

AIRPOLLUTION CONTROL SYSTEMS



Gesellschaft für Luft- und Entstaubungstechnik mbH

APPLICATIONS

Air purification is one of the greatest challenges of our time.

At ACS, research, development, production and marketing specialists have risen to the challenge. Meticulous and innovative approaches have generated great success in all fields of air purification. Our ongoing dedication to this specialist market has developed worldwide confidence in ACS as one of the leading companies in air filtration and dust removal.

ACS air filters are a perfect, often unique and, indeed, economical solution for:

- industrial air intake and exhaust gas purification
- air conditioning and ventilation systems, in the public, commercial and industrial sectors
- clean room installations
- paint spray booth and oven installations





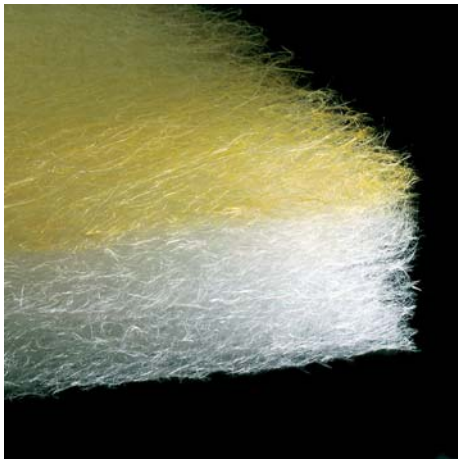
QUALITY

We work to the highest standards when meeting our customer's demands for economical, high quality air filters.

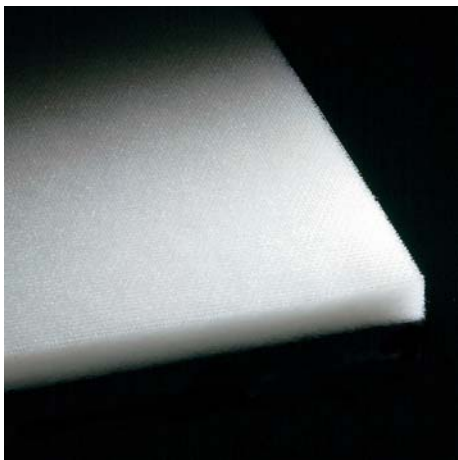
From the outset, we have made the greatest demands on our production, process technology and materials selection criteria. Our requirements and acceptance standards are therefore tougher than average.

The result is a cost effective range of air filters which excel in operation, by optimising the relationship between efficiency and dust holding capacity.

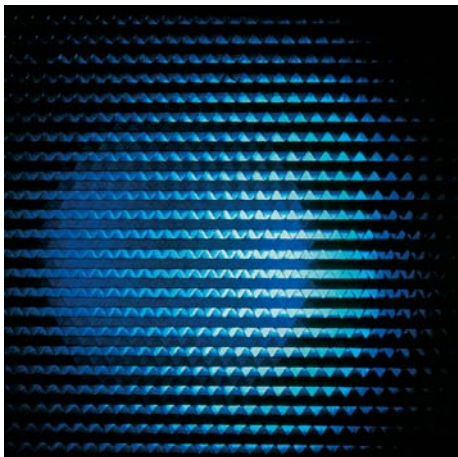
The exceptionally high standards we have achieved are maintained by the ongoing exchange of information between our own specialists and the scientific experts of the world, which together with constant product research and development, leads to the adoption and implementation of state of the art process technology.



