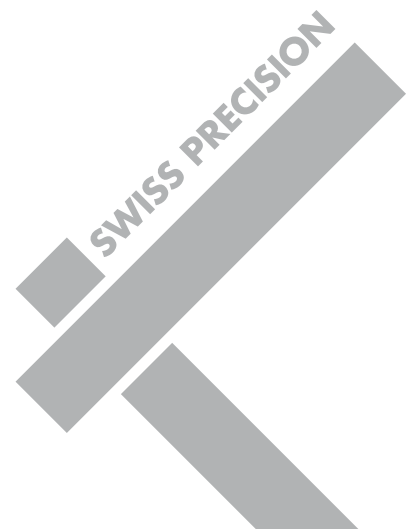




BOPP AM

Acoustic Meshes

bopp.com



BOPP MESHES – PERFECT PITCH, OPTIMUM PROTECTION

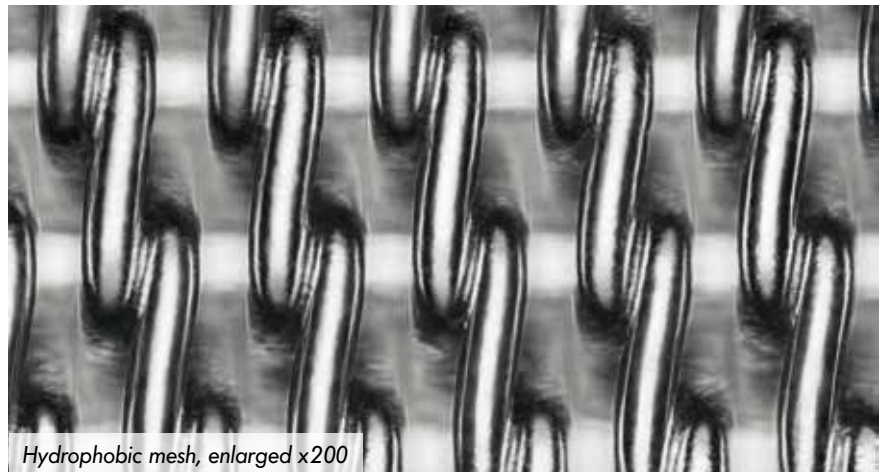


Perfect sound can only be achieved when all elements of an assembly are of the highest quality. Materials science plays an important role in this. Working closely with renowned acoustic specialists, BOPP has developed a range of specialist meshes offering many additional advantages for acoustics applications alongside the highest levels of sound technology.

In contrast to products from other manufacturers, BOPP meshes are manufactured exclusively from the highest grade stainless steel and are therefore more precise in terms of specification, more durable and particularly resistant to damage; they are therefore also easier to handle.

BOPP ACOUSTIC MESHES: KEY ADVANTAGES

- Exact retention of specific acoustic impedance across the entire surface area of the mesh
- Comprehensive range of acoustic transparency up to > 1000 MKS Rayl
- Guaranteed reproducibility
- High levels of temperature resistance (AISI 304/316)
- Unrivalled protection against dust particles, moisture, physical, thermal and chemical impact
- Excellent workability, including demanding design challenges such as shape, colour and brightness



Hydrophobic mesh, enlarged x200

FOCUS ON APPLICATIONS

Working closely with internationally renowned manufacturers of premium acoustic products, we have extensive experience of the constantly evolving and rapidly changing challenges of this high tech market sector. We know how important it is not just to continue to develop good products but also to use innovative ideas to create new methods.

Whether it's about optimisation of acoustic performance, the creation of new forms and other design elements or special protection for existing components, we are your partner of choice for innovative ideas.

