

Heavy metals

The flue gases produced by thermal processes can contain heavy metal compounds in particulate, aerosol and gaseous form. These heavy metal compounds are removed from the exhaust air and flue gases using suitable filters. Lignite coke or activated charcoal is used as adsorbent to separate heavy metals present in gaseous or aerosol form. To further reduce the level of gaseous heavy metal compounds, the adsorbent can be additionally supplemented with a sulphide compound.



Steuler Anlagenbau supplies complete separation filters that operate according to the entrained flow principle. These are essentially modified dust filters that use a suitable adsorbent medium (lignite coke or activated charcoal, with or without supplement) and inert materials (like hydrated lime or sodium bicarbonate) to trap the heavy metals.

In the case of acid, dust and/or dioxin-laden flue gases from combustion plants, the heavy metal separation process is integrated into the overall process, thereby minimizing investment and operating costs. In the case of acid, dust and/or dioxin-laden flue gases from combustion plants, the heavy metal separation process is integrated into the overall process, thereby minimizing investment and operating costs.