

BOPP Composite Meshes



www.bopp.com

«THE ART OF SWISS PRECISION»

BOPP – Your partner for composite meshes



Zurich headquarters

Established in 1881 in Switzerland, G. BOPP + Co. AG soon developed from a manufacturer of coarse mesh products into a world leader for the finest high tech filter meshes. The very finest wire diameters from as little as 0.015mm are woven to the highest standards of quality into high tech filter meshes for a comprehensive range of applications in filtration. BOPP supplies a global market and has subsidiary companies in Germany, UK, Italy, Sweden, USA, Korea and China.

Know-How from decades of experience

BOPP has been manufacturing composite meshes for almost 40 years. Over this time, we have amassed a wealth of experience, constantly developing our portfolio. Once measuring just 500mmx500mm in diameter, we can now produce discs up to 1200mmx1200mm, which can be welded together using our own production techniques developed in-house to create composite discs measuring several metres in diameter. Today, we continue to achieve new milestones in mesh processing and fabrications. Take a look at our growing range of services.



Welded composite discs up to 3 metres in diameter

Our production principles

We only use premium raw materials in the manufacture of our products. Processing takes place in dust-free, air-conditioned workshops using modern equipment and high

precision weaving machines developed in-house. Combined with comprehensive quality control processes, we guarantee optimum quality, cleanliness and accuracy.

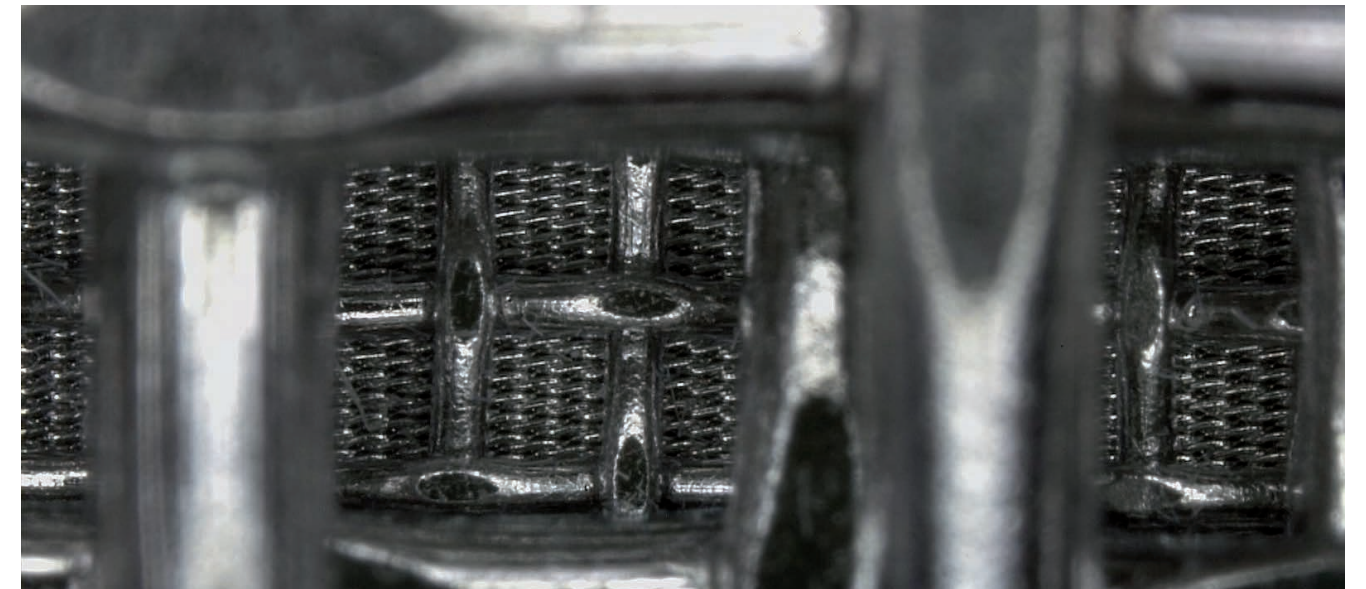


Weaving room

The fundamental principle of sintering

BOPP manufactures a comprehensive range of single layer meshes. Each design has its own individual properties and strengths. During the sintering process, selected meshes are bonded together using heat and pressure. This effectively combines the advantages of the individual mesh layers and

facilitates optimised filtration processes. Composite meshes created this way allow for the finest filtration results and are especially resistant to compressive loading across the entire surface, thanks to thousands upon thousands of points of contact between the support and filter layers.

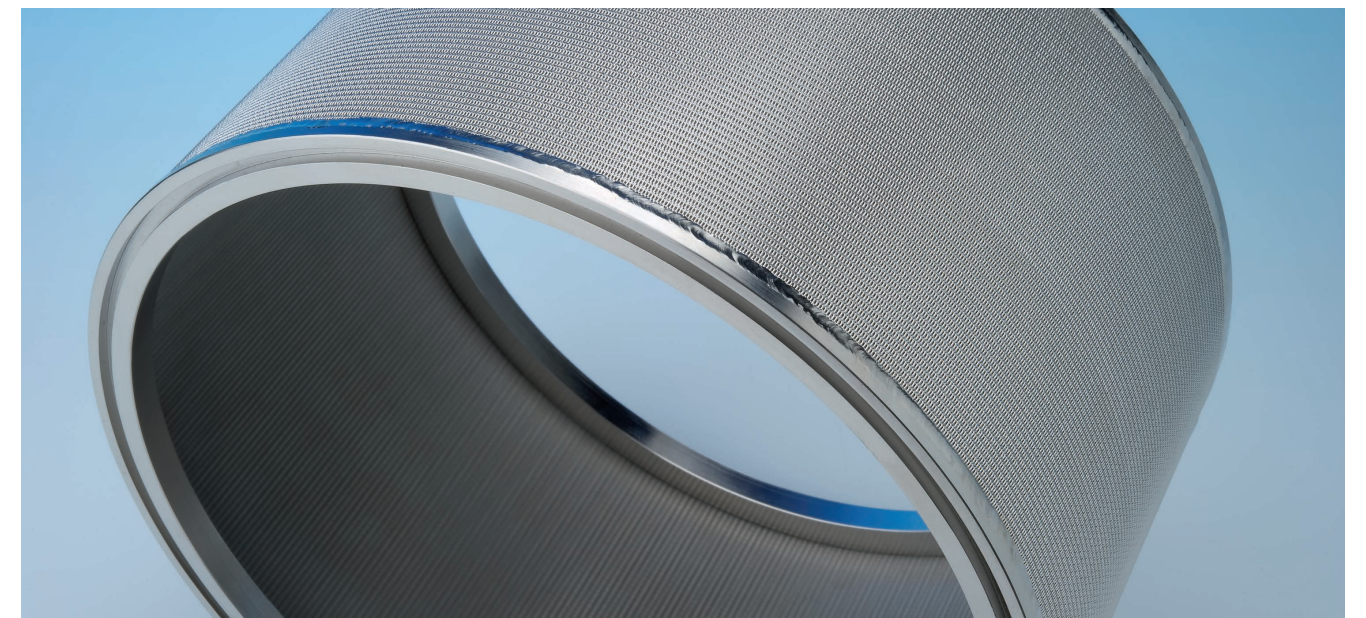


Multilayer composite meshes under the high-performance microscope

Composite meshes for demanding filtration applications

Multi-layer meshes are particularly suited to demanding filtration applications for a variety of reasons. Standard two-, three- and five-layer composite meshes offer many additional advantages alongside improvements in physical stability and longevity, which more than compensate for the slightly higher cost price.

Building on our experience in the most diverse practical applications, over the years we have developed a standard portfolio of products covering a broad spectrum of industrial challenges. For certain applications, it may be advisable to select a bespoke material or style of weave. The individual mesh layers can be combined in almost any configuration.



Customised composite meshes

Properties and advantages of BOPP composite meshes

Using state of the art technologies and equipment, we optimise our meshes and sinter these to form composite meshes, targeting even more impressive benefits for your application.

Aperture sizes

Extremely precise apertures and aperture size distribution across the entire surface of the composite mesh.

Robust

Our composite meshes demonstrate exceptional robustness to mechanical and thermal influences. Dependent upon the alloys, the composite meshes are capable of withstanding temperatures up to 600°C.

Longevity

Our composite meshes excel in terms of longevity and therefore reduced downtime.

Cleanability

The relatively smooth mesh surfaces are easy to clean and can withstand higher backwashing pressures.

Load

Reduced loading of the filter media with pulsation.

Dimensions

Disc sizes up to 1200mm x 1200mm without welds.

Flow rates

Our composite meshes are specially designed for high flow rates.

