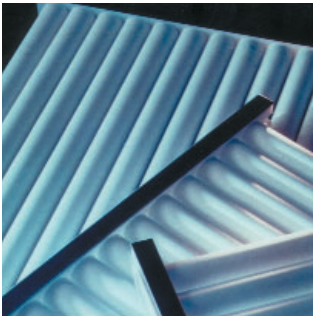


SINBRAN: AN INNOVATIVE TYPE OF FILTER

SINBRAN FOR HIGHEST FILTRATION EFFICIENCY - RIGID BODY FILTER AND MEMBRANE FILTER IN ONE



SINBRAN denotes the standard for highest filtration efficiency with an innovative and well-proven type of filter. The SINBRAN filter elements combine the advantages of membrane filters with those of rigid body filters:

Large filter area requiring minimum space
High mechanical load capacity
Very long life cycle
Low pressure drop
High filtration efficiency

A FILTER FOR DIFFICULT CONDITIONS

SINBRAN is a new approach to dust collection that achieves impressive filtration results, even in particularly difficult applications. SINBRAN filter elements provide the highest filtration efficiency for fine, sub-micron dust. The filter material's high mechanical stability ensures a long service life. The design of the filter frames makes them compatible with existing filter systems. SINBRAN has BIA test certification according to DIN EN 6035-2-69 Appendix AA (08/99), and meets the requirements of dust class "M", formerly known as categories U, S, G and C (penetration level of <0.01 percent).

RELIABLE AND EFFICIENT: SINBRAN APPLICATIONS

The separation of fumes created during laser cutting requires a special filter medium for submicron particles. In such installations SINBRAN filters have proved their efficiency over several thousand hours of operation, with emission levels below the detectable limits.

SINBRAN filter elements are environmentally friendly and are, therefore, suitable for use in the pharmaceutical and food industries. Combined with our newly developed, innovative pre-coating process, SINBRAN is suitable for the separation of aerosols of organic material, such as those created during laser cutting operations. In the past they could only be treated by complicated processes utilizing wet scrubbers, catalysts or thermal incineration. Dry operating filter units clogged irreversibly within a few days.

With our special pre-coating process (patent pending), an auxiliary layer is created on the surface of the filter elements. This coat protects the actual filter surface from adhesive substances, while absorbing a large portion of hydrocarbons. The system can also be used for the separation of adhesive substances or particles.



AIR FILTRATION SYSTEM SOLUTIONS



SINBRAN - A NEW TYPE OF RIGID BODY FILTER

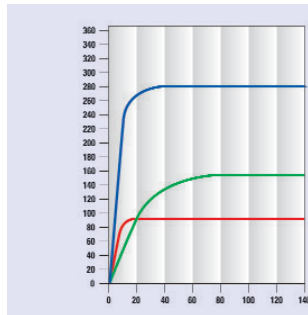
SINBRAN, a combination of sintered, porous polyethylene with a GORE membrane laminated onto it, offers the advantages of both membrane filtration and rigid body filtration.

The solid rigid body with a large filter area in a minimum of space ensures high mechanical stability and a long service life.

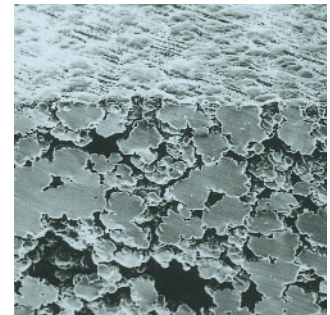
The smooth uniformity of the GORE ePTFE membrane results in a surface filtration with extremely high filtration efficiency.

The dust particulate is almost completely retained at the filter surface and cannot clog the sintered body, as it is unable to penetrate it. This results in a low pressure loss, compared to conventional rigid body filters.

The filter cleaning is effected by short pulses of compressed air during the filtration process.



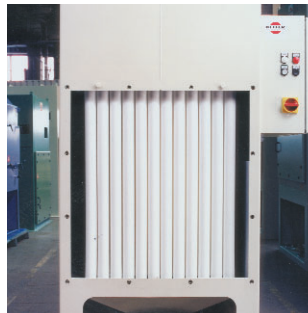
- Standard rigid body filter
- Textile filter media
- SINBRAN



The extremely thin and smooth GORE ePTFE membrane creates high filtration efficiency with low pressure loss.

ENVIRONMENTALLY SOUND PRODUCT DESIGN

SINBRAN filter elements are environmentally friendly and can be recycled. Because fibers do not separate from the filter elements thereby contaminating the end product, the filter elements can be used in the pharmaceutical and food industries. No adhesives or solvents are used in the manufacture of SINBRAN filter elements which are made from polyethylene, stainless steel and PTFE. They can be easily dismantled and recycled according to environmental standards.



SINBRAN is a joint product of



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