and the cost for the repair can easily be 50% less! Gilsulate®500XR is compatible with other piping systems allowing you to make repairs and instantly begin to save substantial BTU's and reduce current energy losses!

Many university and district energy owners stock a small amount of Gilsulate®500XR in their central stores for those occasions when lines break and require immediate repair. Maintenance crews can quickly repair the isolated problem and have critical utilities back up and running. It is quick and easy because it fits any configuration of pipe sizes or temperatures you may have.

Gilsulate®500XR has also been used to encase and isolate the field applied joints of pre-insulated systems. Owners are looking to lengthen the life-span of their existing systems by eliminating moisture penetration at the joint; which leads to a wet and inoperable underground insulation system. Gilsulate®500XR is hydrophobic (does not get wet) and has proven to be a successful solution for owners looking to lengthen their existing systems.

Gilsulate®500XR is a controlled density fill consisting of insulating minerals and a dielectric mineral. It's the MOST thermally efficient, highest CO<sub>2</sub> reducer and lowest operational cost PIPi product on the market. Gilsulate®500XR systems can be up to 40% more efficient.

**WE WANT TO HELP YOU SAVE BTU'S!  
CONTACT US TODAY & BECOME GREEN!**



#### KENT STATE UNIVERSITY

The casing on a 20' x 16' steam expansion loop ruptured. The buildings it serviced had to be online within a few weeks. Gilsulate®500XR was chosen and the estimated 2 day repair was easily met. The repaired loop was undetectable in a subsequent infrared scan.



#### BURLINGTON COUNTY COLLEGE

An existing system 8" & 6" HWSR.  
1400 linear feet  
Charred 1 inch urethane insulation  
System losing 1,640,000 BTU/HR  
Repair cut heat loss to 80,000 BTU/HR  
Savings: 1,560,000 BTU/HR



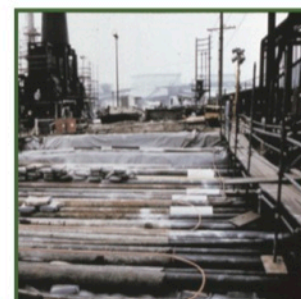
#### PROVIDENCE HOLY CROSS

An existing Gilsulate® Circa 1950's CWSR steel system was excavated (2010) to add valves. The piping system is "like brand new" and still in operation. Valves were added and system was reinsulated and protected with Gilsulate®500XR



#### UNIVERSITY OF GEORGIA

University received federal stimulus grant to improve energy efficiency. Funds were used to fix a leak and wet insulation on their steam and condensate pipes. The university's physical plant crews excavated the site, installed new piping and the Gilsulate®500XR. The university will save \$9,500 per year and 475 MMBTU's or 25 tons of CO<sub>2</sub> per year for the 100 ft. repair.



#### CHEVRON REFINERY

Retrofit of 300+ severely corroded pipelines under a road crossing. Gilsulate®500XR is a controlled density fill and was used for its load bearing properties and to prevent future corrosion to the pipelines. All other options were too expensive and required extensive "down" time.



#### STANFORD UNIVERSITY

Communication/electrical lines were crossing an existing insulated steam line where the heat loss was excessive. The steam line was left buried and untouched. A 9 inch thick "slab" of Gilsulate®500XR was installed between the steam and electrical lines therefore reducing the temperature and enabling the lines to cross.

## UNDERGROUND CONTROLLED DENSITY INSULATING FILL & CORROSION PROTECTION SYSTEM

Designed for temperatures 35°F - 800°F • NO MAINTENANCE SYSTEM • LONG TERM RELIABILITY • HIGH EFFICIENCY INSULATION • COST EFFECTIVE

CLIENTS WITH NUCLEAR WASTE OR CRITICAL INFRASTRUCTURE DISTRIBUTION SYSTEMS REQUIRE THE RELIABLE SOLUTION; CORROSION IS NOT AN OPTION! THEY USE ONLY THE CONTROLLED DENSITY FILL; WHICH ALLOWS THE CONTRACTOR/INSPECTOR THE ABILITY TO CONFIRM INSTALLED THICKNESSES AND PROTECTION.

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