### Couplant Solutions Catalog

#### EchoPure™
The most universal water-soluble UT couplant
- **Operating Range:** -60°F to 350°F / -51°C 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™
Lowest price, high performance UT couplant
- **Operating Range:** 18°C to 180°C / -8°F to 82°C
- Medium & high viscosity
- No nitrates, nitrites, glycol ethers or formaldehyde
- Water-soluble
- Acrylic polymer, least residue

#### Echo Shear Wave™
Transmits normal incidence shear wave
- **Operating Range:** 40°C to 90°C / 4°F 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°C to 750°C / -42°F to 398°F
  - Long Term: -45°C to 400°C / -42°F to 204°F
  - Enhanced acoustic impedance
  - Reduces surface roughness acoustic noise

#### Echo Z+™
High acoustic impedance
- **Operating Range:** 0°F to 200°F / -18°C to 93°C
- Ideal for rough surfaces and concrete
- Very high viscosity
- Excellent ferrous corrosion inhibition

#### EchoMix® Powder
- **Operating Range:** 32°C to 120°C / 0°F to 50°C
- Easily mixed in water
- Salt resistant
- No formaldehyde
- Compact for shipping & storage

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

#### SuperSonix™
Broader operating range and slowest evaporation rate in a water-based, high performance couplant
- **Operating Range:** -10°F to 220°F / -23°C to 104°C
- Slow drying
- Compatible with most materials
- Medium viscosity
- No nitrates, nitrites, glycol ethers or formaldehyde
- Water-soluble

#### UltraSonix™
High performance – Aircraft grade
- **Operating Range:** 10°F to 220°F / -12°C 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°C to 120°C / -8°F 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°C to 500°F / 18°C to 260°C
- Packaged from USP glycerin, 99+%
- Higher acoustic impedance
- Will not harden on equipment
- Pumpable fluid
- Compatible with plastics

#### EchoPure™
The most universal water-soluble UT couplant

#### 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.
- 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°C to 120°C / 0°F to 50°C
- Easily mixed in water
- Salt resistant
- No formaldehyde
- Compact for shipping & storage

#### EchoMix® Single
- 1-part powder
- Easiest mixing
- Blue mixing tracer
HiTempco
No residue, fast response

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

Echo/Term
Lowest cost for use above 800°F

Operating Range: 200°F to 1000°F / 93°C 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)

Echo/Term Extreme™
The best — no residue, instant, stable response to 1250°F

Operating Range: -40°F to 1250°F / -40°C to 675°C
Auto Ignition: 1500°F / 704°C

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

Echo 8 HT™
Most universal AUT fluid

Operating Range: -50°F to 800°F / -23°C to 371°C
Pumpable Range: Grade 1: 30°F to 800°F / -1°C to 425°C
Grade 4: 50°F to 800°F / 10°C 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°F to 675°F / -40°C to 357°C
Pumpable Range: 0°F to 675°F / -18°C 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°F to 350°F / -34°C to 177°C
Pumpable Range: 35°F to 350°F / 2°C 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°F to 150°F / -40°C to 65°C
Pumpable Range: -40°F to 150°F / -40°C to 65°C

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