
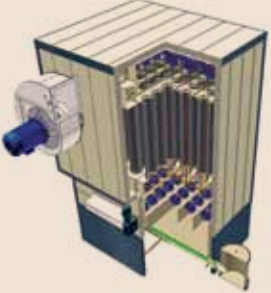




# Overview of filter systems used by Schmid AG

To comply with the statutory emission values, special filters are used in wood furnaces. Depending on the fuel and furnace size, different systems are recommended.

Filter	Technical description	Specifics	Output range
<b>Schmid cartridge filter</b> 	<p>These polyamide filters are heat-resistant up to 200°C and offer a large filter area in minimum space. To protect against sparks, a mechanical spark protector is installed. The filter cartridges are automatically cleaned with compressed air. This ensures a constant pressure decrease above the filter. The ash is removed via a screw conveyor.</p>	<ul style="list-style-type: none"> <li>• new product developed by Schmid AG</li> <li>• free standing or mounted directly onto the furnace</li> <li>• used in pellet and wood-chip furnaces</li> </ul>	180 to 500 kW
<b>Tubular electrostatic precipitator</b> 	<p>Electrostatic precipitator in tube design with multiple vertical filter tubes in which discharge electrodes are arranged. The active surfaces of the separator electrodes/inside walls of the tubes are automatically cleaned mechanically.</p> <p>Display with touch panel to display and store:</p> <ul style="list-style-type: none"> <li>– exhaust gas temperatures</li> <li>– operating hours of high-voltage operation, cleaning, bypass operation and faults</li> </ul>	<ul style="list-style-type: none"> <li>• compact dimensions thanks to modular design</li> <li>• installation in small spaces and feed openings possible</li> <li>• low maintenance</li> <li>• heating element for heating the filter chamber</li> </ul>	70 to 1200 kW
<b>Dry electrostatic precipitator</b> 	<p>The dust-laden flue gas passes horizontally through a diffuser into the precipitator and is distributed evenly into several «ducts». The dust particles are negatively charged as they flow through the ducts and «stick» to the collecting electrodes. The dust layer that accumulates is removed periodically by means of a rapping device, falls into a dust pan and is discharged by a screw conveyor.</p>	<ul style="list-style-type: none"> <li>• high filtration efficiency</li> <li>• low maintenance</li> <li>• very wide range of applications</li> <li>• outdoor installation possible</li> </ul>	from 240 kW
<b>Bag filter</b>  <p>during filtration</p>	<p>The dust-laden gas enters the housing of the precipitator where it is deflected and the dust is forced to settle down. The dust particles adhere to the surface of the filter medium; the air flows through the filter medium and exits the system as clean gas. The dust collected falls into the dust collection tank and is removed from the precipitator by a screw conveyor.</p>	<ul style="list-style-type: none"> <li>• low clean gas values</li> <li>• addition of additives (e.g. lime) possible; interesting if waste wood is used.</li> <li>• use of individual filter media possible</li> </ul>	from 300 kW