Corrosion resistance

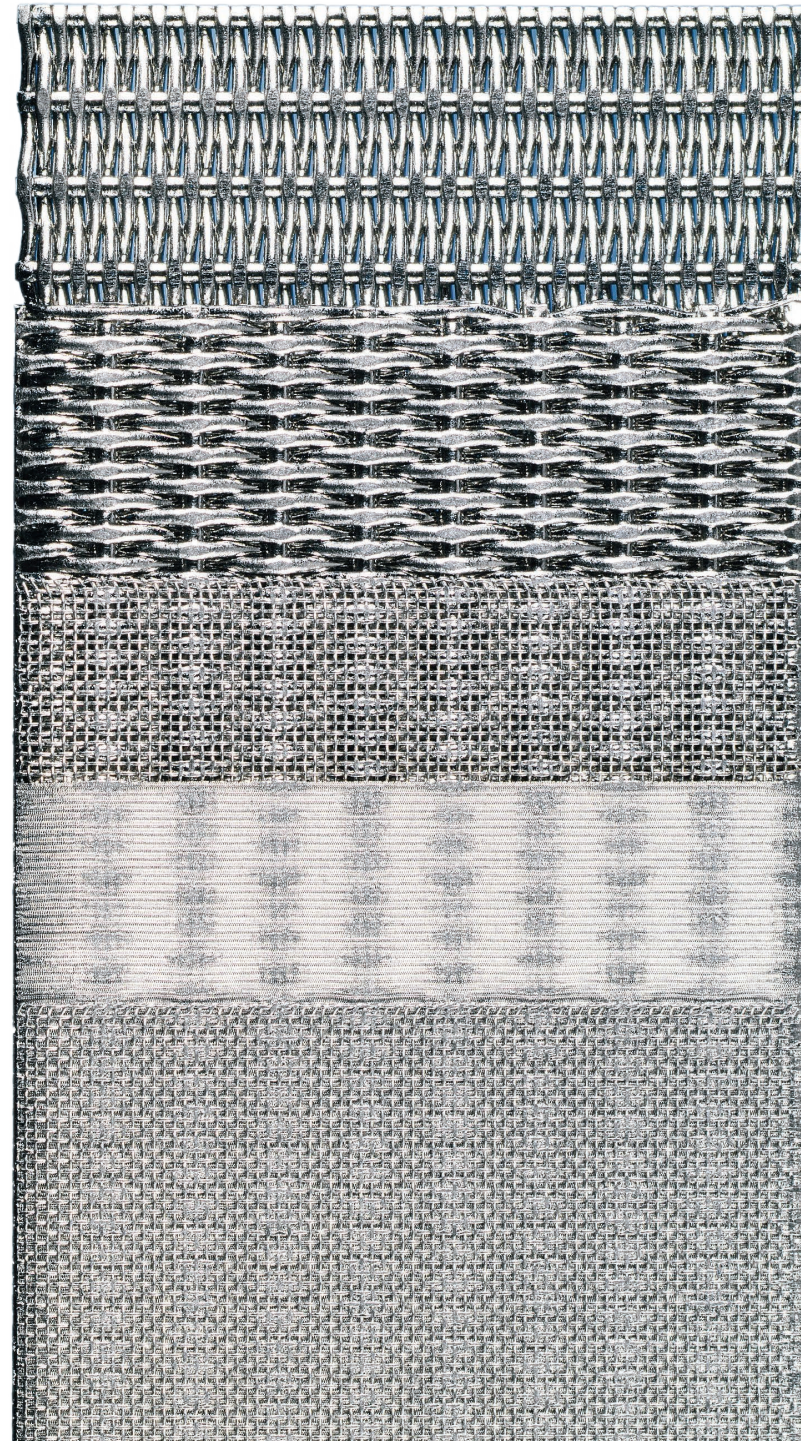
Use of high-grade materials such as stainless steel, Hastelloy, etc results in increased levels of corrosion resistance.

Quality

Our manufacturing processes are designed to achieve high levels of product quality thanks to special attention to reproducibility.

Customer specific

Individually selectable layering and combinations of up to 1000 mesh layers are possible.



Composite meshes in action

Composite meshes from BOPP provide a reliable choice for applications where single layer meshes reach their limits due to restricted stability. They provide the ideal solution for many different sectors.



Biotech/Pharma

Used primarily in chromatography columns, composite meshes demonstrating high precision filter pores form the key component of this equipment.



Chemical Industry

Whether in gas or liquid form, our composite meshes achieve high precision filtration results and a faultless product.



Plant and Equipment

Our Nutsche filters using Absolta and Poremet provide the perfect choice, in sections with or without curved surface or in the shape of discs



Water Industry

Everywhere increased water pressure occurs in filtration applications, our Absolta and Topmesh-PLUS 2 & 3 offer the ideal solution.



Drinks Industry

Premium white wines are usually filtered in sheet filters using Topmesh 3, whilst breweries choose Absolta for source water filtration.



Food Industry

Whether filtering additives or operating in environments where robustness is a particular requirement, composite meshes are the material of choice.



Fluidisation

Poreflo is our solution where fine particulates need to be transferred to a flowable state, as for example commonly found in silos.



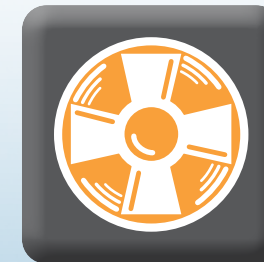
Fuel Filtration

Composite meshes used in the filtration of diverse fuels ensure low wear engine operation and an extended service life.



Green Technology

Mostly customised composite meshes are used in green technology applications. See page 14.



Wind tunnels

Aerodynamic effects in wind tunnels can be created using multi-layer meshes. See page 14.



Acoustics

Acoustic meshes ensure perfect sound quality. Where the mesh must also provide ingress protection, we added a laminated support layer.



Air and Space Travel

Composite meshes are primarily used in rocket engines for mixture control.



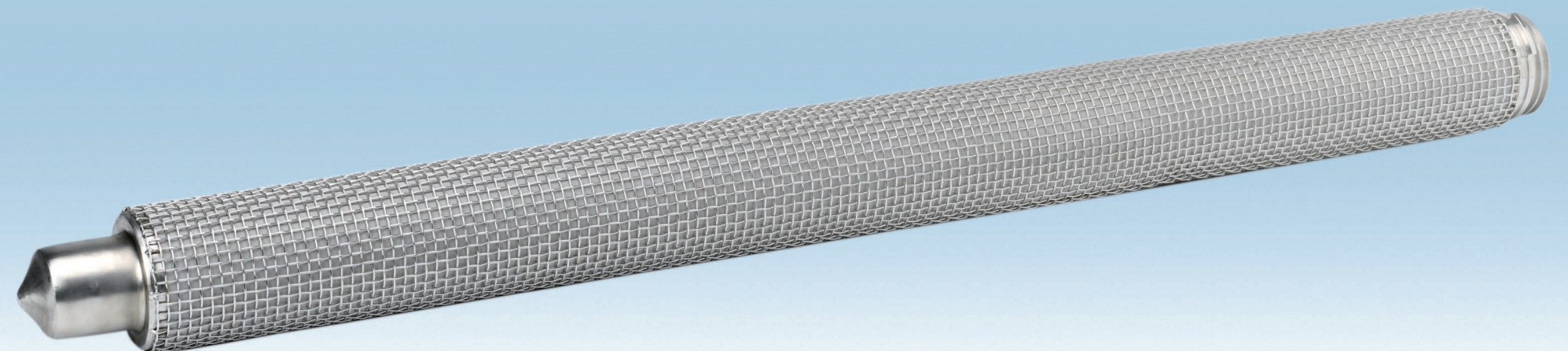
Air

Either for increased air flow or in drying applications at high temperatures, our composite meshes provide reliable service.



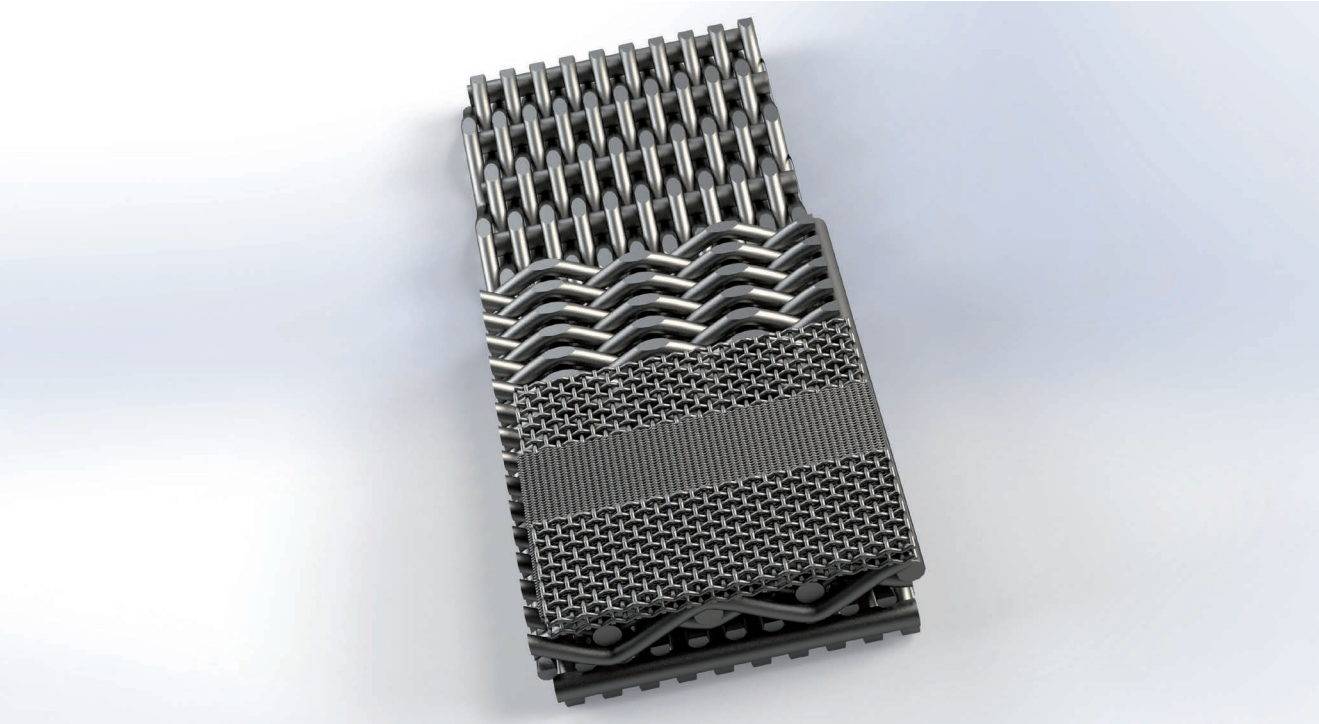
Hydraulics

Filters using composite meshes for high compressive loads protect the hydraulic equipment from foreign particles and abrasion.



POREMET

This lead-like filter medium with highly precise apertures consists of five different wire cloth layers, put together so precisely that they achieve the optimum combination of stability, filter fineness, flow rate and backwashing properties. POREMET is particularly suitable for fine and finest filtration applications at high pressures and harsh operating environments.



Materials

- DIN 1.4404 / AISI 316L, DIN 1.4539 / AISI 904L
- Hastelloy alloys C22 / DIN 2.4602
- Other materials available on request

Application recommendations

Filtration of highly viscous liquids: Nutsche filters, centrifuges, fluidised beds, applications in biotechnology.

