SENSA
称道新材

圣纱 带给您静谧、清新和温暖！

SENSA ® BRINGS YOU PEACE, FRESHNESS AND NICE WARM!

称道新材料科技（上海）有限公司

SENSA NEW MATERIAL TECHNOLOGY (SHANGHAI) CO., LTD

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SENSA 称道新材

目录 DIRECTORY

交流纪要 Summary of Communication

交流日期 DATE _____ 交流地点 PLACE _____

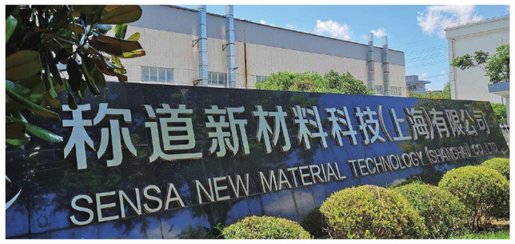
与会人员 PARTICIPANT _____

摘　要 ABSTRACT _____

企业简介 About us

称道新材料科技（上海）有限公司，2012年成立于上海，注册资本3000万元。借助于其管理层资深的国际专业背景和丰富的行业经验，整合其海内外的技术与市场资源，经历数年兢兢业业的耕耘，目前已逐渐发展为一家注重创新、倡导合作的科技型公司。在以熔喷、气流梳理、纺粘等非织造工艺的基础之上，其团队进行了技术的整合与工艺的延伸，开发并生产了多用途的新型非织造材料。其产品被广泛地应用于汽车（和其他交通工具）工业、家电与家用空气净化行业、新风过滤与液体过滤行业、工业隔热保温、劳动防护等行业。因其材料具有较为独特的自身特点，在各个应用领域均得到国内外客户广泛的肯定和好评。公司已申请约20项各类技术专利。

同时，企业注重开展外部合作，获得行业专家的协作与指导，与国内外知名企业进行技术交流与市场推广。 与部分高校建立长期的校企合作关系，并作为大学生的见习基地。



公司愿景与行动：

依靠品质与持续的品质进步，成为首屈一指的行业先锋

Vision & Mission:

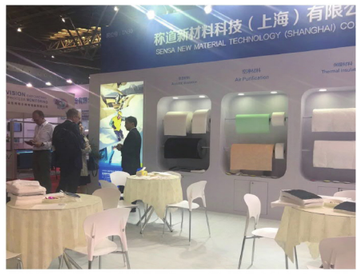
To become the Leading Industry Pioneer, relying on top quality and sustainable improvement

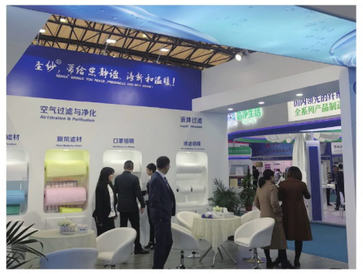
核心价值：

称道员工贡献值得称道的品质

Core Value:

Each individual is accountable to QUALITY





SENSA New Material Technology (Shanghai) Co., Ltd. was established in 2012 with registered capital 30 million RMB. With the help of its top management's professional background and rich experience, it integrates the technologies and market resources in the nonwoven industry. Afte years of hard work, it has gradually become a scientific and technological company. On the basis of melt blown, airlay, and spunbond non woven technology, the team has made new progress on technology innovation. It develops and produces new multi-purpose nonwoven materials. which are widely used in automotive (and other transportation) industry, home appliances and air purification industry, fresh air filtration and liquid filtration industry, industrial thermal insulation, labor protection and other industries. Because of the unique characteristics, the materials have been widely recognized and praised in various application fields both in domestic and export market. The company has applied for dozens of technical patents.

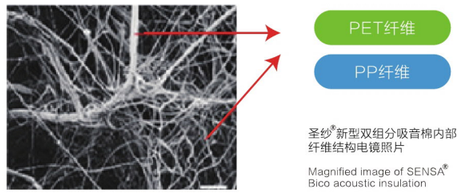
At the same time, it focuses on external cooperation, obtains the cooperation and guidance of industry experts, and carries out technical exchanges and market promotion with well-known enterprises at home and abroad. It establishes long-term school-enterprise cooperation with some colleges and universities, and serves as a probation base for college students.