KEY ACOUSTIC APPLICATIONS AT A GLANCE



• Mobile phones



• Tablets



• Headphones



• Laptops



• Audio equipment



• Hands free kits



• Smartphones



• Microphones



• Loudspeakers, sound bars



• MP3 players



• Radio equipment



• Acoustic measuring devices

SOUND SUPPRESSION APPLICATIONS

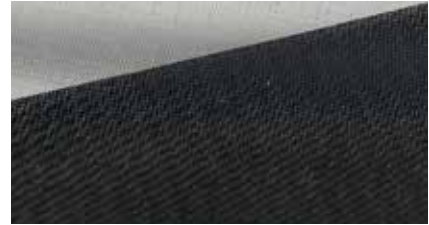
- Aircraft engine noise suppression
- Sound attenuation for power units used in space travel



ADDITIONAL CAPABILITIES

COATINGS

- Hydrophobic
- Oleophobic
- Blacked
- Galvanic coated
- Additional coatings available on request



THERMAL TREATMENTS

- Optimised processability
- No loose wires
- Stress relieved annealing



SURFACE TREATMENTS

- Electropolished
- Etched/passivated



CALENDERED

- Strips or entire rolls
- Up to 30% reduction
- Surface morphology



QUALITY CHECKS AND MEASUREMENTS

- Customer-specific quality checks
- Individual Rayl measurements
- Test records
- Certification, records

FABRICATION

- Precision cutting
- Forming, bending, drawing
- Edge binding
- Welding, punching, bonding, tensioning
- Stamping
- Prototypes, one-offs
- Efficient volume production
- Process orientated packaging



ENGINEERING

- Needs assessments
- Materials recommendations
- Design suggestions
- Build plans
- Cost calculations
- Production engineering

