# Couplant Solutions Catalog

ECHO ultrasonics — The couplant experts

## EchoPure™
**The most universal water-free UT couplant**

**Operating Range:** -60° to 350°F / -51° to 176°C

- Ideal for very cold and very warm inspections
- Couplant of choice for phased array manual inspections (PAMUT)
- Complies with P91 steel requirement for water-free couplant
- Three viscosities
- Very slow drying
- All ingredients generally recognized as safe
- Water-free means no ice crystals which cause noise, down to -60˚F / -51˚C

## SuperSoniX™
**Enhanced performance**

**Operating Range:** -10° to 220°F / -23° to 104°C

- Contains glycerin to improve signal to noise ratio
- Slow drying
- Improved stability against corrosion salts
- Compatible with most materials
- Medium and high viscosity
- Water-soluble

## UltraSonix™
**Glycerin-free – Aircraft grade**

**Operating Range:** 10° to 220°F / -12° to 104°C

- Glycerin-free – meets FAA AC 25-29 requirement of no glycerin for aluminum inspections
- Compatible with most materials
- Medium viscosity

## Signal™
**The couplant for better signal with less noise**

**Operating Range:** -18° to 224°F / -28° to 107°C

- Providing improved signal-to-noise ratio through superior acoustics on rough surfaces such as castings, rough bar stock and fiberglass
- Gel viscosity remains in place for overhead and vertical surfaces

## Sonix™
**Best choice for a low-cost general purpose ultrasonic couplant**

**Operating Range:** 18° to 120°F / - 8° to 50°C

- Strong coupling film, salt stable
- Good ferrous corrosion inhibition
- Compatible with most metals, plastics and composites
- Water-soluble

## Glycerin
**GE Approved Glycerol, Batch 205 for CFM56-7B engine fan blades**

**Operating Range:** 65° to 500°F / 18° to 260°C

- Packaged from USP glycerin, 99+%
- High acoustic impedance
- Will not harden on equipment
- Pumpable fluid
- Compatible with plastics

## Echo Shear Wave™
**Transmits normal incidence shear wave**

**Operating Range:** 40° to 90°F / 4° to 32°C

- Couples shear wave and guided wave
- Water-soluble
- Easily removed with water wash

## Echo 8 ZH™
**For flow metering and long term monitoring at elevated temperatures**

**Operating Range:**
Short Term: -45° to 750°F / -42° to 398°C
Long Term: -45° to 400°F / -42° to 204°C

- Enhanced acoustic impedance
- Reduces acoustic noise from rough surfaces

## Echo Z+™
**High acoustic impedance**

**Operating Range:** 0° to 200°F / -18° to 93°C

- Ideal for rough, pitted surfaces and concrete
- Pencil Point and shear wave inspections
- Five viscosities

## Forever Wedge™

**Operating Range:** -50° to 700°F / -45° to 371°C

- Facilitates more reproducible inspections, less artifacts and longer wedge coupling.
- High viscosity fluid couplant for use between phased array and angle beam transducers and the wedge.

## EchoMix® Single Powder

**Operating Range:** 32° to 120°F / 0° to 50°C

- 1-part powder mix
- Easily mixed in water
- Salt resistant
- Compact for shipping & storage


## AeroSoniX™ Drone Couplant

**Operating Range:** -50° to 775°F / 45° to 412°C

- High temperature UT couplant that pumps like a fluid, stays in place like a gel.
- Broad temperature range.
- No residue, varnish or corrosion in drone pumps.

# High Temperature Couplants

Operating range is printed on every label of Echo's high temperature couplants

## VersaSonic®

**Best general purpose, high temperature couplant**

**Operating Range:** -10° to 700°F / -23° to 371°C
**Auto Ignition:** 788°F / 420°C

- Excellent high temperature transducer lubricant, extends transducer life
- Two viscosities: medium and high
- Fast repsonse, no wait time
- Does not contain peanut oil, silicone oil or plastic polymer

## HiTempco™+

**No residue, fast response**

**Operating Range:** -50° to 850°F / -45° to 455°C
**Auto Ignition:** 894°F / 479°C

- Fast response, no wait time
- No residue or varnish
- Less smoke
- No plastic polymer or char
- Excellent corrosion inhibition

## EchoTherm™

**Excellent performance**

**Operating Range:** -40° to 1250°F / -40° to 675°C
**Auto Ignition:** 1300°F / 704°C

- Ultra-high temperature
- Instantaneous readings
- Longer acoustic window
- Delivers a stronger signal on rough pitted surfaces.
- Leaves plastic residue (char)

## EchoTherm Extreme™

**The best – no residue, instant, stable response to 1250°F**

**Operating Range:** -40° to 1250°F / -40° to 675°C
**Auto Ignition:** 1300°F / 704°C

- Ultra-high temperature
- Fast response, no wait time
- No plastic polymer
- No plastic char residue

# Fluid Couplants for AUT and Robotic UT Inspections

## Echo 8 HT™

**Most universal AUT fluid**

**Operating Range:** -50° to 800°F / -45° to 425°C
**Pumpable Range:**
**Grade 1:** 30° to 800°F / -1° to 425°C
**Grade 4:** 50° to 800°F / 10° to 425°C
**Auto Ignition:** 850°F / 454°C

- Three viscosities
- Little or no residue
- Provides excellent corrosion inhibition on ferrous metals
- Silicone-based

## Echo 6 HT™

**Operating Range:** -40° to 675°F / -40° to 357°C
**Pumpable Range:** 0° to 675°F / -18° to 357°C
**Auto Ignition:** 789°F / 421°C

- Replacement for peanut, canola and mineral oils
- No sticky film, varnish or smoke
- Reduced risk of under-insulation cracking
- Low cost silicone-based fluid

## Echo 3 HT™

**Operating Range:** -30° to 350°F / -34° to 177°C
**Pumpable Range:** 35° to 350°F / 2° to 177°C
**Auto Ignition:** 628°F / 331°C

- Water-soluble
- No need to remove
- Least expensive intermediate temperature fluid

## EchoFLOW™

**Operating Range:** -40° to 150°F / -40° to 65°C
**Pumpable Range:** -40° to 150°F / -40° to 65°C

- Can be pumped in extreme cold
- Environmentally safe
- Approved for use in the Tundra
- Water-soluble



SUPERIOR COUPLANTS • BEST PRICE
ECHO ultrasonics
GUARANTEE
OUTSTANDING SERVICE

QAS INTERNATIONAL
ISO 9001:2015
REGISTERED COMPANY

ECHO ultrasonics The couplant experts

Echo Ultrasonics, LLC
774 Marine Drive | Bellingham, WA 98225
360.671.9121 | echoultrasonics.com

02/01/26