SENSA 称道新材

圣纱® 双组分吸音棉
SENSA® Bico Acoustic Insulation

● 圣纱®双组分吸音棉工作原理

圣纱®新型双组分吸音棉，是通过特殊设计的工艺流程制得的质轻、蓬松的复合材料。该材料内部形成三维网状结构，且交织的纤维纤度范围极广，从直径为1-4 μm 的微纤到直径为20-40 μm的较粗纤维。当声波振动通过纤维间的孔隙时，在摩擦损耗等作用下导致声波的能量转化成热能，从而起到不同频率声波的有效屏蔽与隔离效果。



PET纤维

PP纤维

圣纱®新型双组分吸音棉内部纤维结构电镜照片

Magnified image of SENSA® Bico acoustic insulation

● How Come SENSA® Bico Acoustic Insulation Performs Better

SENSA®Bico acoustic insulation material, is very light (weight) and fluffy which is made with specially-designed process flow technology. It also gives the material a three-dimensional network structure. The material consists of a wide range of microfibers with ∅ 1-4 μm diameter and coarser titer staple fibers with ∅ 20-40 μm diameter. In effect of friction and dissipation, the sound energy is converted into heat energy when acoustic waves pass the porosities between the fibers, thus to sufficiently absorb the sounds for a very wide range of frequencies.

● 圣纱®双组分吸音棉的特点

How Good SENSA® Bico Acoustic Insulation Is

圣纱®双组分吸音棉的应用

Applications of SENSA® Bico Acoustic Insulation

主要应用：除中高级汽车外，还可以广泛用于高铁、游艇、邮轮甚至飞机等其它交通工具上。此外，在家电、机房、泵房、K歌厅、变电房、办公设备等领域亦可起到独特的隔热吸音效果。

Main applications: all vehicles such as: cars, buses, CRH trains, yachts or even air planes Other applications: Home appliance, engine room, pump room,Karaoke room,substation and office equipment, etc.

常见应用区域：车门、前后车盖、仪表盘、顶棚内饰、后备箱等大部分区域。

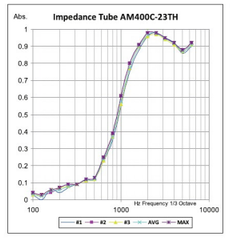
Typical parts: doors, liftgates, instrument panels, headliners, package trays, etc.

除用于装配新车外，在乘用车改装市场的应用也逐渐成熟。

More and more used in auto retrofit market as well.

方便用户安装使用，可特殊设计定制，可协助多项辅助加工：裁切、敷铝箔、敷胶、配搭扣等。

Can be specially designed and tailor-made upon request. More downstream process-es can be done or supported.



圣纱®双组分吸音棉CL 系列技术参数

Technical Data Sheet: SENSA® Bico Acoustic Insulation Serial CL

型号 Type	规格描述 Description	克重 Basic Weight(g/㎡)	厚度 Thickness(mm)
AM-200D15/10T	35% PET +65% PP	200	10
AM-300D15/18T	35% PET +65% PP	300	18
AM-400D15/26T	35% PET +65% PP	400	26
AM-600S35/42T	35% PET +65% PP	600	42

特点:吸音性能优良，与国际知名品牌现有产品高度匹配。

Advantage：Good sound absorption, perfectly compatible with that of international famous brands.

圣纱®双组分吸音棉HL 系列技术参数

Technical Data Sheet: SENSA® Bico Acoustic Insulation Serial HL

型号 Type	规格描述 Description	克重 Basic Weight(g/㎡)	厚度 Thickness(mm)
AM-150D15/16T	45% PET +55% PP	150	16
AM-210D15/21T	45% PET +55% PP	210	21
AM-240D15/26T	45% PET +55% PP	240	26
AM-340D15/37T	45% PET +55% PP	340	37

特点:最新创新技术升级，相同克重下更蓬松，且有效消除边角的安装空隙，吸音效果更佳；更有助车辆轻量化改进；使用成本更低。

Advantage：Upgrade development,higher loft,no more dead point and much better sound absorbing capability @same basic weight; More help to demand on light weight vehicles, Less costs owing to lower weight material used for same sound absorbing effect.

圣纱®耐高温双组分吸音棉HT 系列技术参数

Technical Data Sheet: SENSA® Bico Acoustic Insulation Serial HT

型号 Type	规格描述 Description	克重 Basic Weight(g/㎡)	厚度 Thickness(mm)
HT-200D20/15T	45% PET +55% HTP	200	15
HT-300D20/21T	45% PET +55% HTP	300	21
HT-400D20/26T	45% PET +55% HTP	400	26

特点:采用特种耐高温高聚物，可满足在引擎周围高温区域的吸音隔热要求，最高耐热温度：200°C。

Advantage：Made from special polymers, can be used as acoustic and thermal insulation around engine area where it is very hot. Higher temperature durability up to 200°C.