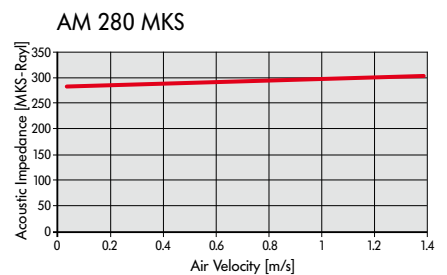
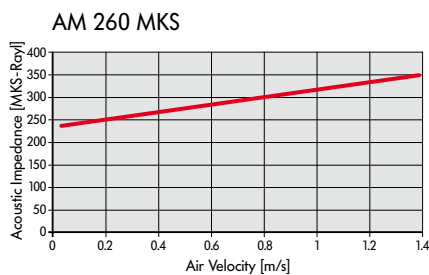
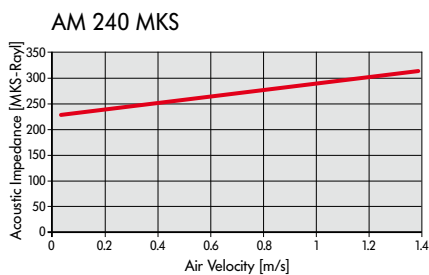
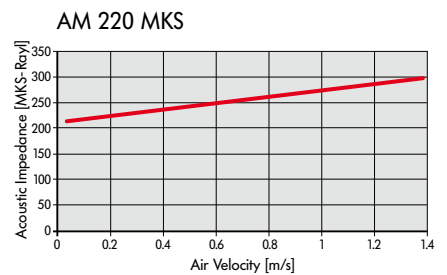
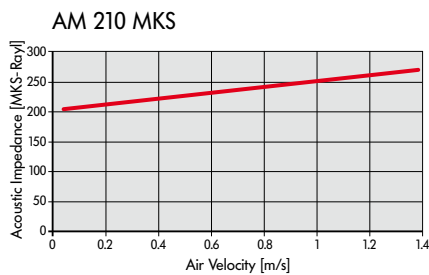
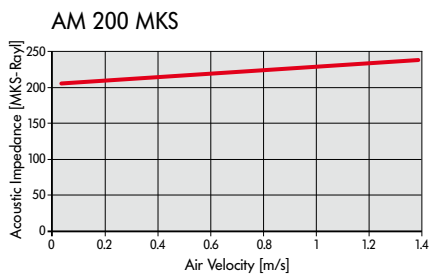
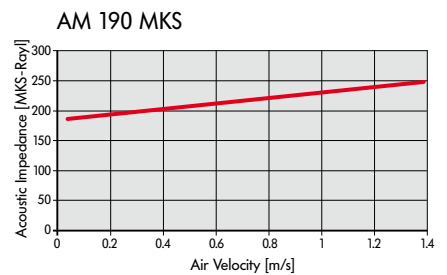
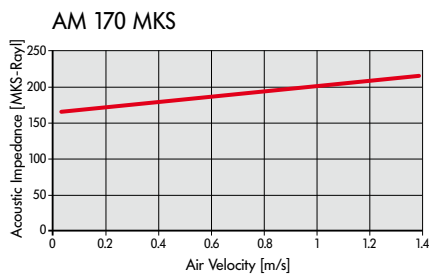
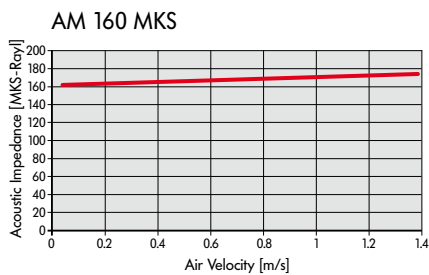
