
PRODUCT BULLETIN

COMPRESSOR INTAKE FILTER



The Problem: Corrosion

Air compressors provide the compressed air essential in operating pneumatic instruments, control valves and processes throughout the industrial plants. Industrial facilities inevitably introduce contaminants into their environment, exposing equipment to the damaging effects of corrosion. Corrosive gases raise the acidity of the compressed air creating aggressive condensate which attacks metal surfaces and leads to vibration and loss of compressor efficiency. To ensure compressors run properly, with a long service life and minimal repairs, it is critical that gaseous contaminants and particulate matter are removed from the intake airstream.

Manufacturers cannot afford to neglect air purification. Typical investments for air compressors range from \$80,000 to as high as \$500,000 with maintenance costs from corrosion at 20% to 50% of the initial purchase price.

The Solution: Purafil's Compressor Intake Filter

Purafil, Inc. the industry leader in gas-phase filtration, developed the CIF system to eliminate serious air compressor problems such as vibration and lost efficiency. Benefits of the CIF include:

- Eliminates vibration of impeller caused by build up of corrosion by-products and prevents corrosion damage to intercoolers, diffusers and casings.
- Prevents loss of cooling due to corrosion of intercooler.
- Allows for use of standard copper intercooler tubes even in a contaminated atmosphere.
- Eliminates unnecessary repair costs by extending operating hours between servicing.
- Reduces initial cost of compressor and allows for use of less costly, standard replacement parts.
- Helps maintain compressor efficiency.

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The CIF is a multi-stage, high efficiency air purification system that removes corrosive gases and particulates from the air. Compressor and process downtime is prevented with the CIF, and thousands of dollars of repair costs are saved. The CIF system guarantees high contaminant removal and maintains compressor efficiency. Other benefits of the CIF include:

Posi-Track™ Technology:

For modular systems, the CIF offers Purafil's patented Posi-Track™ technology, which features slanted tracking to support Purafil's MediaPAK™ modules via a corresponding angled notch in the modules' frame. The Posi-Track technology creates self-sealing pressure to create a positive seal, prevent air bypass and enhance filtration efficiency.

As an alternative to granular MediaPAK modules, the CIF is also available with PuraGRID filters containing GridBLOK technology, Purafil's newest gas phase-air filtration medium. This revolutionary new filter is designed to supply a large amount of chemical filtration with minimal pressure drop, increasing operational performance and energy savings.

Quality Assurance:

Purafil's patented and UL classified chemical media, designed to remove harmful gases, are manufactured under the ISO 9001:2008 quality program.

Compatibility:

The CIF is compatible with most compressor manufacturer's equipment.

Low Pressure Drop:

The CIF is designed for low inlet air pressure drop.

Analytical Services:

Purafil provides atmospheric monitoring and analytical services to verify that your CIF is providing satisfactory control of contaminants.

Flexible Design:

The CIF housing is available in wide range of sizes and construction materials. Particulate filters in all efficiencies and dust holding capacities are available as integral design of chemical filter housing. No additional particulate filters are needed to maintain performance.

Product Benefits:

- Eliminates vibration of impeller caused by build up of corrosion by-products and prevents corrosion damage to intercoolers, diffusers and casings.
- Prevents loss of cooling due to corrosion of intercooler.
- Supported by analytical service for atmospheric contaminant control as well as technical monitoring for performance.
- Allows use of standard copper intercooler tubes even in a contaminated atmosphere.

Benefits Continued:

- Filter housing available in wide range of sizes and construction materials.
- Particulate filtration in all efficiencies and dust holding capacities available as integral design of chemical filter.
- Designed for low inlet air pressure drop.