7S 双组分空气过滤棉
7S Bi-component Air Filter Media

7S 空气过滤棉,用于袋式过滤器
7S Air Filter Media, for Pocket-type Filters

初效系列、中效系列、高中效系列、亚高效系列。我们的用户可以使用我们的7S 双组分空气过滤棉生产各类最终用途的过滤设备和设施，如：采暖过滤、吸尘器、HVAC 过滤、汽车空气滤网、集尘室等。

该高效空气过滤材料运用先进的长效静电驻极技术，将静电长期保存在纤维结构中。实现高效、低阻、高容尘。符合最新的ISO16890标准。

为方便我们的用户，我公司对不同级别的过滤材料使用国际统一识别标示。

7S Air filter media for Pocket-type Filters, including different grades: ASHRAE grade, Sub-HEPA. We produce and provide filter media to customers for producing air filter equipment of wide range end uses such as: ASHRAE filters, vacuum cleaners, HVAC filters,auto cabin filters and bag house filters.

The filter media apply and keep static electricity in microfibers with our new static-electret technology to ensure very high and consistent air filter effect & dust load capability while at very low air resistance,in compliance with the new ISO16890 standard.

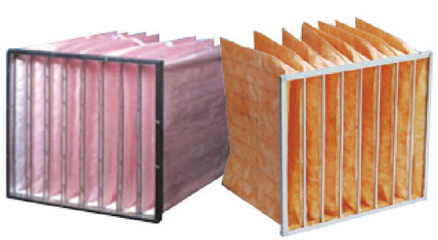
All 7S air filter materials are labeled in accordance with international standards for easy identification.

7S-FM袋式过滤棉技术参数表
7S-FM Pocket Type Air Filter Media Technical Data Sheet

规格型号 Type	克重 Basic Weight (g/m^2)	标准 Standard			流速 Face Velocity:@32L/min	
		中国 China	欧洲 EU	美国 USA	初始阻力 Initial Resistance (mmH_2O)	初始效率 Initial Efficiency(%)
FM-G4/C30	30	初效 Medium	G4/F5		0.4-0.7	40-55
FM-F5/C40	40	初效 Medium	F5	L8	0.6-1.0	55-65
FM-F6/C50	50	中效 Medium	F6	M9 M10	≤1.2	≥75
FM-F7/C60	60	中效 Medium	F7	M9 M10	≤1.4	≥85
FM-F8/C70	70	高中效 Senior Medium	F8	H13 H14	≤1.6	≥90
FM-F9/C80	75/80	亚高效 Sub HEPA	F9,F10	H15 H16	≤2.0	≥95

备注/Note:

1.克重偏差：+/-5 g/m^2；
2.可以应客户要求设计定制其它规格。
1.Deviation of Basic Weight: +/-5 g/m^2；
2.Can be tailor made for special requirement .

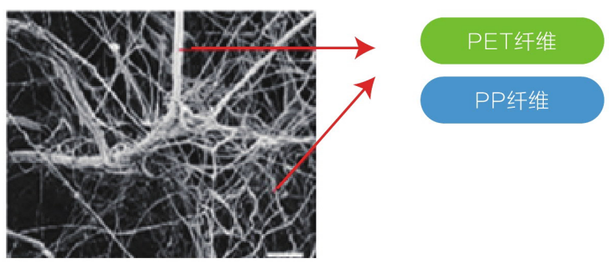


7S-FM袋式过滤棉(热熔胶三层复合式)技术参数表
Technical Data Sheet: 7S-FM Bag Type Air Filter Media

规格型号 Type	克重 Basic Weight	初始阻力 Initial Resistance (Pa)	初始效率 Initial Efficiency (%)	表层颜色 Color
	(g/m^2)	流速 Face Velocity: @ 32L/min, 0.3 μm, 2% NaCl		
FM-F5/D75	75	≤12	65-80	白色或客户指定
FM-F6/D85	85	≤14	75-90	绿色或客户指定
FM-F7/D95	95	≤16	85-95	粉色或客户指定
FM-F8/D105	105	≤20	90-95	黄色或客户指定
FM-F9/D115	115	≤23	≥95	白色或客户指定

备注/Note:

1.克重偏差：+/-5 g/m^2；
2.可以应客户要求设计定制其它规格。
1.Deviation of Basic Weight: +/-5 g/m^2；
2.Can be tailor made for special requirement.



7S 双组分空气过滤棉
7S Bi-component Air Filter Media

用于袋式过滤的滤材采用新型双组分复合结构，其中芯层由PP熔喷微纤和粗旦中空结构PET短纤维经特殊工艺复合而成，内部形成细密的3维网状结构。面层采用克重均匀的纺粘非织造布，形成强度和牢度可靠的骨架，便于加工成袋和可抗击一定的气压冲击,有效延长滤袋的使用寿命。

7S Pocket-Type Air Filter Medias are compounded with melt-blown PP microfibers and heavy denier hollow PET staple fibers at special process. The 3D network inside structure makes the material excellent air filter effect. Laminating with uniform PP spunbond nonwoven scrim, the material can be easily processed into bags and have prolonged life time.

