

# UT-X

## ULTRASONIC COUPLANT

### 超声耦合剂

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是一款高性价比耦合剂粉末用于需要防止铁性腐蚀助剂情况下进行的缺陷检测和测厚等应用。

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.

UT-X Powder可以结盐的锅炉管道, 锈蚀的管道, 结构钢, 钢坯, 焊点以及造船钢板等材料上保持粘度, 可在检测现场与水混合, 其轻量的压缩小包装方便携带至工作现场或作为应急耦合剂储存以备不时之需。



#### BENEFITS 优势

- Salt resistant 耐盐性能
- Environmentally benign formula 环境友好型配方
- Fast, lump-free mixing 快速分散不易结块
- Concentrated to reduce shipping cost and storage space  
压缩包装减少运输费用和储存空间
- No dyes, fragrance or glycerin 无颜料、香味或甘油
- Low skin irritation potential 对皮肤刺激小
- Short-term corrosion protection 短期防腐蚀保护
- Economical option 性价比高

#### APPLICATIONS 应用

Defect location 缺陷位置: subsurface 表面

#### Ideal for 适用于

- Flaw detection 缺陷检测
- Thickness gauging 测厚
- Power generating boilers 发电锅炉
- Corroded parts 被腐蚀零件
- When corrosion, salt, or salt cake is present 当腐蚀、盐化或盐饼出现时
- Large volume flaw inspections 大批量缺陷检测
- Structural steel 结构钢
- Steel billets 钢坯
- Welds 焊点
- Ship plates 造船钢板

#### SPECIFICATIONS 符合规范

- API
- ASME
- AWS

#### PROPERTIES 属性

Appearance 外观*	Granular Powder 粒状粉末
Color 颜色*	White 白色
Silicone 硅	No 不含
Glycerin 甘油	No 不含
Propylene Glycol 丙二醇	No 不含
Halogens 卤素	N/A 不适用
Sulfur 硫	N/A 不适用
Water Soluble 水溶性	Yes 溶于水

\* Of powder mix  
混合粉末

**USE RECOMMENDATIONS 使用推荐**

NDT Method 无损检测方法	Ultrasonic Testing 超声检测
Required Equipment 设备要求	UT equipment, transducer 超声检测设备, 传感器
Usage Temperature 使用温度 <sup>†</sup>	-0 - 49°C
Storage Temperature 储存温度	10 - 30°C
Compatibility 相容性	Most composites and metals 与大多数复合材料以及金属相容

<sup>†</sup> Couplant integrity and acoustic performance may decline beyond these temperature limits.

超过该温度范围耦合剂完整性和声学性能会下降。

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

可以通过制备时用丙二醇替换20%水的方法使防冻至-29°C

**INSTRUCTIONS FOR USE 使用指南**

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.

混合时, 需要小心避免在水/耦合剂中混入空气泡沫。使用以下表格称量水至干净的搅拌容器中, 让水静止以排除多余的空气(4小时最佳)。缓慢混入A袋到水中直至溶解, 混合时可用手动搅拌或者钻式搅拌器进行搅拌, 再加入B袋并继续搅拌直到耦合剂变稠, 这个过程需要几分钟时间。

Viscosity 粘度 §	Water 水
Low 低 (2-3)	6.6 L
Medium 中 (5)	4.7 L
High 高 (6-7)	3.8 L
Very High 极高 (8)	2.8 L

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

主观测量, 0-10分级 0 =水, 5 = 中等胶状, 10 = 极粘稠膏状。

**INSTRUCTIONS FOR USE 使用指南**

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

测量前涂抹少量耦合剂在传感器上或者检测区域即可。

**REMOVAL 清除**

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.

检测结束后立即去除耦合剂以免耦合剂干燥, 可以用水冲洗或用水刷洗。如果去除前耦合剂干燥会形成一层难去除的膜, 要去除该膜需要加压清洗, 钢丝刷洗或浸泡在水中直到耦合剂再次湿润后冲洗或刷洗。

**STORAGE 储存**

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.

将配制好的耦合剂储存在密封容器中。避免阳光直射。不使用时保持容器封闭, 不要将未使用耦合剂放回原包装。更多储存信息请查阅安全数据表 SDS。

**PACKAGING 包装形式**

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

**HEALTH AND SAFETY 健康和安全**

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.cn](http://www.magnaflux.cn).

产品使用前请阅读相关的健康和信息安全信息。完整的健康和信息安全信息参考 [www.magnaflux.cn](http://www.magnaflux.cn) 上的 SDS (安全数据表)。