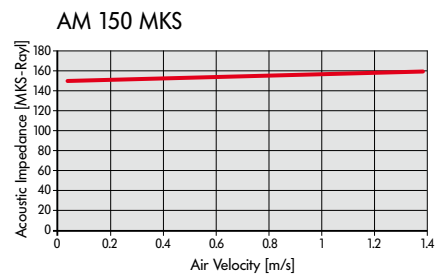
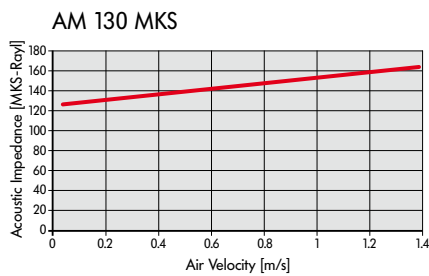
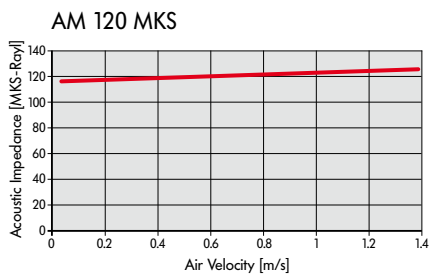
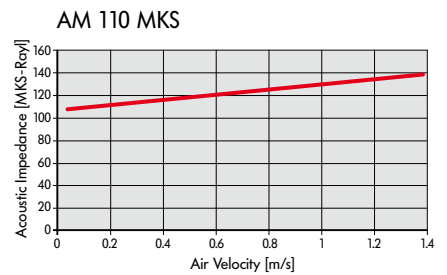
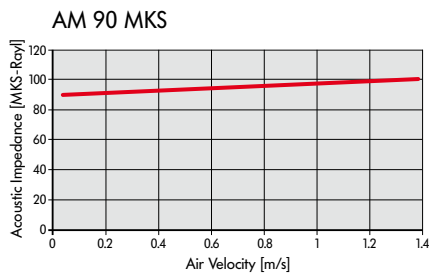
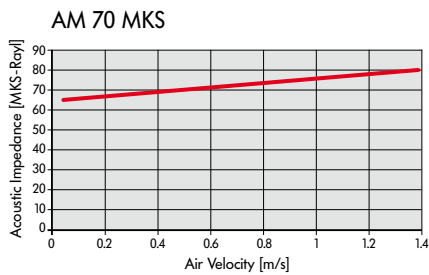
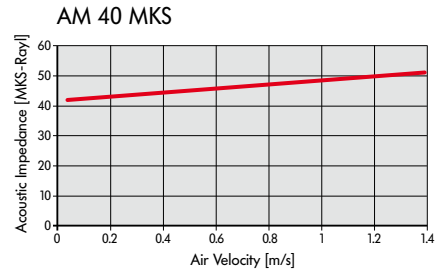
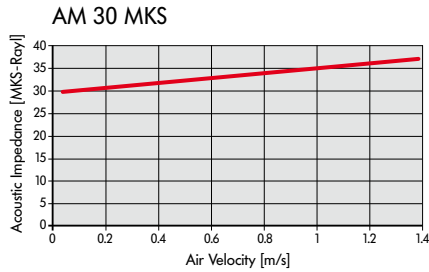
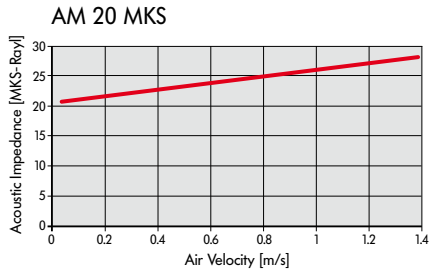