7S 可褶绉空气滤材
7S Pleatable Air Filter Media

7S-FM 高效低阻可打褶空气滤材新品技术参数表
7S-FM Pleatable Air Filter Media (Latest version) Technical Data Sheet
(NEW PRODUCTS: PP MB + PES PLEATABLE)

规格 型号 Type	克重 Basic Weight	初始阻力 Initial Resistance (mmH_2O)	初始效率 Initial Efficiency (%)	挺度 Stiffness
	(g/m^2)	@2% NaCl, 0.3 μm，32 L/min		(mg，葛尔莱挺度)
FM-P65/J60N	16+60	≤0.6	≥65	≥350
FM-P75/J60N	18+60	≤0.8	≥75	≥350
FM-P85/J60N	20+60	≤1.0	≥85	≥350
FM-P95/J60N (H11)	20+60	≤1.2	≥95	≥350
FM-P98/J60N (H11)	20+60	≤1.6	≥98	≥350
FM-P995/J60N (H12)	20+60	≤2.2	≥99.5	≥350
FM-P995/J60N (H12)	25+60	≤2.2	≥99.5	≥350
FM-P9997/J60N (H13)	25+60	≤3.2	≥99.97	≥350
FM-P9997/J60N (H13)	30+60	≤3.2	≥99.97	≥350
FM-P99996/J60N (H14)	40+60	≤4.5	≥99.996	≥350

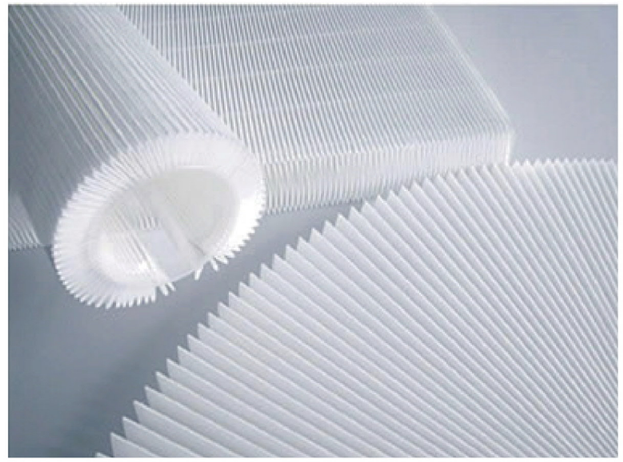
备注/Note：

1.克重偏差：+/-10%；挺度可能存在偏差；
2.可以应客户要求设计定制其它规格。
1.Deviation of Basic Weight: +/-10%;
Stiffness may deviate as well.
2.Can be tailor made for special requirement.

7S高效低阻可打褶空气滤材新品技术
7S-FM Pleatable Air Filter Media

- 与合作伙伴协作，采用国际先进的喷胶复合设备，可实现三层材料的一次性复合与分切加工；且复合后初始阻力增加不足2Pa
- 采用国际品牌的PO环保胶，上胶量小且更环保，无气味
- 可根据客户的具体需求，选用国内外多种工艺的骨架材料
- 可根据不同客户、不同用途的具体技术要求和成本要求，来选择合适的熔喷材质和工艺方法
- 可选超声波复合工艺

- New laminating equipment enables us to laminate three layers simultaneously, with very slight resistance increase up to 2 Pa
- Eco-friendly PO hotmelt applied, with very low dosage
- Various substrates can be used, based on customers' specific requirement
- Diversified meltblown nonwovens can be chosen, based on customers' specific requirement, end-use and cost evaluation
- Ultrasonic bonding can be optional



7S 可褶绉空气滤材
7S Pleatable Air Filter Media

7S 可褶绉空气滤材是利用我们独有的技术将PET 骨架无纺布和PP 熔喷微纤的完美结合体。我们的用户可以用它生产褶绉形空气过滤材料，有效增加过滤面积、进一步提升过滤效果 。可褶绉空气滤材广泛用于隔板或非隔板过滤器。

7S Pleatable Air Filter material is the perfect combination of PET chemical bonded nonwoven fabrics and PP meltblown mircofibers with our own state-of-art technology, which enables our customers to pleat the material and produce pleat - shape air filters , to further enhance the filtration effect due to enlarge filtration area. This kind of filter material can be widely applied in the clapboard filter or non-clapboard filter.

