

Couplant Solutions Catalog



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



EchoTrack™ A

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

Operating Range: -10° to 200°F / -23° to 93°C

- Slow drying
- Compatible with most materials
- Medium & high 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



ECONOgel™

Lowest cost water-soluble ultrasonic couplant

Operating Range: 26° to 120°F / -3.3° to 48°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

Powder 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® Clear

- 2-part (two packets)
- No blue tracer

EchoMix® Single

- 1-part powder
- Easiest mixing
- Blue mixing tracer

High Temperature Couplants

Operating range printed on every label

VersaSonic®

Lowest cost, multiple viscosities

Operating Range: -10° to 700°F / -23° to 371°C

Auto Ignition: 788°F

- Fast response, no wait time
- No plastic polymers
- Low toxicity
- Non-irritating
- Three viscosities: fluid, 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

- 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

- 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

- Ultra-high temperature
- Fast response, no wait time
- No plastic polymer
- No plastic char residue
- Broadest operating range
- Low smoke



Fluid Couplants

Echo 8HT™

Most universal AUT fluid

Operating Range: -50° to 800°F / -45° to 425°C

Auto Ignition: 850°F

- Pumpable fluid
- Three viscosities (Grades 1, 4 & 10)
- Little or no residue
- Low toxicity
- Non-irritating



SpectrumGlide™

Highest performance AUT fluid

Operating Range:

Thickness Gaging: -50° to 730°F / -45° to 387°C

Flaw Detection: 0° to 600°F / -17° to 315°C

Auto Ignition: 752°F

- Least run off of all pumpable fluids
- Minimal residue
- Low toxicity
- Non-irritating



EchoPure Fluid™

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

- Best for very low to ambient temperatures
- Water-soluble (does not form oil slick)
- Least expensive fluid couplant
- Lowest viscosity fluid



ECHO ultrasonics
The couplant experts

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