THE PRODUCT RANGE

We offer a range of standard acoustic meshes designed around identified market requirements.

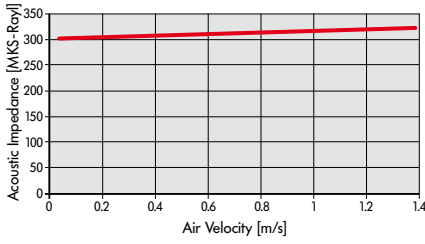
Mesh description	Material	Mesh thickness [mm]	Weight [kg/m ²]	Air flow rate @ $\Delta p = 30\text{Pa}$ [cm ³ /s/cm ²]	Geometric pore size X_{Geo} [μm]	Relative cross sectional area A_{ORel} [%]	Sound impedance @ 0.15m/s [MKS-Rayl]	Sound impedance @ 1.05m/s [MKS-Rayl]
AM 20 MKS	AISI 304/316	0.26	0.68	112	86	19%	21	26
AM 30 MKS	AISI 304/316	0.26	0.78	87	73	16%	30	35
AM 40 MKS	AISI 304/316	0.26	0.87	65	63	14%	43	48
AM 70 MKS	AISI 304/316	0.26	0.97	43	56	13%	68	75
AM 90 MKS	AISI 304/316	0.15	0.52	32	30	13%	93	98
AM 110 MKS	AISI 304/316	0.26	1.07	27	51	12%	113	130
AM 120 MKS	AISI 304/316	0.15	0.55	25	27	12%	118	123
AM 130 MKS	AISI 304/316	0.26	1.09	23	49	12%	130	153
AM 150 MKS	AISI 304/316	0.15	0.58	20	25	11%	149	156
AM 160 MKS	AISI 304/316	0.17	0.69	18	28	10%	160	167
AM 170 MKS	AISI 304/316	0.26	1.14	18	47	11%	171	201
AM 190 MKS	AISI 304/316	0.26	1.15	16	47	11%	189	230
AM 200 MKS	AISI 304/316	0.17	0.71	14	26	9%	205	229
AM 210 MKS	AISI 304/316	0.26	1.17	14	46	11%	207	250
AM 220 MKS	AISI 304/316	0.26	1.18	14	46	11%	220	270
AM 240 MKS	AISI 304/316	0.26	1.19	13	46	11%	235	285
AM 260 MKS	AISI 304/316	0.26	1.23	12	47	12%	260	313
AM 280 MKS	AISI 304/316	0.15	0.65	11	22	10%	285	297
AM 300 MKS	AISI 304/316	0.15	0.66	10	21	9%	304	317
AM 320 MKS	AISI 304/316	0.15	0.67	9	21	9%	315	335
AM 340 MKS	AISI 304/316	0.15	0.67	9	21	9%	342	361
AM 360 MKS	AISI 304/316	0.15	0.68	8	21	9%	361	391
AM 390 MKS	AISI 304/316	0.15	0.68	8	21	9%	392	413
AM 400 MKS	AISI 304/316	0.15	0.70	7	21	10%	405	437
AM 420 MKS	AISI 304/316	0.15	0.70	7	21	10%	420	460
AM 450 MKS	AISI 304/316	0.15	0.71	7	21	10%	447	467
AM 460 MKS	AISI 304/316	0.15	0.72	7	21	10%	464	488
AM 480 MKS	AISI 304/316	0.15	0.72	6	21	9%	481	503
AM 500 MKS	AISI 304/316	0.15	0.74	6	21	9%	505	534
AM 540 MKS	AISI 304/316	0.16	0.78	6	21	9%	542	569
AM 550 MKS	AISI 304/316	0.16	0.78	5	21	9%	549	589

Customer-specific meshes to defined specifications and in all formats available on request.