7S-FM可褶绉空气滤材一代品产品技术参数表
7S-FM Pleatable Air Filter Media Technical Data Sheet
（CONVENTIOANAL VERSION: PP MB + PES PLEATABLE）

规格 型号 Type	克重 Basic Weight	初始阻力 Initial Resistance (Pa)	初始效率 Initial Efficiency (%)	挺度 Stiffness
	(g/m^2)	@2% NaCl, 0.3 μm，32 L/min		(mg，葛尔莱挺度)
FM-P65J60	10+60	≤12	≥65	≥300
FM-P75J60	12+60	≤14	≥75	≥300
FM-P85X70	15+70	≤16	≥85	≥420
FM-P85J60	15+60	≤16	≥85	≥300
FM-P90X70	20+70	≤18	≥90	≥420
FM-P90J60	20+60	≤18	≥90	≥300
FM-P95X70	25+70	≤20	≥95	≥420
FM-P95J50	25+50	≤20	≥95	≥300
FM-P95J60	25+60	≤20	≥95	≥350
FM-P99J60	30+60	≤37	≥99.5	≥350

备注/Note：

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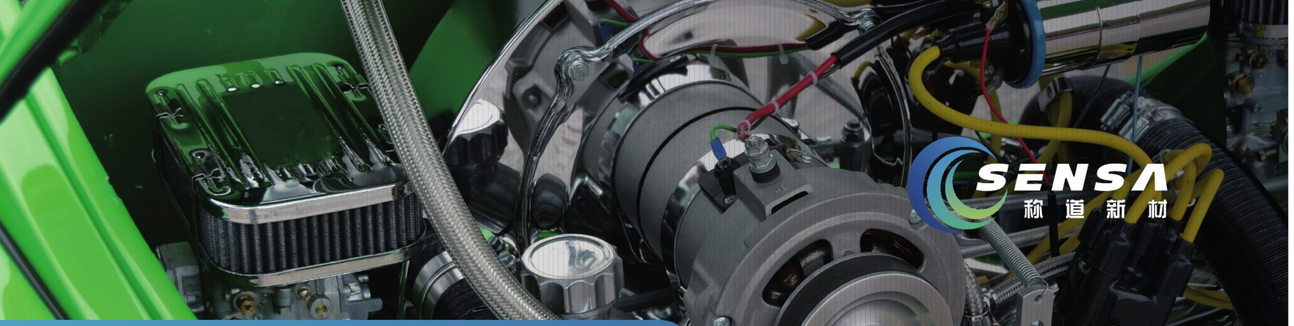
2.可以应客户要求设计定制其它规格。
1.Deviation of Basic Weight: +/-10%;
Stiffness may deviate as well.
2.Can be tailor made upon requirement.



7S 液体专用滤材
7S Liquid Filter Media (MB)

7S PP液体过滤专用熔喷
7S PP Meltblown for Liquid Filtration

基于在熔喷行业的口碑、装备条件和研发能力，协同上下游客户共同开发了7S液体过滤专用熔喷，大致分粗滤、精滤两大类。通常的粗滤级可以做到15-50 μm，精滤级甚至可达0.5-5 μm。采用TOPAS PSM-165型孔径/孔隙检测试仪对孔径与孔隙进行检测，可以得出孔径以及其孔径的分布曲线，以确保材料性能的稳定性与一致性。

SENSA, in cooperation with his friendly partners, has successfully developed a series of specialty meltblown nonwovens as liquid filter media including coarse grade(pore size range: 15-50 μm)and fine grade (pore size range: 0.5-5 μm). The pore size and pore distribution curve of the material can be designed, with the help of professional TOPAS PSM-165 tester. Thus, the properties of the filter media can be consistently guaranteed.

- 100% 采用进口食品包装级聚丙烯原料，不含任何添加剂
  Made from 100% PP and free of any other additive.
- 过滤精度高、通量大、纳污能力强
  High filtration accuracy, through-put and dirt holding capacity.
- 耐酸碱、耐腐蚀、 无毒、 使用周期长
  Resistant to acid and alkali, nontoxic, long life time.
- 适应性广，可广泛应用于生物制药、水净化与处理、食品饮料与酿酒、化工以及电子电力等诸多行业
  Wide range of applications, such as: biomedicine, water treatment, beverage and brewery, chemical industry, electrical/electronic industry, etc.

