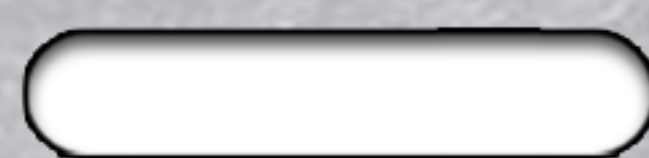


# Impervite® PPS-GR

Innovative Technology Improves Reliability and Serviceability



**Superior Corrosion  
Resistance**



**Cost-Effective  
Solution**



**Low Fouling and  
Easy Maintenance**



**High Pressure  
Applications**



**Completely Field  
Repairable**



**Resistant to  
Vibration Stresses**



**Excellent Thermal  
Shock Resistance**



# CGThermal

Process Technology Solutions for Harsh and Corrosive Process Streams





The proprietary tube in the Impervite® PPS-GR shell and tube heat exchanger combines the benefits of graphite and polymer materials to provide efficiency and reliability for water treatment, heat recovery, and process chemistries. This tube material provides an enviable combination of resilience to operating stresses, corrosion resistance, thermal efficiency, low fouling, and maintainability.

## Advantages

**Corrosion Resistance.** The Impervite® PPS-GR composite tube has been subjected to testing in various corrosive acid streams at elevated temperatures with excellent results. The tube will not degrade with operation as would a metal tube having an annual corrosion rate.

**Low Fouling and Ease of Maintenance.** The Impervite PPS-GR tube has excellent surface quality which results in a low propensity to foul. In addition to a reduced potential to fouling, deposits have a weak bond with the tube. This non-adhesive behavior allows successful surface cleaning using only water at relatively low pressure.


**Completely Field Repairable.** If ever required, individual tubes can be replaced in the field simply and economically without the need for special tools and/or highly specialized welding procedures. This can be accomplished on site with a simple, straightforward operation, eliminating shipping concerns and minimizing downtime.

**Superior Thermal and Mechanical Shock Resistance.** This composite graphite tube is much more ductile than traditional impervious graphite tubes. As a result, it is more resistant to vibration and other mechanical stresses. Additionally, its low CTE and tube-to-tubesheet seal of the Impervite® PPS-GR shell and tube exchanger build in superior resistance to thermal shock.

**Proprietary Self-Contained Elastomeric Sealing System.** The proven tube to tube sheet seal system utilizes a combination of specifically selected elastomeric seals and Teflon support rings. When coupled together with the close tolerance tube nut and tubesheet hole, it results in a highly reliable, static, self-contained seal that is 100% leak free with exceptional service life.

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 [cgthermal.com](http://cgthermal.com)

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