Layer build-up

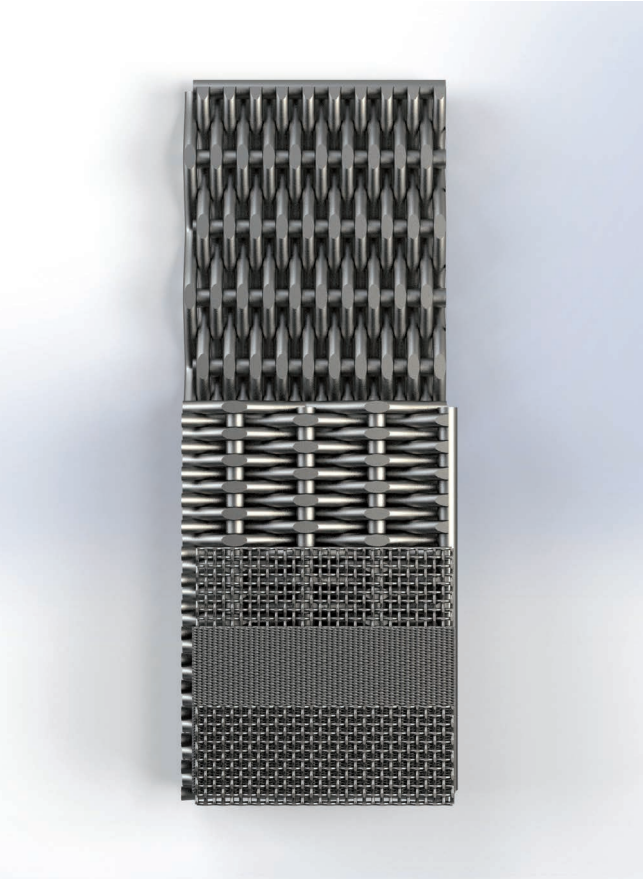
- Protective layer of square weave mesh, protects the filter mesh against damage
- Filtration layer, defines the filter fineness
- Distribution layer (square weave mesh), drainage mesh
- Upper twilled layer, support mesh
- Lower twilled layer, support mesh

Geometric pore size

10–90 microns

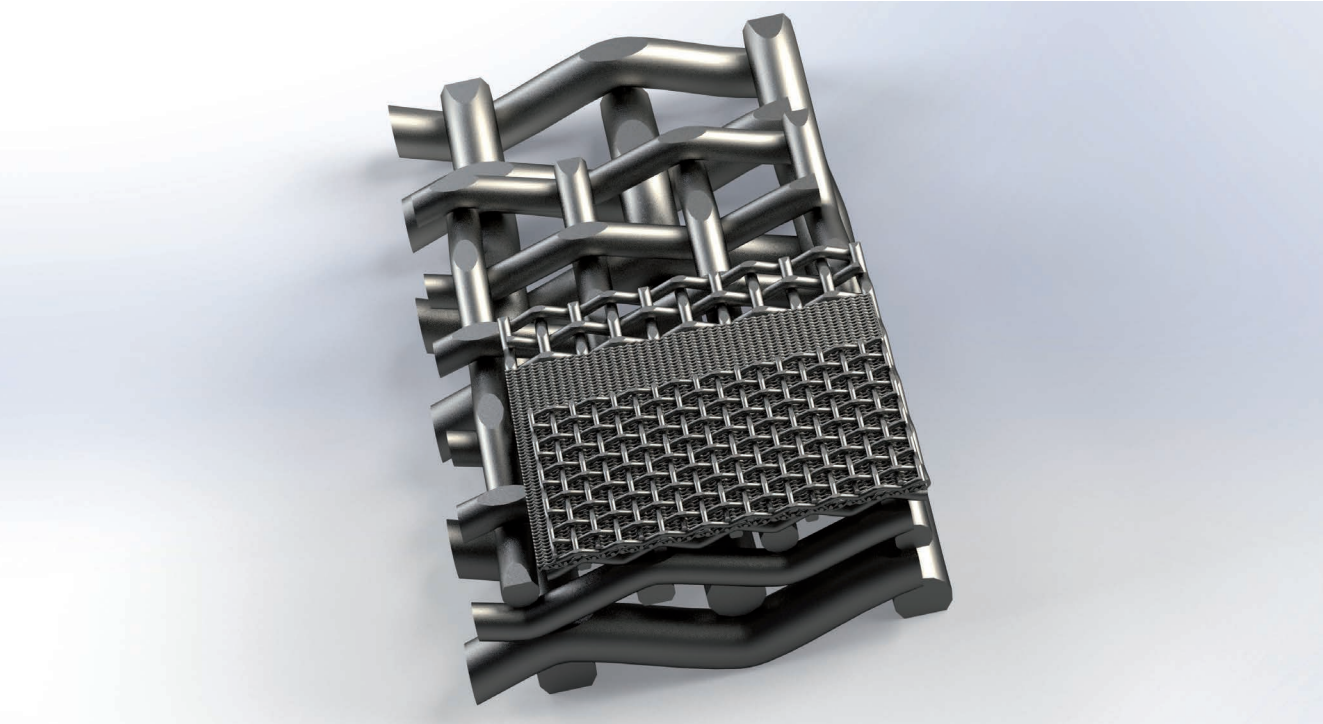
Thickness

1.7mm (Other thicknesses on request)



ABSOLTA

In contrast to POREMET, **ABSOLTA N** is a highly porous filter medium developed to achieve increased flow rates at moderate pressures. ABSOLTA is particularly useful for its cleanability and backwashing capabilities. **ABSOLTA D** is also a five layer structure at a reduced thickness.



Materials

- DIN 1.4404 / AISI 316L, DIN 1.4539 / AISI 904L
- Hastelloy alloys C22 / DIN 2.4602
- Other materials available on request

Application recommendations

Optimum flow rates and backwashing properties make ABSOLTA ideal for applications in liquid and gas filtration.

Layer build-up

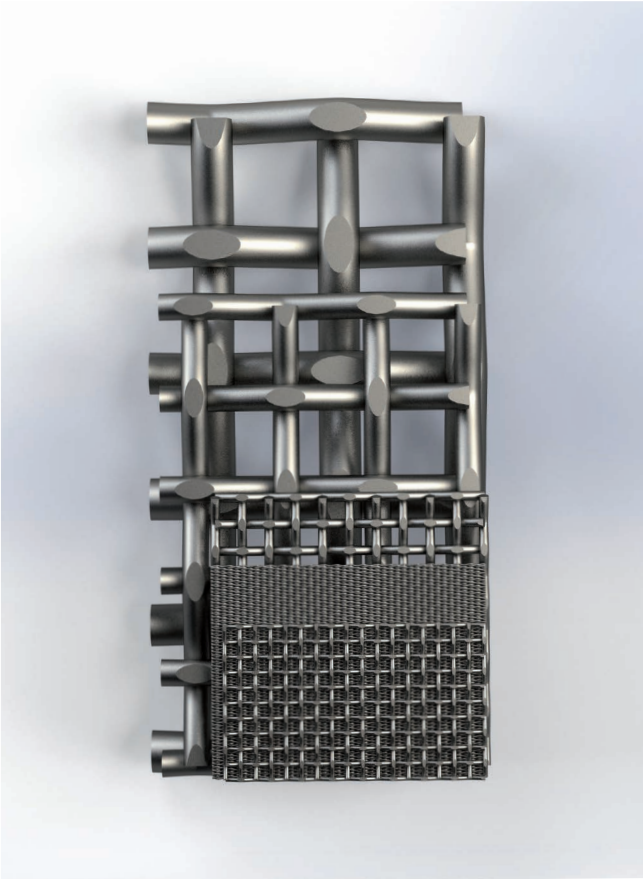
- Protective layer of square weave mesh, protects the filter mesh against damage
- Filtration layer, defines the filter fineness
- Distribution layer (square weave mesh), drainage mesh
- Inner support mesh, square weave mesh
- Outer support mesh, square weave mesh

Geometric pore size

10–90 microns

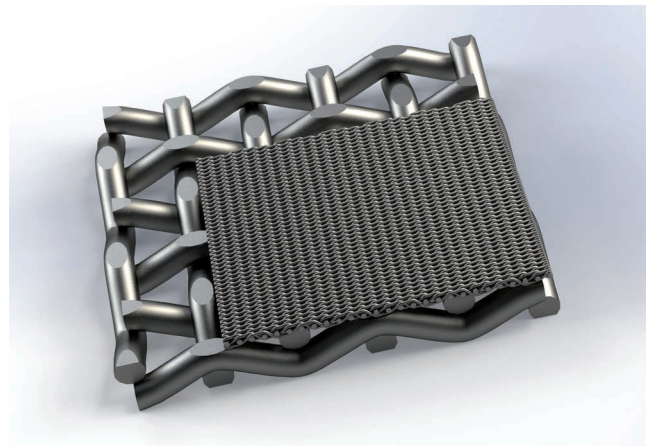
Thickness

2.4mm, (ABSOLTA D 1.70–1.80mm)



TOPMESH 2

TOPMESH 2 was developed to compensate for the reduced rigidity of fine filter cloths. Combining a filter cloth with a square weave support mesh provides stability at moderate pressures combined with good backwashing properties. A minimal number of layers means reduced pressure loss combined with effective backwashing. TOPMESH 2 is therefore ideal for CIP (Cleaning in Place) filters in the pharmaceutical industry. For applications where high pressure loads and larger diameter units are used, additional support media will be required.