7S-LM 粗滤级液体过滤熔喷产品技术参数表
7S-LM Liquid Filter Media (Coarse Grade) Technical Data Sheet

规格 型号 Type	克重 Basic weight (g/m^2)	透气量 Air Permeability ($dm^3/m^2.s$) @Pressure Drop: 100 Pa; Test Area: 20 cm^2	平均孔径 Mean Pore Size (μm)
LM-PS15/MB30	30	200	15
LM-PS20/MB30	30	300	20
LM-PS30/MB30	30	900	30
LM-PS18/MB45	45	300	18

7S-LM 精滤级液体过滤熔喷产品技术参数表
7S-LM Liquid Filter Media (Fine Grade) Technical Data Sheet

规格 型号 Type	克重 Basic weight (g/m^2)	厚度 Caliper (mm)	透气量 Air Permeability ($dm^3/m^2.s$) @Pressure Drop: 100 Pa; Test Area: 20 cm^2	平均孔径 Mean Pore Size (μm)
LM-PS06/MB100	100	0.23	0.6	0.6
LM-PS10/MB90	90	0.20	1.0	1.0
LM-PS20/MB80	80	0.20	4.0	2.0
LM-PS30/MB70	70	0.18	30.0	3.0
LM-PS50/MB50	50	0.18	30.0	5.0
LM-PS50/MB40	40	0.20	60.0	5.0

备注/Note：

1.克重偏差：+/-10%；
2.可以应客户要求设计定制其它规格。
1.Deviation of Basic Weight: +/-10%;
2.Can be tailor made for special requirement.

7S 特种PBT 熔喷滤材
7S Specialty PBT Meltblown

PBT是聚对苯二甲酸丁二醇酯（Polybutylene Terephthalate）的简称。与PET相似，均属于热塑性聚酯。相比PET,分子更柔顺，加工性能更优良，经过改性的PBT更适合于熔喷工艺。

PBT is the abbreviation of Polybutylene Terephthalate, is one kind of thermoplastic polyester. Compared with PET, its molecular chains have better flexibility and processing ability, so that its modified polymer could be the ideal material for meltblown process.

称道新材协同上下游伙伴共同开发了7S-PBT特种熔喷非织造布，制得布面十分均匀、手感非常细腻柔软的熔喷非织造材料。

SENSA, in cooperation with his friendly partners, has successfully developed a series of 7S-PBT meltblown nonwovens. It has very unique characteristics as a result of very fine fibers and soft fabric touch.

7S-FM 特种PBT 熔喷滤材产品技术参数表
7S-FM Specialty PBT Meltblown Technical Data Sheet

规格 型号 Type	克重 Basic weight (g/m^2)	厚度 Caliper (mm)	透气量 Air Permeability ($dm^3/m^2.s$) @Pressure Drop: 100 Pa; Test Area: 20 cm^2	平均孔径 Mean Pore Size (μm)
FM-PBT/MB80	80	0.16	20	5
FM-PBT/MB40	40	0.20	160	12
FM-PBT/MB30	30	0.15	200	15
FM-PBT/MB100	100	0.50	250	20

备注/Note：

1.克重偏差：+/-10%；
2.可以应客户要求设计定制其它规格。
1.Deviation of Basic Weight: +/-10%;
2.Can be tailor made for special requirement.

- 100% 采用进口PBT聚合物原料，特性粘度低且性能稳定
  100% imported PBT polymer，with lower IV and other stable properties.
- 布面十分均匀、手感非常细腻柔软
  Very uniform fabric with soft touch.
- 耐热性能优异(耐180℃)、耐油、耐化学腐蚀
  Excellent heat resistance（up to 180℃）, strong resistance to oil,chemical corrosion protection.
- 可广泛应用于滤清器和油水分离，甚至于在高热工况下的空气过滤和保温隔热
  Can be widely used as the media of filters and oil/water separation,or even as air filter media and insulation material under the hot condition.

7S 差异化熔喷非织造布（多标准口罩专用）
7S Specialty Meltblown Nonwoven (MB)

7S 差异化熔喷非织造布（多标准口罩专用）
7S Specialty Meltblown Nonwoven (MB)

7S差别化系列熔喷非织造布的制备，利用了进口的先进熔喷设备、国际技术领先的进口高熔指原材料以及自身专有的静电驻极技术，三者完美结合后获得。熔喷微纤直径可在 1μm 以下。该产品的最大特点是过滤效率高但阻力低、过滤效率衰减周期长，而且基本无挥发性气味。

Advanced meltblown equipment, special/imported raw materials and state-of-art static-electret technology are the three key factors for 7S Specialty Melt blown Nonwoven.The fiber diam eter achieved is around 1μm. This perfectly balances between high filtration efficiency, lowest possible resistance and longest possible shelf time.

备注/Note:

1.克重偏差：+/- 3 g/m²

2.可以应客户要求设计定制其它规格。

1.Deviation of Basic Weight: +/- 3 g/m²

2.Can be tailor made for special requirement.

