



Air Purification & Dust Control Mapping Chart

Industry	Primary Air Quality Challenges	Best-Fit Purification Methods	Air Dynamics Equipment Options	Typical Price Range
Food & Beverage Manufacturing	Dry ingredient dust, allergens, sanitation debris, odors	Source capture; HEPA; washdown dust collection; VOC scrubbing	Central Vacuum; Cyclones; Dust Collectors; Air Scrubbers; PLECO Portable Vac; Makeup Air Systems	\$15k–\$750k+
Aerospace & Defense Manufacturing	Composite dust, aluminum/titanium chips, FOD, chemical fumes	High-efficiency dust collection; FOD vacuum networks; solvent scrubbing	Central Vacuum; Cyclones; Dust Collectors; Air Scrubbers; PLECO; Makeup Air	\$50k–\$2.5M+
Automotive & Battery Manufacturing	Conductive dust, lithium/carbon powders, welding fumes, paint VOCs	HEPA dust collection; wet scrubbing; VOC control; clean makeup air	Dust Collectors; Wet Air Scrubbers; Cyclones; Central Vacuum; PLECO; Makeup Air Systems	\$30k–\$1.8M+
Industrial Manufacturing (General)	Welding fume, grinding dust, plastics/wood dust, mixed debris	Cartridge/baghouse collection; cyclonic pre-separation; multi-drop vacuum	Dust Collectors; Cyclones; Central Vacuum; Air Scrubbers; PLECO; Makeup Air	\$20k–\$1M+
EV, Electronics & Clean Manufacturing	Ultrafine particles, solder fumes, chemical vapor, contamination control	HEPA/ULPA; local capture; vapor scrubbing; pressurized makeup air	HEPA Dust Collectors; Air Scrubbers; Central Vacuum; PLECO; Makeup Air	\$40k–\$2M+
Textile & Nonwoven Manufacturing	Lint, fiber fly, microfibers, heat load, airborne particulate	High-volume dust collection; pre-separation; plant pressurization	Dust Collectors (fiber-grade); Cyclones; Central Vacuum; Makeup Air Systems; PLECO	\$25k–\$1.2M+
Industrial Makeup Air Applications	Negative pressure, heat balance, fume migration, clean zone pressurization	Heated/cooled/tempered makeup air supply; filtration; pressure zoning	Industrial Makeup Air Units (DX, indirect-fired, direct-fired, heat recovery), HEPA options	\$40k–\$1.5M+
OTHER EQUIPMENT				
Pneumatic Conveying Systems	Material carryover, bulk solids dust, line leakage, product loss	Point-of-transfer capture; cyclone pre-separation; vacuum conveying	Cyclones; Dust Collectors; Central Vacuum; Resource Recovery Skids; Makeup Air	\$10k–\$900k+
Resource Recovery / Recycling Plants	High-load dust, metal/plastic fines, reclaimable particulate, VOCs	High-capacity dust collection; multi-stage separation; odor control	Cyclones; High-CFM Dust Collectors; Central Vacuum; Air Scrubbers; Resource Recovery Systems; Makeup Air	\$50k–\$2M+