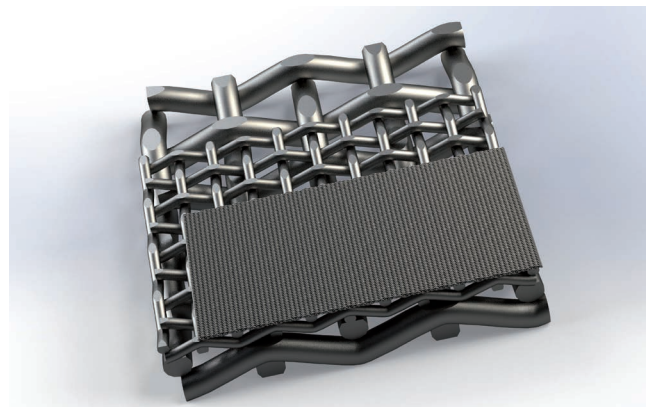


Application recommendations

Filters for the separation of separate solids and liquids, surface filtration for particulate separation, sieve plates, aeration filters, hydraulic filters, backwashing filters (also automated), cleaning baskets for small components.

TOPMESH 3

In comparison with TOPMESH 2, this laminate features an additional bonded layer between the filter mesh and the square weave support mesh. Constant low flow resistance and good backwashing capabilities enable higher pressure loads to be handled. TOPMESH 3 is particularly suitable for use with CIP (Cleaning In Place) filters.



Application recommendations

As TOPMESH 2 as well as for sturdy aeration filters, Nutsche filter floors, spray driers, drying plant, container baskets for cleaning plant and filter drums for coolant lubrication equipment.

Layer build-up

- Filtrationlayer, defines the filter fineness
- Inner support mesh (TOPMESH 3)
- Outer support mesh

Geometric pore size

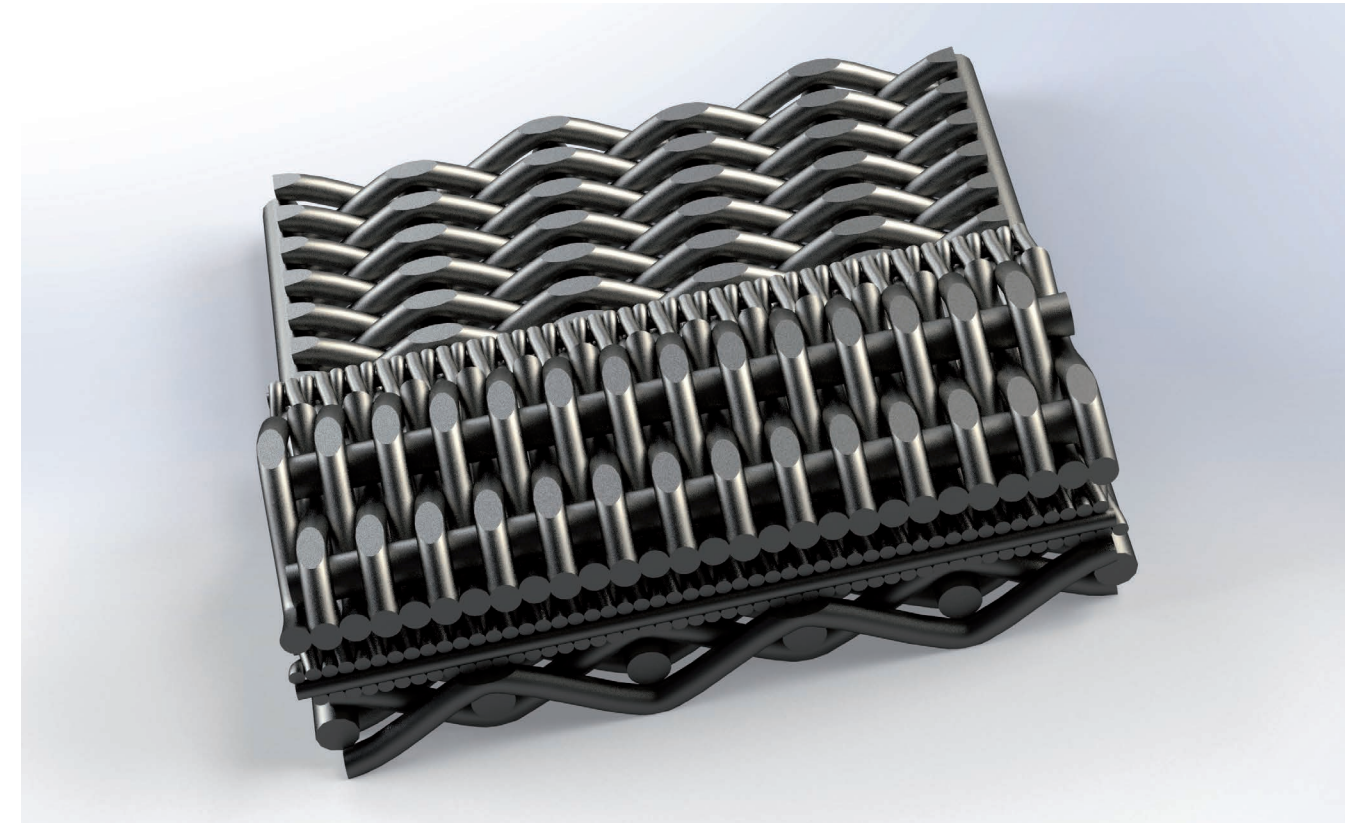
10–500 microns

Thickness

0.7–2mm

POREFLO

POREFLO is a two or three layer mesh featuring offset layers of twilled wire cloth. The resultant thickening of the surface changes the composite mesh into a highly stable, air permeable metallic membrane with reduced porosity. POREFLO is particularly suitable for applications where high levels of flow resistance are required.



Application recommendations

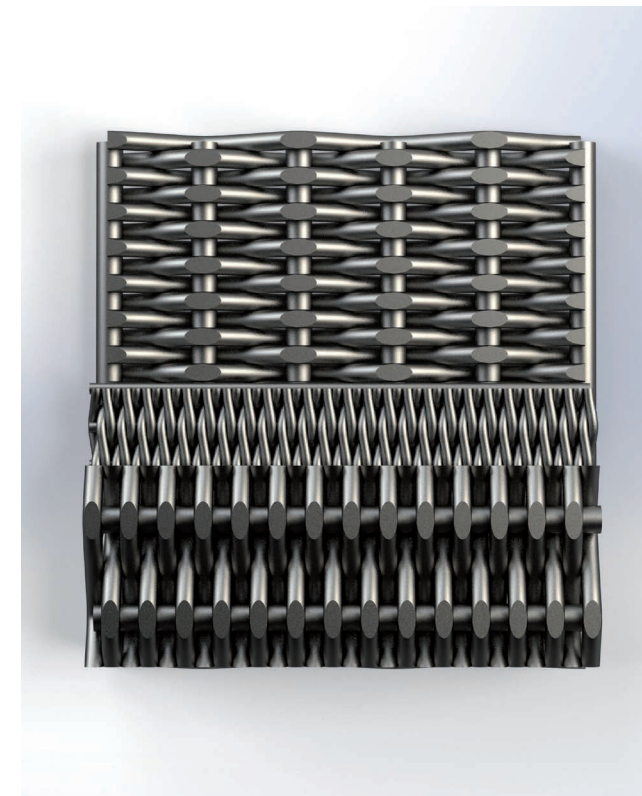
Fluidisation elements, fluidised bed floors, aeration elements, pneumatic conveyor troughs, silo applications

Layer build-up

- Protective layer / Distribution layer
- Distributor layer
- Support layer

Thickness

0.85–1.60mm



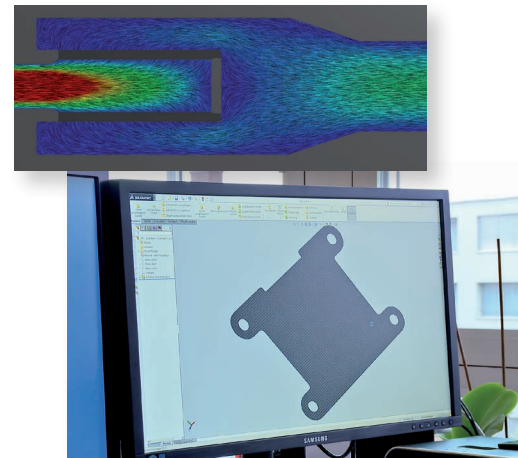
BOPP – our expanded range of services

BOPP is not only a world leader in outstanding composite meshes but also specialises in further processing these meshes. Our comprehensive selection of plant and equipment enables us to process composite meshes into semi-finished goods, produced to individual customer specifications.

Engineering

We are pleased to support you in choosing the correct mesh specification in terms of flow values, material properties, geometric form and component layout with:

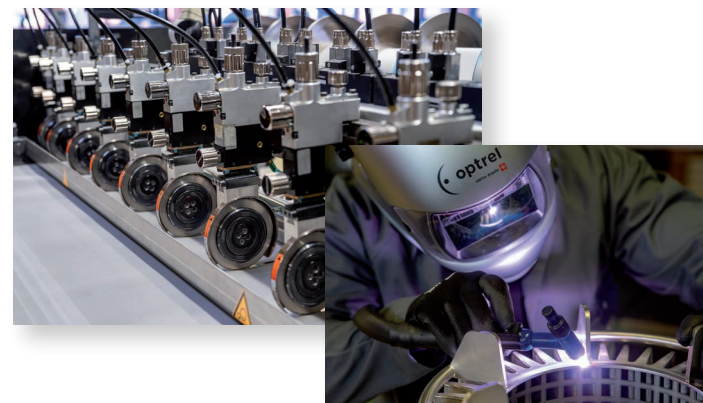
- Demand analyses
- Materialisation recommendations
- Design suggestions
- Design drawings
- Cost calculations
- Production technology



Fabrications

We fabricate our meshes into semi-finished goods and finished goods and also into complete assemblies to customer requirements using:

- Precision cutting – perfect cut edges and angularity
- Forming, bending, deep drawing, edging
- Welding, soldering, annealing, tensioning
- Stamping
- Building prototypes, one-offs
- Automated mass production
- Process oriented packaging
- Laser cutting



Thermal Treatment

Using a variety of treatments, the mechanical properties of materials such as hardness, elasticity and plasticity can be matched to further processing requirements.

