

Case Study

Reducing Plasma Cutter Maintenance with Clean, Dry Air

Problem

An industrial distributor of welding and plasma cutting equipment serving the manufacturing sector noticed a recurring issue among their customers:

Rising maintenance costs and frequent breakdowns of plasma cutting machines.

The root cause was poor compressed air quality — moisture and contaminants were damaging the torch and consumables, leading to expensive repairs and production downtime



The Super-Dry Solution

Super-Dry recommended implementing a 3-stage air treatment system at the point of use:

- ✓ - FSD-45-W Water Separator – removes bulk liquid water
- ✓ - SAF-45-X Filter – captures oil aerosols and fine particulates
- ✓ - D1 Desiccant Air Dryer – ensures a consistent supply of ultra-dry air

Installed directly beside the plasma cutter, this compact system guarantees the air feeding the plasma machine remains clean, dry, and contaminant-free.

Results

After installation, the distributor's customers reported:



Significant reduction in maintenance costs



Extended lifespan of plasma consumables



Less downtime and consistent cutting performance

By improving air quality, the distributor was able to offer their clients a high-value solution that set them apart from competitors.

Products Used

Super-Dry FSD-45-W Water Separator

Removes bulk water droplets from compressed air.

Super-Dry SAF-45-X Filter

Captures fine oil and particulate contaminants.

Super-Dry D1 Desiccant Air Dryer

Delivers ultra-dry air for clean, consistent plasma cutting results.



Client Profile

An established industrial distributor specializing in welding and plasma cutting systems, serving manufacturing clients across North America. Dedicated to helping customers improve process reliability and equipment longevity.