Glassfibre - Airfiltration

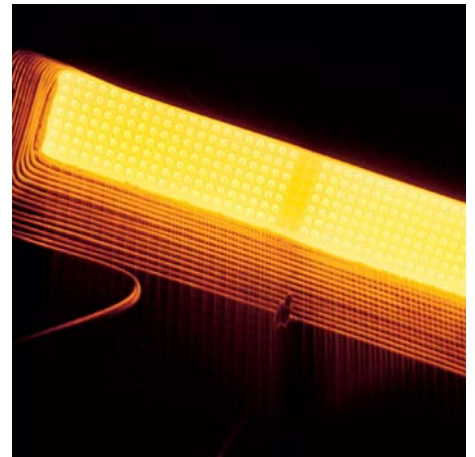


Synthetic-Thermo bonded media



H.E.P.A. filter





Development installation for glass fibre



Equipment to measure fractional particle arrestance



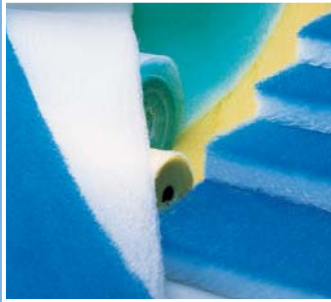
DIN EN 779 Test Rig

THE PRODUCTS

Years of continuing research and development have combined with a vast array of experience gained worldwide, to produce a comprehensive range of air filters that meet the needs of domestic and industrial air treatment, as well as paint overspray collection.

The ACS range of air filters extends from the economical G 2 coarse filter to the high performance of U 17 (H.E.P.A./ULPA). Meeting the highest standards in every category, ACS filters are unique, offering cost effective operational reliability in the toughest service conditions.

Our specialist design and construction capabilities enable us to supplement our standard range of filters, with filters especially designed to meet the specific needs of individual clients.



Glass Fibre Filter Media

The ACS glass fibre media are manufactured using computer controlled spunbonded technology producing media, that are of consistent high quality with a progressive density and high dust holding capacity with very low initial pressure loss. The media are suitable for use in high dust applications as primary filters, in H & V installations, as extract filters for paint overspray or as inlet filters for gas turbine installations.



Filter Category G 2 - G 4 in accordance with DIN EN 779.



High Efficiency (Microfine) Glass Bag Filters

ACS HE-series high efficiency bag filters are constructed from microfine glass fibre reinforced with polyester backing eliminating the possibility of fibre migration. All the pockets are tapered stitched to prevent blinding and thereby ensuring maximum utilisation of the filter area to give uniform air distribution. Available in a range of efficiencies from F 5 - F 8/9 and in any size and pocket configuration with either 20 or 25 mm header frames to allow maximum choice.



Filter Category F 5 - F 8/9 in accordance with DIN EN 779.



Compact Rigid Bag Filter

ACS HEK-series compact rigid bag filters are manufactured using the latest mini-pleat technology. The pleated filter packs are produced from high efficiency, water-repellent glass fibre paper, finely pleated and spaced to maximise surface area. The packs are assembled in a V-formation and sealed in a rigid supporting frame. This design provides high efficiency filtration in air conditioning systems where space is limited and high air volume is required. It also allows for an extended service life, capable of withstanding high air turbulence and vibration which is equally effective in high humidity conditions. The HEK/GT-series is specially designed for high burst-pressure installations such as gas turbines.

Filter Category F 6 - H 13
in accordance with DIN EN 779/DIN EN 1822.



Panel Filters

ACS offers disposable panel filters with either glass fibre or pleated synthetic media infills to suit all applications. The panel filters are constructed within a cardboard surround with the media held in place with either perforated metal or cardboard facings.

The GZ - series are manufactured incorporating progressive density spunbonded glass fibre media ensuring low pressure loss together with high arrestance resulting in cost effective primary filters. The VZ - range can be manufactured using either pleated synthetic media or high grade glass fibre media to achieve higher level efficiency panel filters, thereby providing a complete range of panel filters, offering optimum performance.

Filter Category G 3 - F 8 in accordance with DIN EN 779.



Air Filter Equipment

ACS provides a wide range of air handling equipment suitable for various applications ranging from collection of atmospheric dust in air intakes to the collection and treatment of radio active, toxic, gaseous, and odorous impurities from exhaust gases. In addition to our standard range of equipment we also offer a specialised service with design, manufacture and installation to match customers individual requirements.

Filter Category G 3 - U 17
in accordance with DIN EN 779/DIN EN 1822.



Synthetic Media

The ACS range of synthetic filter media is produced, utilising the latest thermobonding technology. Entirely PVC free, the media are structured to give progressive density, ensuring high mechanical strength during use, which are resistant to high temperature and moisture fluctuations achieving high initial arrestance and maximum dust holding capacity. The wide ACS range extends from medium efficiency, high grade and fine filters, to adhesive coated superfine filters for critical surface preparation applications in the automotive industry.

Filter Category G 3 - F 5 in accordance with DIN EN 779.