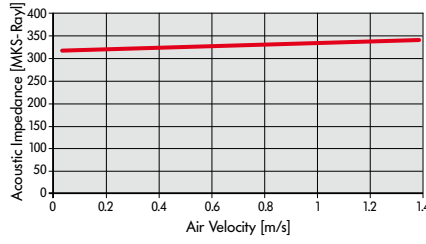


BOPP AM Acoustic Meshes

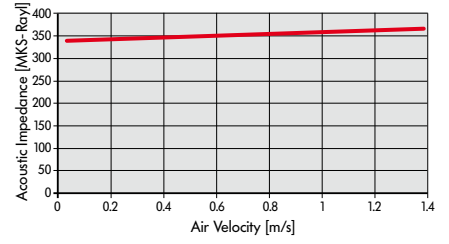
AM 300 MKS



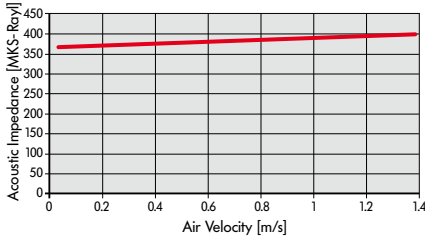
AM 320 MKS



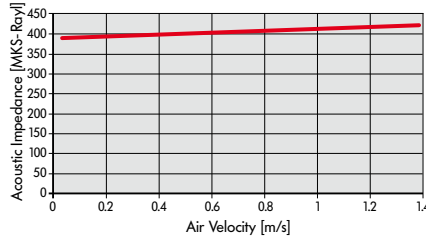
AM 340 MKS



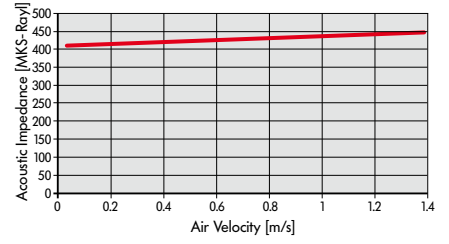
AM 360 MKS



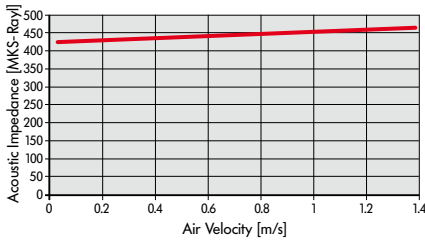
AM 390 MKS



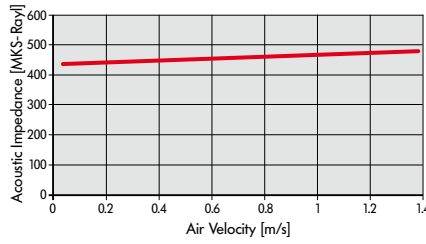
AM 400 MKS



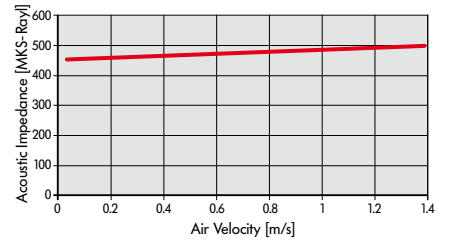
AM 420 MKS



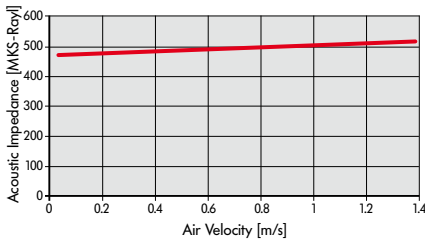
AM 450 MKS



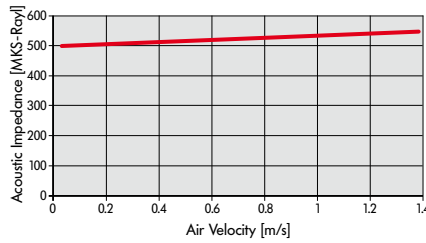
AM 460 MKS



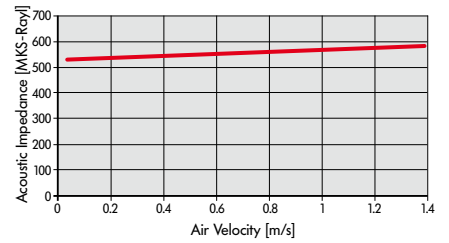
AM 480 MKS



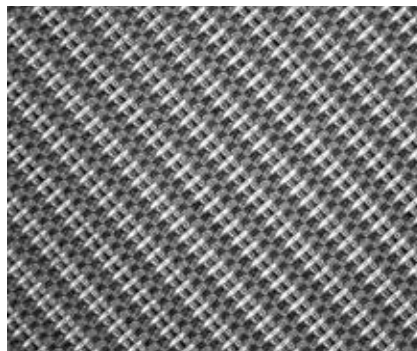
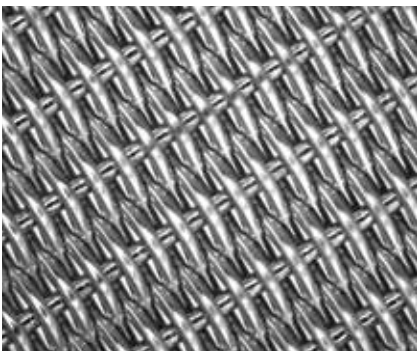
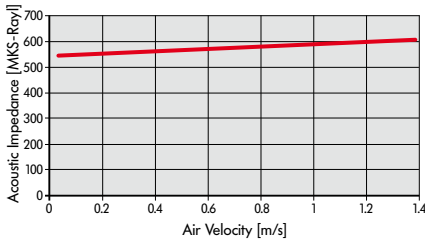
AM 500 MKS



AM 540 MKS



AM 550 MKS



SIX GOOD REASONS TO CHOOSE BOPP MESH

■ QUALITY

BOPP is recognised as one of the leading manufacturers of precision woven meshes. Our acoustic meshes are produced using state of the art equipment. In-house manufacturing eliminates the risk of error and ensures continuous quality control.

■ ECONOMY

We are constantly innovating to increase production efficiency whilst retaining advanced levels of quality control.

■ EXPERIENCE

We have years of experience working with renowned acoustics specialists, analyzing applications and developing innovative solutions.

■ ENVIRONMENTAL PROTECTION

Our advanced equipment complies with all the latest standards in terms of energy consumption and sustainability. We are active participants in programmes designed to reduce energy consumption and are members of Cleantech organisations.

■ REPRODUCIBILITY

We operate process orientated systems to guarantee optimum reproducibility.

■ PROCESS SECURITY

We manufacture in an economically and commercially stable environment to guarantee above average material availability through extensive stockholding.



