

ECHO GEL[®] 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

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)

Properties¹

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
¹At 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