Medium Efficiency Bag Filters

The ACS range of bag filters are constructed utilising the special PVC-free thermally bonded media, incorporating unique manufacturing techniques to produce the highest quality product in terms of performance, efficiency and cost effectiveness. The pockets are manufactured to provide maximum use of the entire filtration area with minimal resistance to airflow. As the pockets are self-supporting, they maintain stability under nil or low air volume conditions (e.g. Variable Air Volume). The bag filters are available in a range of efficiencies from G3-F5 and in numerous pocket and header frame configurations to accommodate any installation.

Filter Category G 3 - F 5 in accordance with DIN EN 779.

High Efficiency Particulate Air (H.E.P.A.) Filters

The ACS HG-series HEPA filters are specifically designed to collect airborne contaminants including toxic dust, filterable viruses, bacteria and mists and can be used equally effectively in both inlet and exhaust applications.

The high efficiency of the HGV HEPA-series is achieved using the TFA principle in pleating the glass fibre paper to realise optimum geometry and filter area throughout.

Filter Category H 10 - U 17
in accordance with DIN EN 1822.

Surface Technology Filters

ACS surface technology filters are designed for use in critical surface preparation applications and comprise of high performance PVC free synthetic or glass media contained within special cardboard frames with either perforated metal or cardboard facings to retain the media.

The media can also be supplied with an adhesive coating and with a scrim on the air exit side.

For applications where higher temperatures are encountered, up to 300°C, specially bound glass fibre is available housed within an aluminium frame.

Filter Category G 3 - F 5 in accordance with DIN EN 779.

Dust Control Media

All ACS dust control media are compatible with and are suitable for all equipment available from other leading manufacturers.

This allows the flexibility to supply a range of high performance filter tubes, bags and cloth for special requirements where non-stick, anti-static, fire, water, oil, acid resistant and membrane coated characteristics are involved, so designed to provide simple solutions to complex filtration problems. ACS also provides a comprehensive range of dust control equipment from the standard cartridges, inserts and frames to top of the range specialist designed equipment.



Roll Filters

ACS produces roll filters to suit all manufacturers current installations and are constructed from either progressive spunbonded glass fibres or thermally bonded synthetic media.

The roll filters offer low compressibility and dust holding capacity throughout the depth of the media, ensuring that during service there is a slow rise in resistance. This combination creates a highly cost effective solution in many filter applications.

Filter Category G 3 in accordance with DIN EN 779.



High Efficiency Synthetic Bag Filters

The ACS range of HES high efficiency bag filters are produced from unique multi-layered synthetic media which are progressively built up to achieve high initial efficiency with minimum pressure loss.

Designed to meet the most stringent hygiene requirements, combined with high mechanical strength, this product offers an economical alternative to the high efficiency microfibre glass bag filters.

Available in all standard and non-standard sizes.

Filter Category F 5 - F 8/9
in accordance with DIN EN 779.



Laminar Flow Panels

The ACS LFP-series of laminar flow panels are designed to meet the highest specifications of clean room installations. Constructed from ultra-fine glass fibre media uniformly pleated using thermo-setting technology giving optimum pleat geometry throughout. These pleated filter packs are assembled into an anodised extruded aluminium frame with epoxy coated grilles on both sides. Each filter is individually leak tested or scanned to be conform to DIN EN 1822 standards. ACS also supplies a wide range of housings including fully disposable terminal modules for all clean room applications.

Filter Category H 13 - U 17
in accordance with DIN EN 1822.



Metal Filter Cells

ACS offers a comprehensive range of metal filter cells specially designed to collect dust, oil mist, grease and other contaminants.

The filters are constructed from expanded metal meshes housed in sturdy metal frames suitable for all applications and are designed to meet the toughest fire regulations especially for kitchen installations.

The filters can be specified in various metals such as galvanised steel, aluminium or stainless steel.



Carbon Filters

ACS carbon filters are used to adsorb gaseous odours and impurities from the air stream and are available pre-assembled as either cartridge filters or panel filters or alternatively supplied in loose bulk form as well as carbon coated foams and synthetic media.

The cartridge shown here is particularly abrasion resistant whilst offering low air resistance.

Along with standard grade carbon a comprehensive range of impregnated carbons is available in various particle sizes.

For the more demanding of applications the range is completed by chemical adsorption and oxidation filters incorporating specially designed granules.

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CONTROL
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