Wire drawing

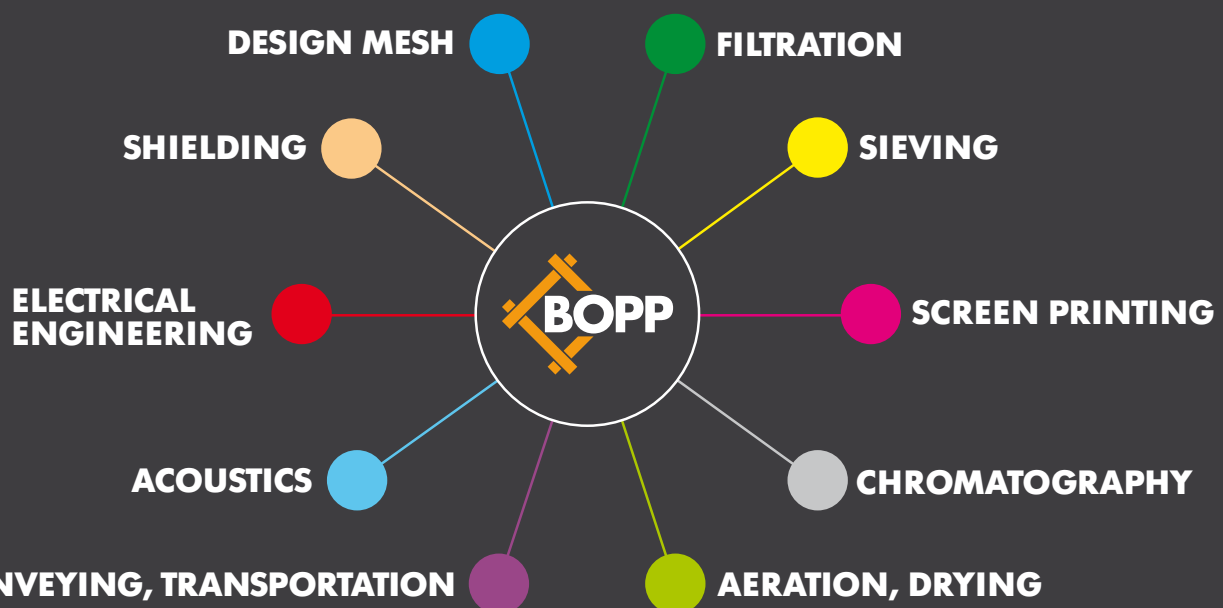


Mesh production



Fabrication

BOPP – COMPETENCE IN APPLICATIONS



The BOPP Group

Head Office
in Zurich



■ SWITZERLAND

G. BOPP + CO. AG

Bachmannweg 21
CH-8046 Zürich
Phone +41 (0)44 377 66 66
E-Mail info@bopp.ch
www.bopp.com

G. BOPP + CO. AG

Mühltoibel
CH-9427 Wolfhalden
Phone +41 (0)71 888 60 66
E-Mail info@boppwh.ch

Filinox AG

Mühltoibel
CH-9427 Wolfhalden
Phone +41 (0)71 888 60 22
E-Mail info@filinox.ch

■ GERMANY

Spörl oHG

Staudenweg 13
72517 Sigmaringendorf
Phone +49 (0) 7571 7393-0
E-Mail post@spoerl.de
www.spoerl.de

■ ENGLAND

G. BOPP & CO. LTD.

Grange Close
Clover Nook Industrial Park
Somercotes, Derbyshire DE 55 4QT
Phone +44 (0) 1773 521 266
E-Mail info@gbopp.com
www.boppmesh.com

■ ITALY

BOPP Italia srl

Via Sestriere 5/3
10060 Candiolo (TO)
Phone +39 011 9624984
E-Mail info@bopp-italia.it
www.bopp.com

■ SWEDEN

BOPP Utildi AB

Box 118
SE-312 22 Laholm
Phone +46 430 792 50
E-Mail bopputildi@bopputildi.se
www.bopputildi.se

■ USA

G. BOPP USA Inc.

4 Bill Horton Way
Wappingers Falls, NY 12590
Phone +1 845 296 1065
E-Mail info@bopp.com
www.bopp.com

■ KOREA

Samwoo Enterprise (G. BOPP ASIA)

Room 536, Shinan Metro Khan B/D
1115, Bisan-Dong, Dongan-Gu
Anyang-City, Kyungki-Do
Phone +82 31 388 0656
E-Mail boppasia@bopp.com

■ CHINA

Samwoo Enterprise (G. BOPP ASIA)

Room 508, Building B
Lotus Square
No. 1050, Wuzhong Road, Minhang
District Shanghai
Phone +86 21 6126-5496 / 5497
E-Mail boppasia@bopp.com