

Corrosivity Testing Kits (CTKs)

Proactive Indicator for Corrosive Gases

Understanding the severity of corrosive gases in your environment is essential for protecting sensitive equipment, maintaining reliable operations, and ensuring safe air quality. PureAir's Corrosivity Testing Kits (CTKs) provide a simple, effective way to assess the amount of corrosive gases present within your facility.

CTKs use reactivity monitoring to classify environmental conditions and evaluate their potential corrosive effects on electronic equipment.

How It Works

Place CTKs

Customers place testing kits in the targeted areas within the facility for a 30-day exposure period.

Corrosivity Level Collection

Each kit contains specially prepared silver and copper strips that react with airborne corrosive gases.

Return for Laboratory Analysis

The CTKs are shipped back to PureAir's ISO 17025 Accredited in-house laboratory for evaluation. PureAir's lab provides a quantitative measure of the overall corrosion potential of an environment.

Receive Corrosion Severity Results

PureAir's laboratory determines the corrosion severity based on ISA Standards.

Based on the results, PureAir recommends the most effective solution to remove the corrosive gases. This proactive approach extends equipment lifespan, minimizes costly downtime events, and ensures compliance with industry air quality standards.

Key Benefits of Corrosive Gas Removal

- *Extended equipment lifespan*
- *Reduced downtime events and maintenance costs*
- *Protection of valuable electronic assets*
- *Improved operational reliability*
- *Compliance with ISA Standard 71.04-2013 air quality standards*



Industries Affected by Corrosion

- Pulp & Paper Mills
- Refineries
- Mining & Steel Plants
- Chemical Plants
- Motor Control Centers (MCC)
- Drive Rooms
- Server Rooms
- Laboratories
- Administrative Buildings
- Any environment that has sensitive electrical equipment

ISA Classification

	G1	G2	G3	GX
	Mild	Moderate	Harsh	Severe
	Corrosion is Not a Factor	Corrosion is Measurable	High Probability that Corrosion Attacks Will Occur	Electronics are Not Expected to Survive
Copper Reactivity Level	0-299 (Å)	300-999 (Å)	1000-1999 (Å)	≥ 2000 (Å)
Silver Reactivity Level	0-199 (Å)	200-999 (Å)	1000-1999 (Å)	≥ 2000 (Å)

Gas-phase filtration is recommended for environments with contamination levels above G1.

ISA Classifications Defined:

MILD (G1)

An environment sufficiently well-controlled so corrosion is not a factor in determining equipment reliability.

MODERATE (G2)

An environment in which the effects of corrosion are measurable and may be a factor in determining equipment reliability.

HARSH (G3)

An environment where there is a high probability that a corrosive attack will occur. These harsh levels should prompt further evaluation, resulting in environmental controls or specially designed and packaged equipment.

SEVERE (GX)

An environment where only specially designed and packaged equipment would be expected to survive. Specifications for equipment in this class are a matter of negotiation between user and supplier.