Couplant Solutions Catalog

ECHO ultrasonics — The couplant experts

EchoPure™
The most universal water-soluble UT couplant

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

- Couplant of choice for phased array manual inspections (PAMUT)
- Complies with P91 steel requirement for water-free couplant
- Ideal for very cold and very warm inspection
- Four viscosities (fluids and gels)
- Very slow drying
- All ingredients approved for incidental food contact
- Water-free / water-soluble

SuperSoniX™
Broadest operating range and slowest evaporation rate in a water-based, high performance couplant

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

- Slow drying
- Compatible with most materials
- Medium viscosity
- No nitrates, nitrites, glycol ethers or formaldehyde
- Water-soluble

EchoTrack™
Lowest price, high performance UT couplant

Operating Range: 18° to 180°F / -8° to 82°C

- Medium & high viscosity
- No nitrates, nitrites, glycol ethers or formaldehyde
- Water-soluble
- Acrylic polymer, least residue

UltraSonix™
High performance – 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 & high viscosity
- No nitrates, nitrites, glycol ethers or formaldehyde

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
- No nitrates, nitrites, glycol ethers or formaldehyde
- 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+%
- Higher 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

- Water-soluble
- Easily removed with water wash
- Low toxicity, non-irritating

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 surface roughness acoustic noise

Echo Z+™
High acoustic impedance

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

- Ideal for rough surfaces and concrete
- Very high viscosity
- Excellent ferrous corrosion inhibition

Phased Array Couplants

Forever Wedge™
- 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.

EchoPure™
- Reduces noise and artifacts from couplant failure between the wedge and the test object.
- Eliminates dry spots under the wedge.
- See ABOVE for more information

Powdered Couplants

EchoMix® Powder

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

- Easily mixed in water
- Salt resistant
- No formaldehyde
- Compact for shipping & storage

EchoMix®
- 2-part (two packets)
- Strongest coupling film
- Blue mixing tracer

EchoMix® Single
- 1-part powder
- Easiest mixing
- Blue mixing tracer

High Temperature Couplants

Operating range printed on every label

VersaSonic®

Lowest cost, two viscosities

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

- Fast response, no wait time
- No plastic polymers
- Low toxicity
- Non-irritating
- Two viscosities: medium and high viscosity gel
- Does not contain peanut oil

HiTempco

No residue, fast response

Operating Range: -50° to 775°F / -45° to 412°C
Auto Ignition: 820°F / 437°C

- Fast response, no wait time
- No residue or varnish
- Less smoke than VersaSonic
- No plastic polymer or char
- Excellent corrosion inhibition
- Non-toxic, non-irritating

EchoTherm™

Lowest cost for use above 800°F

Operating Range: 200° to 1000°F / 93° to 538°C
Auto Ignition: 1300°F / 704°C

- Less expensive couplant for use over 800°F and in inspection ports
- Ultra-high temperature
- Contains a plastic polymer which delays response time 2 seconds
- 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
- Broadest operating range
- Low smoke

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

- Two viscosities (Grades 1 & 4)
- Little or no residue
- Low toxicity
- Non-irritating
- Silicone-based

Echo 6 HT Fluid™

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 Fluid™

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 Fluid™

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

- Easily pumped in extreme cold
- Environmentally safe
- Approved for use over Tundra
- Water-soluble

SUPERIOR COUPLANTS • BEST PRICE
ECHO ultrasonics
GUARANTEE
OUTSTANDING SERVICE

ISO 9001:2015 REGISTERED COMPANY

ECHO ultrasonics The couplant experts

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