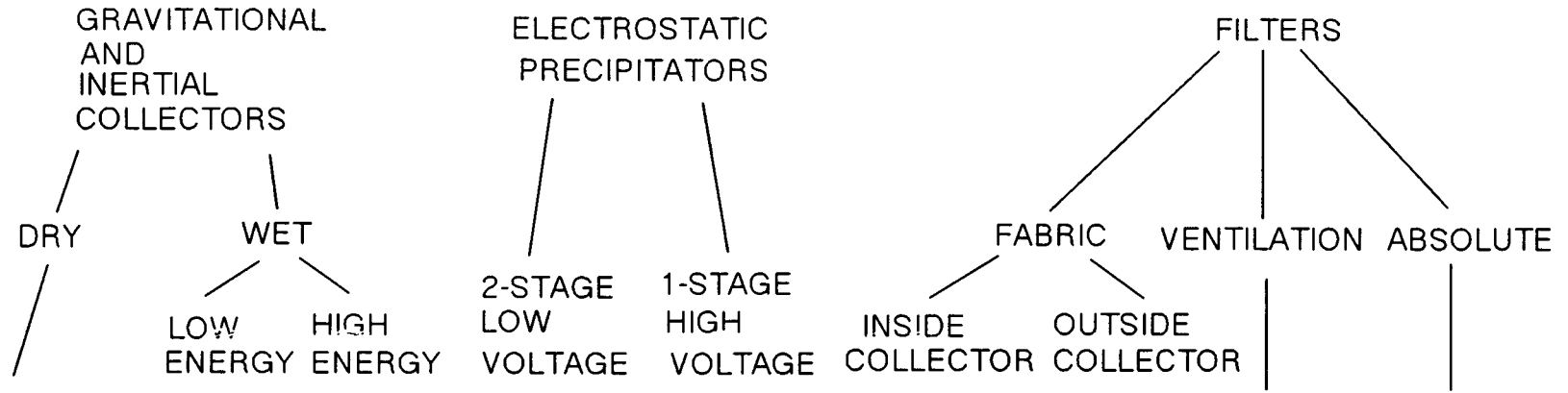


CHARACTERISTICS OF AIR AND GAS CLEANING METHODS AND EQUIPMENT FOR COLLECTING AEROSOL PARTICLES



	Settling chamber Cyclone	Wetted cyclone Impingement & entrainment	Venturi Disintegrator	Electronic air cleaner Furnace air cleaner	Wire and plate Wire and tube	Reverse gas cleaning Shaker cleaning	Pulse-jet cleaning	Pleated paper Media	Paper Deep bed
Contaminants	Crushing, Grinding, Machining	Crushing, Grinding, Machining	Metallurgical Fumes	Room air, Oil mist	Fly ash Acid mist	All Dry Dusts	All Dry Dusts	Room air	Pre-cleaned room air
Loadings g/m ³	0.1-100	0.1-100	0.1-100	< 0.1	0.1-10	0.1 - 20	0.1 - 20	< 0.01	< 0.001
Overall Efficiency %	High for > 10 um	High for > 10 um	High for > 1 um	High for > 0.5 um	High for > 0.5 um	High for all sizes	High for all sizes	High for > 5 um	High for all sizes
Pressure Drop, kPa	0.5 - 2	0.5 - 2	2 - 20	0.5-1	0.5 - 2	1 - 2	1 - 2	0.2 - 1	0.2 - 0.4
Initial Cost	Low	Moderate	Moderate	Moderate	High	Moderate to High	Moderate	Low	Moderate
Operating Cost	Moderate	Moderate	High	Low	Moderate	Moderate	Moderate	Low	High
Serviceability	Good (erosion)	Good (corrosion)	Good (corrosion)	Poor (shorts)	Fair (shorts)	Fair to Good	Fair to Good (blinding)	Fair	Fair to Poor
Limitations	Efficiency	Efficiency, Disposal	Operating Cost	Loading	Resistivity	Temperature	Temperature	Loading	Loading