- Workability optimisation
- Variable hardness and plasticity
- Elimination of loose wires on DKS meshes
- Stress relief annealing

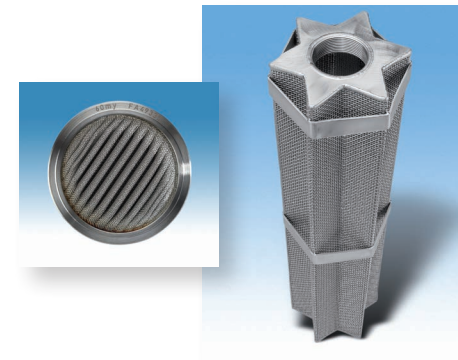


Moulded Parts

On request, we can fabricate our meshes into moulded parts to your individual specifications.

For example:

- Filter frames
- Filter candles
- Star filters
- Discs
- Pleated filters
- And many more



Coatings

Hydrophobic, hydrophilic, grey scale to black or inscribed, our coatings add so much more to your filter meshes without having any detrimental effect on the aperture size.

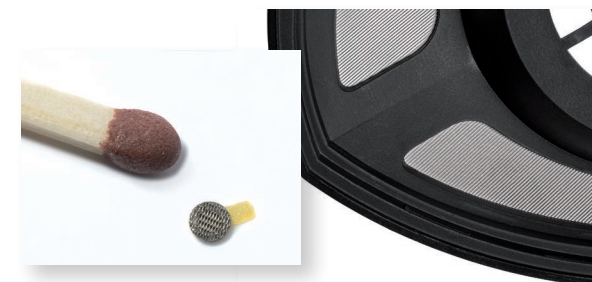
- Applied to selected areas of the mesh
- Chemically resistant
- UV resistant
- Temperature resistance from -50°C to 200°C



Partnering

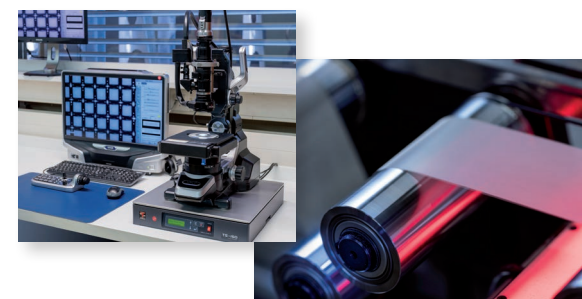
In partnership with renowned companies across the globe, we can also offer additional fabrication and processing capabilities for tasks including:

- Component assemblies
- And many more



Quality Control, Measuring

- Customer-specific quality control processes
- Issue of measuring protocols
- Certification, attestations
- Flow measurement
- Glass bead testing
- Bubble point testing



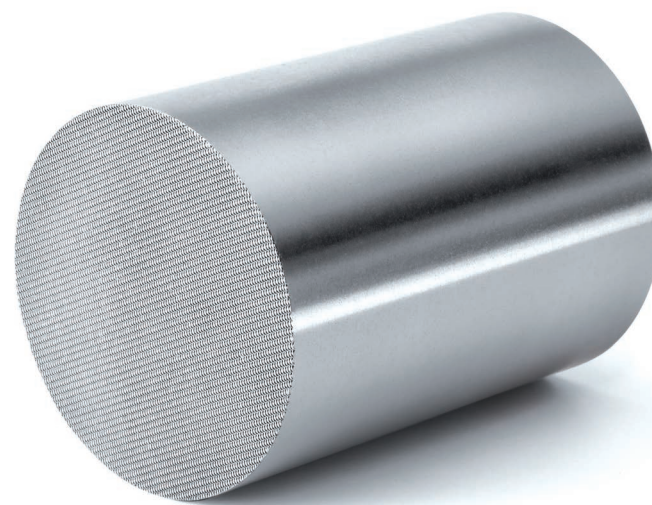
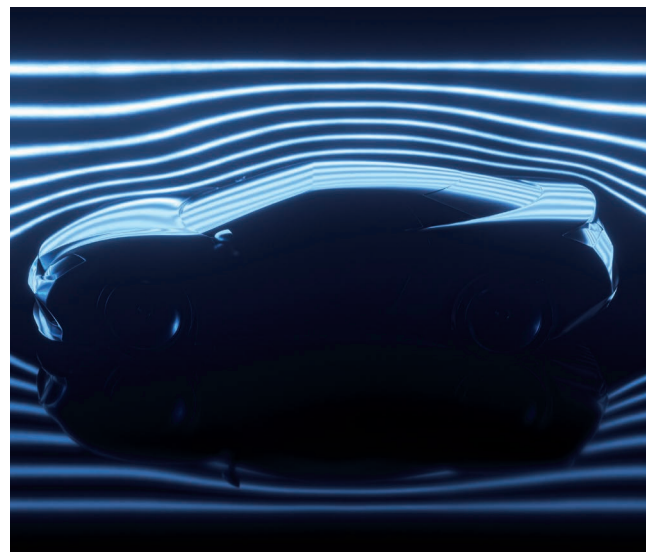
Your individual solution – our strong point

At BOPP, we focus closely on each individual application. And as no one application is the same as another, we are happy to develop and manufacture composite meshes to meet your bespoke requirements.

Sometimes, even the five layers in our standard product range are not enough to withstand the high mechanical loads of your operating environment. No problem – our composite meshes can be further enhanced with the use of additional support layers. **Seven and ten layer meshes** with thicknesses from three to five millimetres have proved especially effective. For optimum performance, the support layers are arranged at 90° angles to each other.



- One application example can be found in testing aerodynamic performance of vehicles in wind tunnels. The resulting border vortex which does not occur under normal driving conditions is sucked away by reinforced composite mesh plates which can withstand the weight of the vehicle.
- BOPP has already successfully manufactured many sintered assemblies comprising hundreds of layers of mesh for the construction of experimental Stirling engines. These allow efficiency values to be enhanced significantly due to the reduced heat absorption/output.
- Customers in the chemical and pharmaceutical industries rely on double-sided sintered solutions, where the layer stack and the support layers feature a filter layer on both sides. This facilitates filtration in both directions of flow.



Composite-PLUS

In 2021, we brought to market a further development of our most advanced filter mesh – Betamesh-PLUS. These exceptional filter meshes can now be integrated as filter layers in composite meshes and can be ordered under the name Composite-PLUS. Benefit from a range of innovative features.



With specifications down to an aperture size of just five microns alongside high flow rates, previously unachievable filtration results are now possible using multi-layer composite meshes POREMET, ABSOLTA and TOPMESH 2 & 3.

The filter layers

For our Composite-PLUS we have replaced the existing filter layers with Betamesh-PLUS meshes. These meshes offer not only additional specifications with geometric pore sizes of 5, 6, 7, 8 and 12 micrometres with excellent flow rates, but also offers a newly staggered optimum grading between the individual specifications.

Thanks to elongated entry apertures with Betamesh-PLUS, filtration takes place at the surface of the mesh. This prevents blockages and allows for good cleaning properties with the filter cake building on the surface of the mesh. This is also valid for POREMET-PLUS and ABSOLTA-PLUS, where the filter layer is integrated at the second level of the mesh.

Increase in productivity

Higher flow rates are reflected directly by reduced energy requirements in the filtration process, which not only contribute to an improved environmental balance but also to reduced operational costs.

Reduced space requirements

In general, for larger filter flows the required component layout is smaller. This saves on installation space as well as material costs.