7S-FM差异化熔喷（适用于立体面罩/呼吸器: GB2626）产品技术参数表

7S-FM Specialty Meltblown Technical Data Sheet （Suitable for mask or respirator as per GB2626-2019）

规格 型号 Type	克重 Basic Weight (g/m²)	初始阻力 Initial Resistance (Pa)	初始效率 Initial Efficiency (%)	加载效率 Loading Efficiency (%)
		@2% NaCl, 0.3 μm，85 L/min		
FM-FS95	80+15	≤50	≥85	-
FM-N95/C150MB40	150+40	≤110	≥98	≥95
FM-N95/C140MB20	140+20	≤100	≥95	≥90

7S-FM差异化熔喷（适用于儿童口罩:GB38880）产品技术参数表

7S-FM Specialty Meltblown Technical Data Sheet（Suitable for Children's mask as per GB/T 38880-2020）

规格 型号 Type	克重 Basic Weight (g/m²)	初始阻力 Initial Resistance (Pa)	初始效率 Initial Efficiency (%)	备注 Remarks
		@NaCl, 0.3 μm, 32 L/min		
FM-P95/MB25	25	≤25	≥95	用于儿童卫生口罩 (for W grade)

规格 型号 Type	克重 Basic Weight (g/m²)	初始阻力 Initial Resistance (Pa)	初始效率 Initial Efficiency (%)	备注 Remarks
		@NaCl, 0.3 μm, 45 L/min	@NaCl, 0.3 μm, 85 L/min	
FM-P98/MB25N	25	≤30	≥95	用于儿童防护口罩 (for F grade)

7S-FM差异化熔喷（适用于立体口罩: GB2626 , NIOSH）产品技术参数表

7S-FM Specialty Meltblown Technical Data Sheet （Suitable for mask as per NOISH 42 CFR Part 84 and GB2626-2019）

规格 型号 Type	克重 Basic Weight (g/m²)	初始阻力 Initial Resistance (Pa)	初始效率 Initial Efficiency (%)
		@2% NaCl, 0.3 μm，85 L/min	
FM-N90/MB25	12.5+12.5	≤70	90-95
FM-N95/MB30	15+15	≤95	≥95
FM-N95/MB50	25+25	≤110	≥98
FM-N95/MB40LR	20+20	≤100	≥98
FM-N95/MB80	40+40	≤100	≥98
FM-N99/MB50N	25+25	≤95	≥99.9
FM-N100/MB80N	40+40	≤200	≥99.99

7S-FM差异化熔喷（适用于立体口罩: KF）产品技术参数表

7S-FM Specialty Meltblown Technical Data Sheet （Suitable for mask as per KF norms issued by MFDS）

规格 型号 Type	克重 Basic Weight (g/m²)	初始阻力 Initial Resistance (Pa)	初始效率 Initial Efficiency (%)
		@Paraffin Oil, 0.3 μm, 95 L/min	
FM-KF80/MB25N	25	≤90	≥87
FM-KF94/MB40N	40	≤140	≥98.5

7S-FM差异化熔喷（适用立体口罩: EN149）产品技术参数表

7S-FM Specialty Meltblown Technical Data Sheet （Suitable for mask as per EN 149: 2001+A1 2009）

规格 型号 Type	克重 Basic Weight	初始阻力 Initial Resistance (Pa)	初始效率 Initial Efficiency (%)
	(g/m²)	@Paraffin oil, 0.3 μm, 60 L/min	
FM-P1/MB40	20+20	≤60	≥96
FM-P2/MB50LR	25+25	≤110	≥99
FM-P3/MB60N	30+30	≤120	≥99.97

7S 差异化熔喷非织造布（口罩专用）
7S Specialty Meltblown Nonwoven (MB)

- 核心的生产设备均为国际先进水平的进口配置，运行更稳定，产品风格细腻且均匀性好

  Key equipment related to meltblown is imported, which is able to run at very stable condition and makes the products more uniform.

- 自有驻极技术和进口驻极载体的结合，产品质量更稳定，静电抗衰减

  Applications of combinatorial optimization: own static electret process and imported additives, make the media with more stable quality.

- 疏水不霉变（含湿率不到1%）

  Hydrophobic nature (moisture content: <1%) to reduce the possibility of mildew.

- 采用国际大石化集团茂金属PP聚合物，无游离化学物质挥发，绿色环保无气味

  Little or zero VOC emission, environmental protection, Odor free.

- 除本册中详解的品种外，适用于其它常见品种口罩的熔喷均可生产，如：GB32610-2016,YY0469-2011,YY0969-2013,GB19083-2010,ASTM F2100-2019,BS EN14683:2019 等。

  Besides those specified in this book, we also provide high quality meltblown for other mask standards, such as: GB32610-2016, YY0469-2011, YY0969-2013, GB19083-2010, ASTM F2100-2019, BS EN14683:2019, etc.

