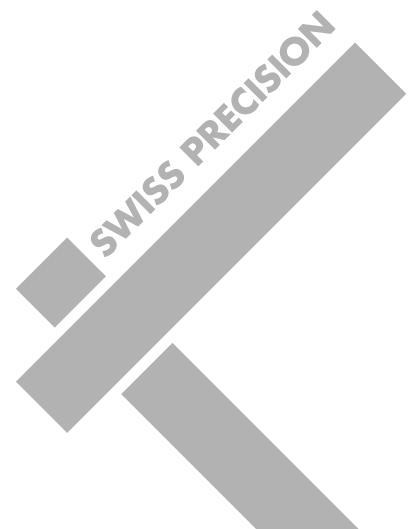




BOPP
Stars of Filtration

bopp.com





BOPP STARS OF FILTRATION

Star filters offer a practical alternative for gentle and uniform drying of moist particulate matter. Fluidised bed drying applications tumble matter in powder form in a hot gas flow where there is a strong mass and heat transfer. The technology is also used for post production drying of spray granulated or

extruded substances with a small amount of residual moisture. The key reason for choosing to install star filters is a potential threefold increase in filter area, retaining the same dimensions.

■ FOR THIS REASON, STAR FILTERS ARE BECOMING INCREASINGLY POPULAR, ESPECIALLY IN THE FOLLOWING INDUSTRIES



• Pharmaceuticals



• Chemicals



• Cosmetics



• Food
• Animal feedstuffs

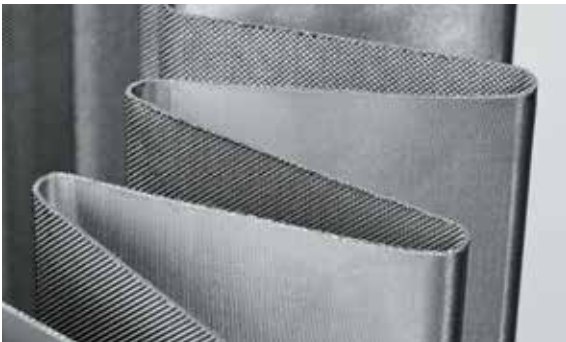




■ THE FOLLOWING EXAMPLE DEMONSTRATES THE ADVANTAGES OF CHANGING TO STAR FILTERS

- **Starting position:** unsatisfactory results using textile filters due to damages, poor cleaning capabilities and life expectancy
- **Seeking alternatives:** tests using stainless steel star filters from various manufacturers
- **Test results:** All stainless steel filters yield improvements, particularly in terms of life expectancy
- **Decision** made to select the BOPP solution, mainly because of the massive reduction in cleaning cycles
- **Situation after one year:**
 - Operational time between cleaning cycles increased by a factor of 9
 - Reduced downtime, therefore increased productivity
 - Massively reduced product wastage achieved through improving the filter laminate
 - Annual savings amounting to a seven figure sum
- **Result:** additional manufacturing plant is converted

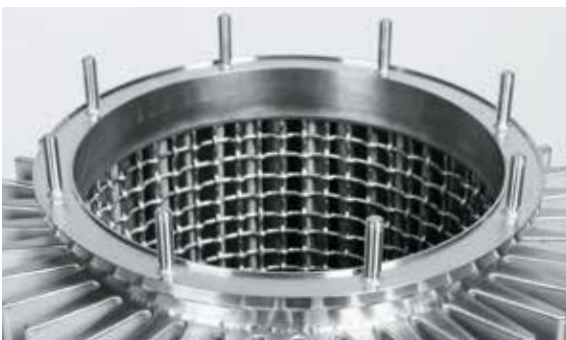
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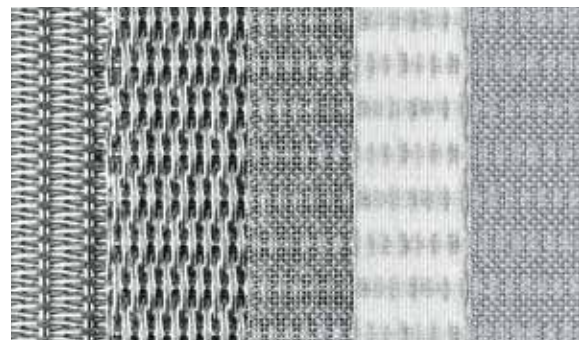
Exact dimensions for each location



Perfect welds, maximum longevity



Precise integration of accessories



Optimum mesh combination to achieve the best results in terms of filtration and cleanability

■ **TO ACHIEVE THE BEST STAR FILTER DESIGN, THE FOLLOWING CRITERIA SHOULD BE TAKEN INTO ACCOUNT WHERE POSSIBLE**

- Material
- Loadings in use; mechanical, thermal and chemical
- Compression ratios
- Flow speeds, volume flow
- Size, dimensions, design
- Location
- Accessories
- Cleanliness demands
- Ergonomics
- Standards requirements

■ **USING THIS REQUIREMENTS PROFILE, SOLUTIONS CAN BE DEVELOPED, CONTAINING THE FOLLOWING ELEMENTS:**

- Material
- Wire diameter
- Aperture count, aperture size
- Filter fineness
- Mesh type, geometry, mesh combination
- Tensile yield point
- Processability
- Weave
- Finishing

■ **BOPP MANUFACTURES PREMIUM STAR FILTERS**

- Efficiency increases due to increased filter area
- Reduced pressure loss through improved filter laminate
- More effective cleaning, reduced cleaning cycles
- CIP (Cleaning in Place)
- Longevity thanks to premium materials
- Improved levels of economy
- Security of supply ('one stop shop')



Stable support mesh for increased flow rates



Creative solutions to meet challenging demands



From one offs to volume production



Safety features designed in for trouble free operation

■ GOOD PRODUCTS DESERVE GOOD SERVICE; THE BOPP OFFER:

- **Worldwide technical advice, including on-site**
Choice of filter media: mesh combinations, materials, design, economy, configuration of accessories
- **Development**
Design proposals, optimisation/testing of alternatives, toolmaking, production of prototypes, production planning
- **Production**
Cost effectiveness determines the level of automation and quality control
- **Procurement**
Accessories can be sourced according to requirements
- **Maintenance**
Replacement parts, refreshing

■ GOOD REASONS TO CHOOSE BOPP

- **Quality**
Our products are manufactured using state of the art equipment. By linking our processes, we avoid communication issues and facilitate integrated quality assurance
- **Economy**
We are continuously developing new ways to increase production efficiency whilst retaining the highest levels of quality
- **Experience**
Over decades, we have analysed and optimised hundreds of challenging filtration processes and developed numerous new solutions
- **Reproducibility**
We maintain a process-oriented approach and therefore guarantee optimum reproducibility
- **Security**
We operate in an economically and socially stable environment and can offer above average levels of availability, combined with extensive stockholding
- **Environmental protection**
Our plant and equipment meets the latest standards in terms of energy consumption and sustainability. We are active participants in energy reduction programmes and are members of Cleantech organisations.

■ THE BOPP GROUP

G. BOPP + CO. AG is one of the world's leading manufacturers of precision woven wire mesh and sintered laminates, operating from locations in Switzerland, Germany, England, Italy, Sweden, USA, Korea and China. These premium quality products are used as square weave meshes for sieving and sizing, in screen printing and as filter cloths and laminates in diverse applications worldwide. Fabricated products are used in almost every industrial sector, such as chemicals, pharmaceuticals, plastics, mechanical engineering, the paper industry and environmental technology through to aviation and space travel.



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