Technical data Composite-Meshes

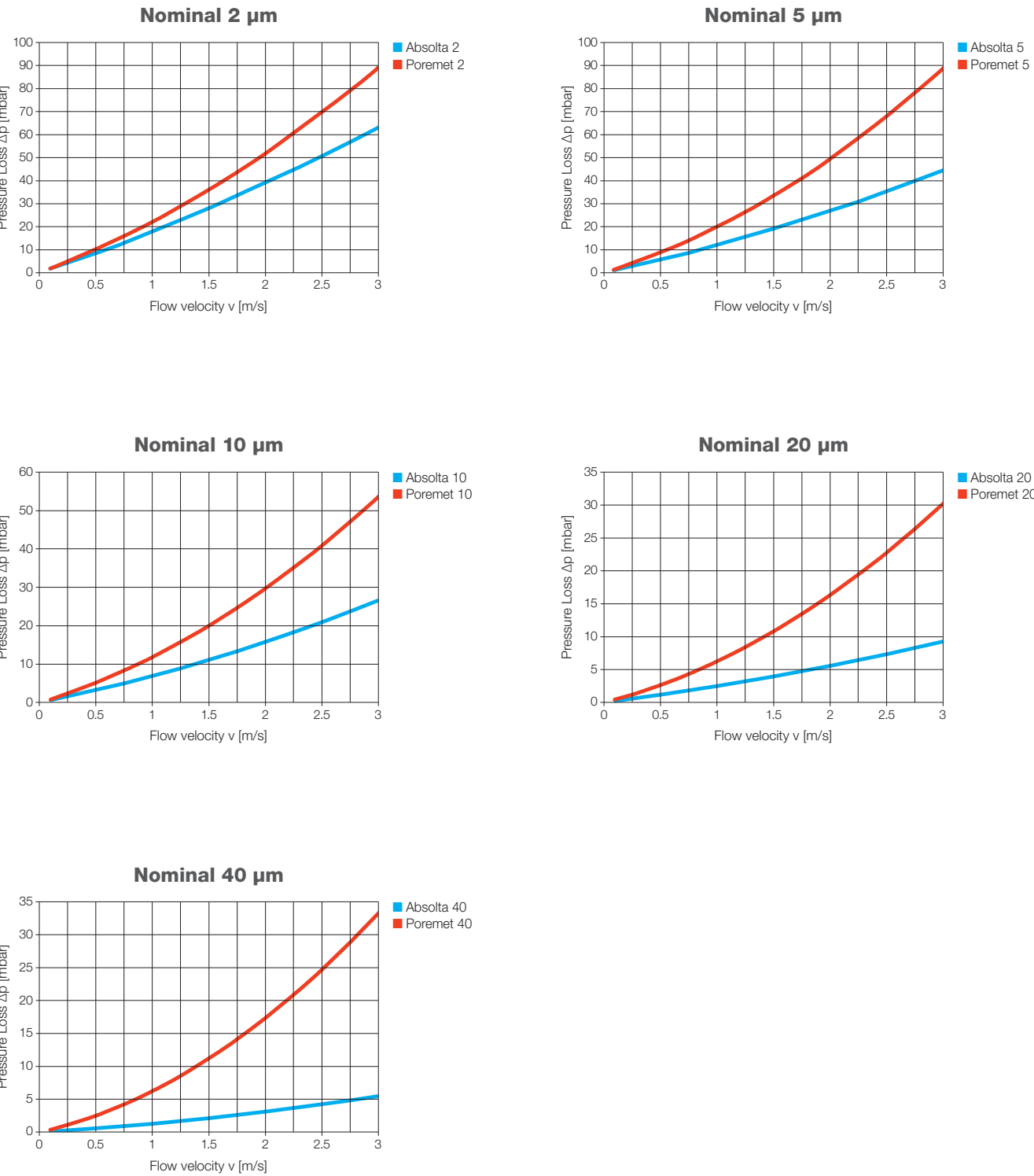
Mesh type	Mesh description	Geometric pore size [µm]	Thickness [mm]	Porosity [%]	A _{sk} resp. A _{ss} [mm²/cm]	R _{p0.2} [N/cm]	Weight [kg/m²]	Specific flow coefficient [EU]
Poremet	Poremet 2	10	1.7	30	5.5	1080	9.25	4681
	Poremet 5	14	1.7	30	5.5	1080	9.60	4111
	Poremet 10	21	1.7	30	5.5	1080	9.55	2440
	Poremet 15	20	1.7	30	5.5	1080	9.10	1282
	Poremet 20	25	1.7	30	5.5	1080	9.15	1244
	Poremet 30	35	1.7	30	5.5	1080	9.29	1183
	Poremet 40	50	1.7	30	5.5	1080	9.55	1163
	Poremet 50	60	1.7	30	5.5	1080	9.70	1103
	Poremet 60	75	1.7	30	5.5	1080	10.00	1501
	Poremet 75	90	1.7	30	5.5	1080	10.15	1449
Absolta	Absolta 2	10	2.4	55	4.9	780	8.40	4194
	Absolta 5	14	2.4	55	4.9	780	8.75	2749
	Absolta 10	21	2.4	55	4.9	780	8.70	1548
	Absolta 15	20	2.4	55	4.9	780	8.25	546
	Absolta 20	25	2.4	55	4.9	780	8.30	462
	Absolta 30	35	2.4	55	4.9	780	8.44	401
	Absolta 40	50	2.4	55	4.9	780	8.70	280
	Absolta 50	60	2.4	55	4.9	780	8.85	253
	Absolta 60	75	2.4	55	4.9	780	9.15	222
	Absolta 75	90	2.4	55	4.9	780	9.30	197
Topmesh 3-layer	TM3-KT 2	10	2.0	60	3.6	573	6.25	3847
	TM3-KT 5	14	2.0	60	3.6	573	6.60	2528
	TM3-KT 10	21	2.0	60	3.6	573	6.55	1273
	TM3-BM 15	15	2.0	60	3.6	573	6.10	469
	TM3-BM 20	20	2.0	60	3.6	573	6.10	448
	TM3-BM 25	25	2.0	60	3.6	573	6.17	356
	TM3-BM 30	30	2.0	60	3.6	573	6.25	336
	TM3-QM 40	40	2.0	60	3.6	573	5.95	98
	TM3-QM 50	50	2.0	60	3.6	573	6.00	72
	TM3-QM 80	80	2.0	60	3.6	573	6.05	51
	TM3-QM 100	100	2.0	60	3.6	573	6.10	45
	TM3-QM 150	150	2.0	60	3.6	573	6.30	38
	TM3-QM 200	200	2.0	60	3.6	573	6.40	31
	TM3-QM 500	500	2.0	60	3.6	573	7.40	27
Topmesh 2-layer	TM2-KT 2	10	0.7	60	1.3	207	2.45	3710
	TM2-KT 5	14	0.7	60	1.3	207	2.80	2585
	TM2-KT 10	21	0.7	60	1.3	207	2.75	1304
	TM2-BM 15	15	0.7	60	1.3	207	2.30	537
	TM2-BM 20	20	0.7	60	1.3	207	2.30	437
	TM2-BM 25	25	0.7	60	1.3	207	2.37	363
	TM2-BM 30	30	0.7	60	1.3	207	2.45	345
	TM2-BM 40	40	0.7	60	1.3	207	2.60	236
	TM2-QM 50	50	0.7	60	1.3	207	2.20	67
	TM2-QM 60	60	0.7	60	1.3	207	2.20	58
	TM2-QM 80	80	0.7	60	1.3	207	2.25	49
	TM2-QM 100	100	0.8	60	1.3	207	2.30	40
	TM2-QM 150	150	0.8	60	1.3	207	2.50	35
	TM2-QM 200	200	1.4	60	1.3	207	2.60	29
	TM2-QM 500	500	1.4	60	1.3	207	3.60	16
Poreflo	Poreflo 303		1.25	14	5.4	1101	8.64	58'092
	Poreflo 304		1.45	18	5.4	1101	9.64	32'010
	Poreflo 305		1.60	19	5.4	1101	9.92	19'709
	Poreflo 206		0.85	12	4.9	1016	5.99	79'718
	Poreflo 207		1.00	18	4.9	1016	6.49	8655
	Poreflo 208		1.05	20	4.9	1016	6.72	4015
	Poreflo 209		1.20	31	4.9	1016	6.63	768

- **Geometric pore size x_{900}** Based on characteristic mesh parameters including style of weave, wire diameter and division of calculated value. Describes the diameter of the largest spherical bead capable of passing through the mesh.
- **Yield point $R_{p0.2}$** Maximum permissible loading on the mesh in warp or weft direction, without significant permanent deformation.
- **A_{sk}** Actual material cross section on the cut surface of a vertical cut in the warp direction through the mesh. This material cross sectional area transmits the tensile forces in the warp direction.
- **A_{ss}** Actual material cross section on the cut surface of a vertical cut in the weft direction through the mesh. This material cross sectional area transmits the tensile forces in the weft direction.
- **Porosity** Proportion of the open area of the mesh to the given total volume of the mesh. The total volume is defined by the external dimensions length, width and thickness.
- **A_{oret}** Theoretical free flow area, through which the filtrate can pass, in relation to the flow surface.
- **Eu** Dimensionless property (Euler's number) to assess the relationship of the pressure to the inertial forces of each respective mesh specification. Higher values denote higher pressure differential values under the same conditions (Air, 20 m/min, 20 °C). The values are merely intended to compare the meshes in terms of flow resistance.
- We reserve the right to make technical changes. The latest data can be found on our website.
- On request, bespoke meshes can be manufactured to individual customer specifications in all formats.

Technical data Composite-PLUS

Mesh type	Mesh description	Geometric pore size [µm]	Thickness [mm]	Porosity [%]	A _{sk} resp. A _{ss} [mm²/cm]	R _{p0.2} [N/cm]	Weight [kg/m²]	Specific flow coefficient [EU]
Poremet-PLUS	Poremet-PLUS 5	5	1.7	30	5.5	1080	9.05	3345
	Poremet-PLUS 6	6	1.7	30	5.5	1080	9.05	3050
	Poremet-PLUS 7	7	1.7	30	5.5	1080	9.05	2438
	Poremet-PLUS 8	8	1.7	30	5.5	1080	9.10	2225
	Poremet-PLUS 10	10	1.7	30	5.5	1080	9.10	1981
	Poremet-PLUS 12	12	1.7	30	5.5	1080	9.10	1831
	Poremet-PLUS 15	15	1.7	30	5.5	1080	9.10	1704
	Poremet-PLUS 20	20	1.7	30	5.5	1080	9.10	1282
	Poremet-PLUS 25	25	1.7	30	5.5	1080	9.25	1250
	Poremet-PLUS 30	30	1.7	30	5.5	1080	9.40	1217
	Poremet-PLUS 35	35	1.7	30	5.5	1080	9.55	1163
	Poremet-PLUS 40	40	1.7	30	5.5	1080	9.70	1103
	Poremet-PLUS 50	50	1.7	30	5.5	1080	10.00	1501
	Poremet-PLUS 70	70	1.7	30	5.5	1080	10.15	1449
Absolta-PLUS	Absolta-PLUS 5	5	2.4	55	4.9	780	8.20	2370
	Absolta-PLUS 6	6	2.4	55	4.9	780	8.20	2022
	Absolta-PLUS 7	7	2.4	55	4.9	780	8.20	1456
	Absolta-PLUS 8	8	2.4	55	4.9	780	8.25	1300
	Absolta-PLUS 10	10	2.4	55	4.9	780	8.25	1005
	Absolta-PLUS 12	12	2.4	55	4.9	780	8.25	835
	Absolta-PLUS 15	15	2.4	55	4.9	780	8.25	713
	Absolta-PLUS 20	20	2.4	55	4.9	780	8.25	546
	Absolta-PLUS 25	25	2.4	55	4.9	780	8.40	396
	Absolta-PLUS 30	30	2.4	55	4.9	780	8.55	320
	Absolta-PLUS 35	35	2.4	55	4.9	780	8.70	280
	Absolta-PLUS 40	40	2.4	55	4.9	780	8.85	253
	Absolta-PLUS 50	50	2.4	55	4.9	780	9.15	222
	Absolta-PLUS 70	70	2.4	55	4.9	780	9.30	197
Topmesh-PLUS 3-layer	TM3-PLUS 5	5	2.0	60	3.6	573	6.05	2250
	TM3-PLUS 6	6	2.0	60	3.6	573	6.05	1900
	TM3-PLUS 7	7	2.0	60	3.6	573	6.05	1271
	TM3-PLUS 8	8	2.0	60	3.6	573	6.10	1096
	TM3-PLUS 10	10	2.0	60	3.6	573	6.10	816
	TM3-PLUS 12	12	2.0	60	3.6	573	6.10	669
	TM3-PLUS 15	15	2.0	60	3.6	573	6.10	469
	TM3-PLUS 20	20	2.0	60	3.6	573	6.10	448
	TM3-PLUS 25	25	2.0	60	3.6	573	6.25	336
	TM3-PLUS 30	30	2.0	60	3.6	573	6.40	247
	TM3-PLUS 35	35	2.0	60	3.6	573	6.55	197
	TM3-PLUS 40	40	2.0	60	3.6	573	6.70	185
Topmesh-PLUS 2-layer	TM2-PLUS 5	5	0.7	60	1.3	207	2.25	2176
	TM2-PLUS 6	6	0.7	60	1.3	207	2.25	1917
	TM2-PLUS 7	7	0.7	60	1.3	207	2.25	1341
	TM2-PLUS 8	8	0.7	60	1.3	207	2.30	1185
	TM2-PLUS 10	10	0.7	60	1.3	207	2.30	847
	TM2-PLUS 12	12	0.7	60	1.3	207	2.30	695
	TM2-PLUS 15	15	0.7	60	1.3	207	2.30	537
	TM2-PLUS 20	20	0.7	60	1.3	207	2.30	437
	TM2-PLUS 25	25	0.7	60	1.3	207	2.45	345
	TM2-PLUS 30	30	0.7	60	1.3	207	2.60	236
	TM2-PLUS 35	35	0.7	60	1.3	207	2.75	207
	TM2-PLUS 40	40	0.7	60	1.3	207	2.90	185

