

# ECHO GEL<sup>®</sup> XP ultrasonic couplant



Echogel XP (Extended Performance) is an extended temperature range, slow drying, economically priced couplant for flaw inspection. Echogel XP resists viscosity breakdown on salt-caked boiler surfaces and on corroded pipe or structural steel.

## Temperature Operating Range

5° to 190°F (-15° to 87°C)

## Benefits

- Broad operating temperature range to 5°F
- Slow drying properties, facilitating large coverage and re-inspection
- Enhanced wetting capabilities; will quickly wet oily or dirty surfaces
- Remains stable on corrosion or salt cake, and is recommended for inspection of power generating boilers when salt cake is present
- Does not contain glycerine

## Safety

- Non-flammable and non-irritating

## Removal

Echogel XP is slow to dry and can be easily removed with a water wash or by wiping with wet or dry cloths. The polymer (thickening agent) in Echogel will form a film if allowed to dry on the part. If the couplant is allowed to dry, and a film forms, it can be removed by pressure washing or wire brushing.

## Chemical Analysis and Certification

Independent laboratory analysis of Chlorides and Sulfur referencing ASTM procedures is furnished with each shipment at no additional charge and is available at [www.sonotech-inc.com](http://www.sonotech-inc.com)

Total Halogens..... <50 ppm  
Sulfur..... <50 ppm

## Acoustic Transmission

Optimal transmission requires that an ultrasonic couplant have no air bubbles; Sonotech's unique processing eliminates couplant air bubbles.

## Corrosion Inhibition

A basic premise in NDT is that it must be truly nondestructive. The couplant must not cause detrimental metallurgical damage to the part through corrosion. Sonotech has developed a sensitive ferrous corrosion test and rating system for our couplants that evaluates both surface and crevice corrosion.

- Echogel XP contains a ferrous corrosion inhibitor with a relative effectiveness rating of 80, and is compatible with most composites and metals. Ferrous Corrosion Characteristics Chart available at <http://www.sonotech-inc.com>.

## Echogel XP has been tested and approved to:

- ASTM F519-05 (Hydrogen Embrittlement of low alloy high strength steel)

## Properties<sup>1</sup>

Viscosity  
Grade 20 (high).....~75,000 cps (Brookfield LV Spindle #4 @ 6 rpm)  
Velocity ..... 1.55±.05 mm/μsec  
Acoustic Impedance Gr. 20..... 1.60±.05 Mrayls  
pH ..... 7.5 to 9.0  
<sup>1</sup>At ambient temperature.

## Packaging

1-gallon (4 liter) container  
5-gallon (18.9 liter) container  
15-gallon (56.8 liter) drum  
55-gallon (208.2 liter) drum

