

Case Study

Protecting 3D Printers with Point-of-Use Filtration

Problem

Dupont, a leading manufacturer utilizing 3D printing technology, was facing a risk of contamination in their air-operated printers.

Although their compressor room was already equipped with primary filtration, the long distance between the compressor room and the 3D printers allowed moisture and pipe scale to accumulate in the air lines.

This contamination threatened the printers' performance and could lead to costly maintenance and downtime.



The Super-Dry Solution

To safeguard the equipment, Super-Dry recommended installing point-of-use filtration and drying directly at the printer stations:

- ✓ - SAF-185-X Coalescing Filter – captures fine oil aerosols, pipe scale, and solid contaminants
- ✓ - Super-Dry D2 Desiccant Air Dryer – ensures clean, dry air supply to each printer

This setup complements the main filtration system, guaranteeing optimal air purity right where it matters most.

Results

Since the installation, Dupont has:



Maintained consistently dry, contaminant-free air at each printer



Eliminated risks of wet air-related maintenance issues



Gained peace of mind through continuous monitoring of air quality

Their 3D printers now operate at peak efficiency, ensuring reliable production and reduced maintenance costs.

Products Used

Super-Dry FSD-85-W Water Separator

Removes bulk liquids

Super-Dry SAF-85-X Coalescing Filter

Removes oil aerosols, dust, and fine particulates.

Super-Dry D1 Desiccant Air Dryer

Delivers ultra-dry compressed air to protect sensitive equipment.



Client Profile

Dupont, a global leader in materials and industrial technology, uses advanced 3D printing systems in its manufacturing processes. By integrating Super-Dry's point-of-use air treatment solution, Dupont ensures precision, reliability, and long-term equipment protection.