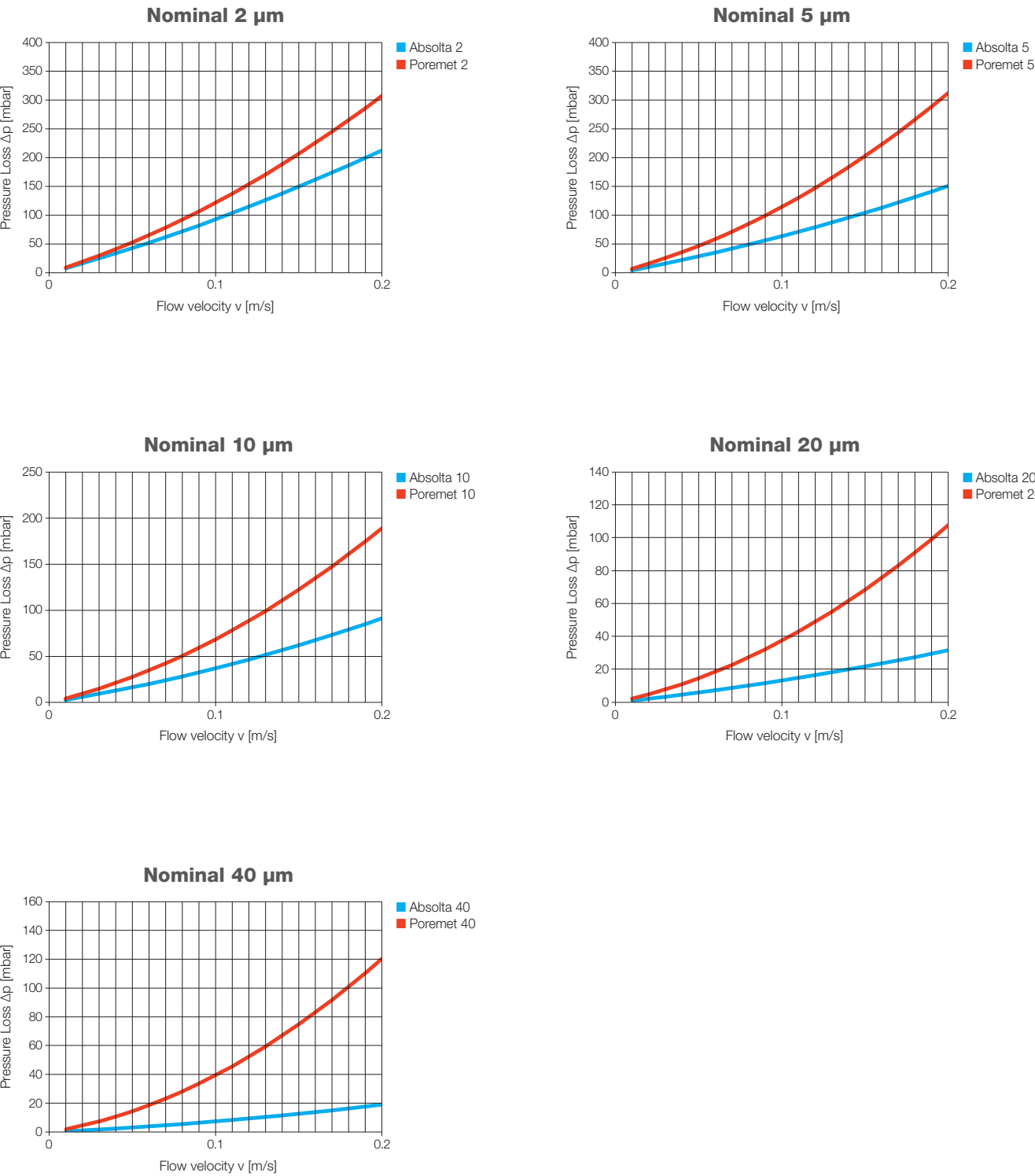
Composite meshes – pressure drop air flow



Composite meshes in air flow

- The pressure drop curves depicted cover the most current specifications. Pressure drop curves for other standard specifications are available on request.
- The pressure drop values shown are the result of Rayl measurements under laboratory conditions using calibrated equipment. Depending on design, variations are possible. The table values serve as a tool to help with selection. Any liability is excluded. We recommend further clarifications for technical design purposes.

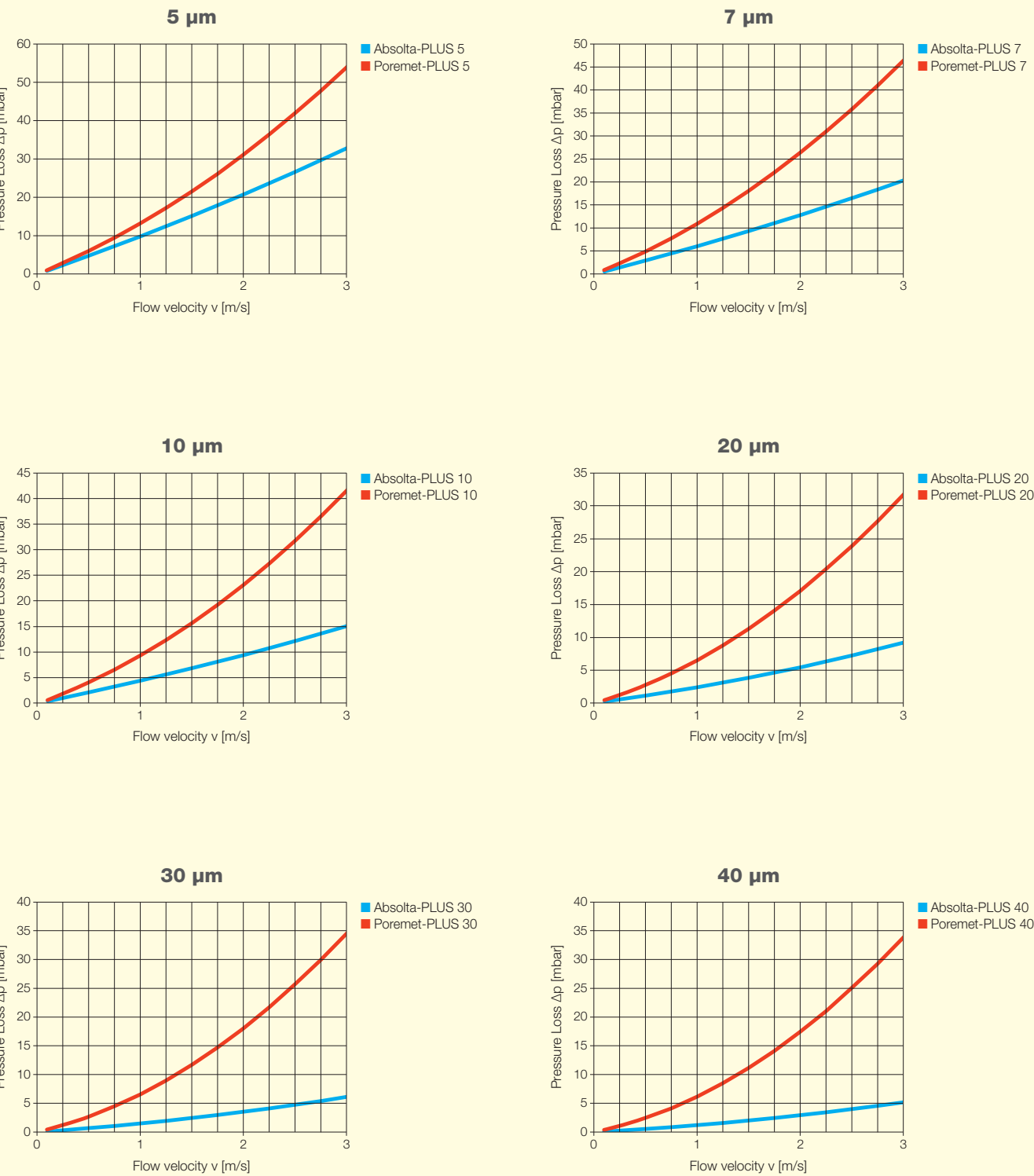
Composite meshes – pressure drop water flow



Composite meshes in water flow

- The pressure drop curves depicted cover the most current specifications. Pressure drop curves for other standard specifications are available on request.
- The pressure drop curves represent calculated pressure drop values for water on the basis of measurements for air assuming laminar and incompressible flows. They are therefore subject to the same qualifications as the diagrams relating to air.

