Ultrasonic Couplant

MAGNAFLUX

UT-X[®] Powder is a cost-effective couplant powder for flaw detection and thickness gaging applications where ferrous corrosion inhibition is required.

UT-X Powder retains viscosity on salt caked boiler tubes, corroded pipe, structural steel, steel billets, welds and ship plate. Mixed with water at the inspection site, its compact and lightweight packets are easy to transport to a job site or to store as an emergency couplant for unanticipated shortages.



BENEFITS

- Salt resistant
- Environmentally benign formula
- Fast, lump-free mixing
- Concentrated to reduce shipping cost and storage space
- No dyes, fragrance or glycerin
- Low skin irritation potential
- Short-term corrosion protection
- Economical option

APPLICATIONS

Defect location: subsurface

Ideal for:

- Flaw detection
- Thickness gauging
- Power generating boilers
- Corroded parts
- When corrosion, salt, or salt cake is present
- Large volume flaw inspections
- Structural steel
- Steel billets
- Welds
- Ship plates

SPECIFICATION COMPLIANCE

- API
- ASME
- AWS

PROPERTIES

Appearance*	Granular Powder
Color*	White
Silicone	No
Glycerin	No
Propylene Glycol	No
Halogens	N/A
Sulfur	N/A
Water Soluble	Yes

* Of powder mix

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USE RECOMMENDATIONS

NDT Method	Ultrasonic Testing
Required Equipment	UT equipment, transducer
Usage Temperature [‡]	32 to 120°F / -0 to 49°C
Storage Temperature	50 to 86°F / 10 to 30°C
Compatibility	Most composites and metals

[‡] Couplant integrity and acoustic performance may decline beyond these temperature limits.

Can be winterized to -20°F / -29°C by replacing 20% of the water used for preparation with propylene glycol.

PREPARATION INSTRUCTIONS

When mixing, be very careful to avoid adding air bubbles to the water/couplant. Use the chart below and measure water into a clean mixing container. Let water sit to remove excess air (four hours is optimum). Slowly mix packet A into water until dissolved. Mix by stirring by hand or use a drill mixer. Add packet B and continue mixing until couplant thickens, this may take several minutes.

Viscosity [§]	Water
Low (2-3)	1.75 gal / 6.6 L
Medium (5)	1.25 gal / 4.7 L
High (6-7)	1 gal / 3.8 L
Very High (8)	0.75 gal / 2.8 L

Subjective measure, 0–10 scale where 0 = water, 5 = medium gel, 10 = very thick paste

INSTRUCTIONS FOR USE

Apply a small amount of couplant to the transducer or inspection area before measurement.

REMOVAL

Remove couplant immediately after inspection before the couplant dries with water rinse or a combination of water rinse and brushing. A difficult-to-remove film may form if the couplant is allowed to dry before removal. Remove film by pressure washing, wire brushing or immersing the part in water until the couplant rehydrates and can be washed or brushed off.

STORAGE

Store prepared couplant in an airtight container. Store out of direct sunlight. Keep container closed when not in use. Never put unused couplant back into the storage container. Refer to Safety Data Sheet for additional storage instructions.

PACKAGING

1 gal / 3.78 L packet (case of 10)	62-110
5 gal / 18.9 L packet (case of 10)	62-510

HEALTH AND SAFETY

Review all relevant health and safety information before using this product. For complete health and safety information, refer to the product Safety Data Sheet, which is available at **www.magnaflux.com**.