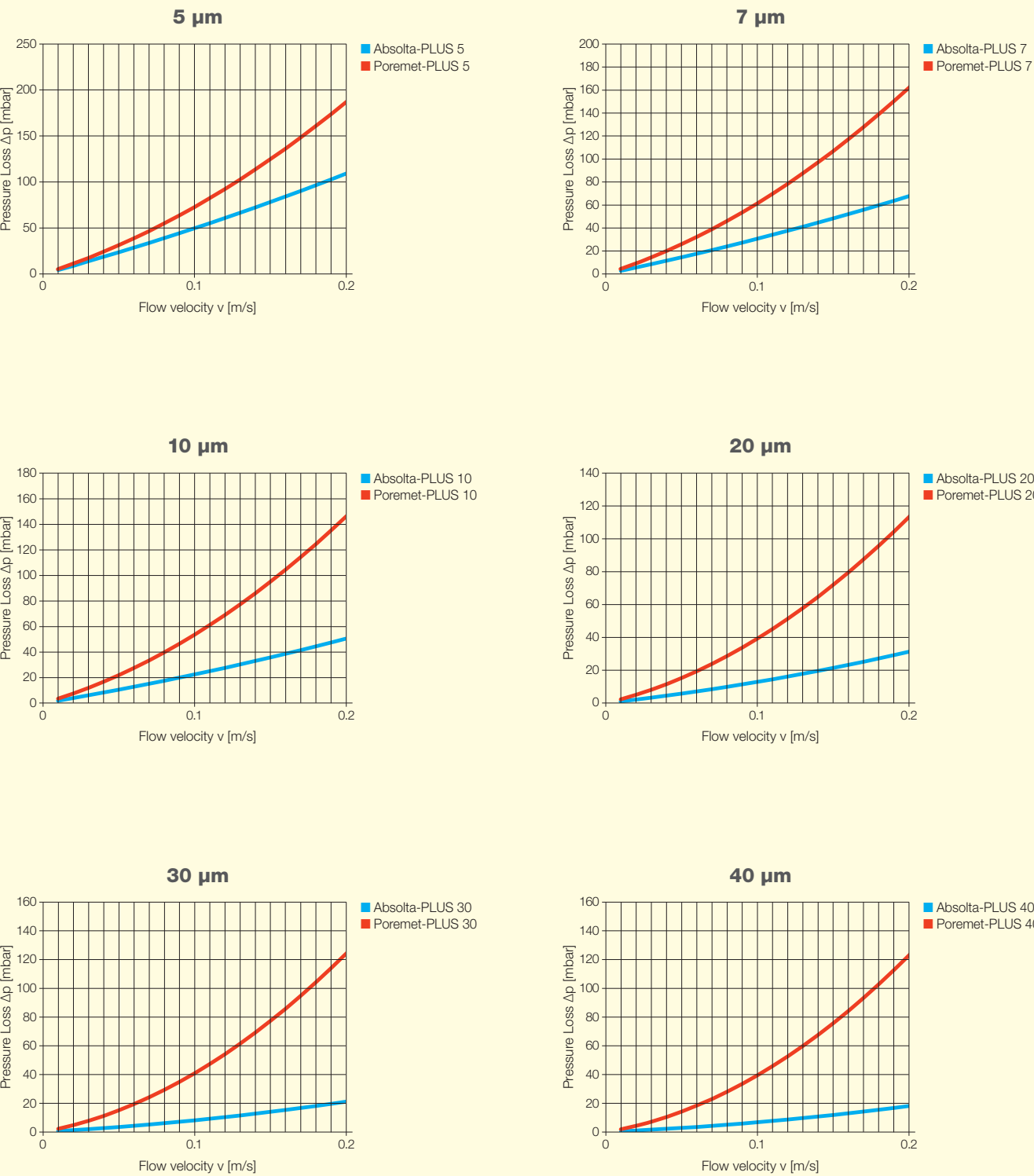
Composite-PLUS meshes – pressure drop air flow



Composite-PLUS Air

- The pressure drop curves depicted cover the most current specifications. Pressure drop curves for other standard specifications are available on request.
- The pressure drop values shown are the result of Rayl measurements under laboratory conditions using calibrated equipment. Depending on design, variations are possible. The table values serve as a tool to help with selection. Any liability is excluded. We recommend further clarifications for technical design purposes.

Composite-PLUS meshes – pressure drop water flow



Composite-PLUS water

- The pressure drop curves depicted cover the most current specifications. Pressure drop curves for other standard specifications are available on request.
- The pressure drop curves represent calculated pressure drop values for water on the basis of measurements for air assuming laminar and incompressible flows. They are therefore subject to the same qualifications as the diagrams relating to air.

Seven good reasons to choose BOPP

The power to innovate at BOPP is based on decades of experience. Alongside exceptional product characteristics in the most diverse sectors, we also excel in terms of fundamental attributes and qualities.

1

Quality

We always maintain strict compliance with industry specific weaving standards. What's more, we have created our own in-house standards alongside each of these, which demand far more than the officially accepted values in terms of challenges and tolerances.

2

Experience

Thanks to in-house research and development and valuable feedback from our customers in diverse industrial sectors, we have acquired an enormous wealth of experience, which is used in consultancy as well as product development.

3

Cost Efficiency

We continue to find new ways to increase our production efficiencies with a simultaneous increase in quality standards.

4

Reproducibility

We maintain a process orientated approach to ensure optimum reproducibility.

5

In-house Wire Drawing

We are the only fine wire weavers to operate our own fine wire drawing plant. This means we can ensure reliable delivery schedules and maintain quality procedures totally independent of third party input.

6

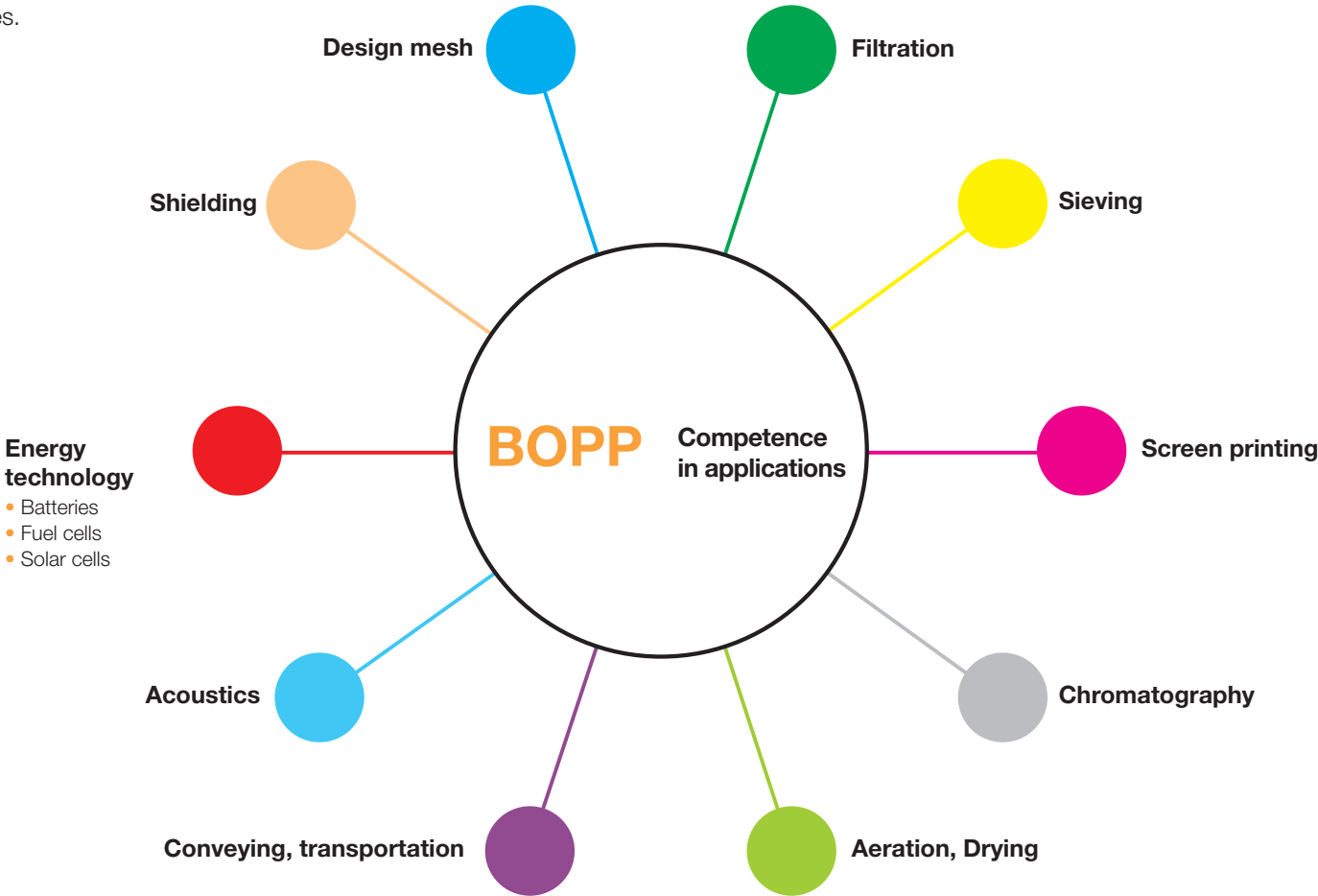
Security

We manufacture in a trade-friendly and commercially stable environment, and are therefore able to guarantee above average levels of product availability, supported by extensive stockholding. In addition, the BOPP Group operates three separate production facilities, providing higher levels of process security in the supply chain.

7

Protecting the Environment

Our manufacturing plant complies with modern standards in terms of energy use and environmental sustainability. We are active participants in programmes to improve energy efficiency, and a member of Cleantech organisations.



A world map with a light gray background. The landmasses are outlined in black. Fifteen colored dots are placed on the map to indicate study locations. The dots are colored blue, green, orange, and yellow. There are 5 blue dots, 5 green dots, 1 orange dot, and 4 yellow dots. The locations are distributed across North America, South America, Europe, Africa, Asia, and Australia.

- G. BOPP + CO. AG**
 Bachmannweg 21
 CH-8046 Zürich
 Phone +41 44 377 66 66
 E-Mail info@bopp.ch
www.bopp.com



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