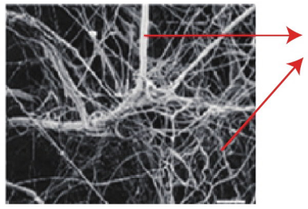
圣纱®
高效工业保温棉
SENSA® High Performance Thermal Insulation

圣纱®保暖原理

圣纱®高效工业保温棉采用微米级微纤维经特种工艺复合而成，且具有立体网状结构。是一种质地轻、保温性能优异的填充材料。

How Come SENSA® High Performance Thermal Insulation Performs Better

SENSA® High Performance Thermal Insulation is made from microfibers, to form three-dimensional network structure. It can be called one of the most warm-keeping materials.



圣纱®高效工业保温棉内部纤维结构电镜照片

Magnified image of SENSA® thermal insulation

圣纱®高效工业保温棉所使用的独特的微纤维与其它多数合成保温材料所使用的纤维相比较，其直径仅为数十分之一，使得它能隔绝更多的空气，从而能达到更有效的保温效果；对于相同体积的保温材料，圣纱®高效工业保温棉中含有更多的纤维数量，起到加倍保温的效果。

The unique microfibers or fine fibers that make up SENSA® insulation work by trapping air. The more air a material traps in a given space the better it insulates from the cold atmosphere. Because the fibers in SENSA® insulation are finer than the fibers used in most other synthetic or natural insulation, they trap more air in less space, which naturally makes SENSA® insulation a better insulator.

圣纱®高效工业保温棉具有轻、薄、柔、暖、耐洗涤、不霉变、透气性好（芯吸效应）等特点。吸水量小于其本身重量的1%，因此即使在潮湿环境下依然能够保持较好的隔热能力。

圣纱®高效工业保温棉采用食品包装级别原材料；而且在生产的过程中，不添加其它化学物质，产品可以达到了欧洲生态纺织品（Oeko-Tex Standard 100）的要求。

圣纱®高效工业保温棉从技术上已经可以实现100%回收再利用。

通过在产品配方上的调整，圣纱®高效工业保温棉可实现不同等级的耐温、耐光、阻燃等要求。

圣纱®高效工业保温棉，产品规格广（不同厚度、克重、外形），除应用于服装服饰外，正被大量应用于农业大棚保温、工业管道和风管的防寒隔热等。

SENSA® is weight light, warm, soft, moisture-resistant (hydrophobic) and breathable. It is still effective in damp conditions. Fibers absorb less than 1% by weight of water.

Raw materials for SENSA® are somehow of food-packaging grade, exclusive of any chemical additives, thus SENSA® Thermal Insulation is also in line with Oeko-Tex Standard 100.

SENSA® Thermal Insulation is Eco-friendly, can be 100% recyclable.

By adjusting the formula of the material, SENSA® Thermal Insulation can be heat durable, anti-light/anti-UV and flame retardant.

SENSA® Thermal Insulation family of products includes a wide selection of insulation weights, thicknesses and appearances. Besides the use on different clothes, they can be widely used as the insulators in agricultural greenhouses, industrial pipes and air ducts.

圣纱®IMC产品技术参数表

SENSA®IMC Product Technical Data Sheet

规格型号 Type	克 重 Basic Weight(g/㎡)	厚 度 Thickness(mm)	保温率 Thermal Insulation Efficiency (%)	传热系数 Heat Transfer Coefficient (W/m·°C)	克罗值 CLO Value (㎡·°C/W)
IM-C40	40	3	53	9.5	0.7
IM-C80	80	6	63	5.4	1.2
IM-C100	100	6	72	4.2	1.5
IM-C150	150	9	79	2.8	2.3
IM-C200	200	12	82	2.4	2.7

备注/Note:

1.可以应客户要求设计定制其它规格。
1.Can be tailor made for special requirement.

圣纱®IMB产品技术参数表

SENSA®IMB Product Technical Data Sheet

规格型号 Type	克 重 Basic Weight(g/㎡)	厚 度 Thickness(mm)	保温率 Thermal Insulation Efficiency (%)	传热系数 Heat Transfer Coefficient (w/m2oC)	克罗值 CLO Value (㎡·°C/W)
IM-B100	100	5	70	4.5	1.4
IM-B150	150	8	76	3.2	2.4
IM-B200	200	10	80	2.7	2.7
IM-B400	400	22	85	2.3	2.9

备注/Note:

1.产品表面压花。2.可以应客户要求设计定制其它规格。
1.Products calendered in favorable patterns. 2.Can be tailor made for special requirement.

圣纱®IMFLEX产品技术参数表

SENSA®IMFLEX Product Technical Data Sheet

规格型号 Type	克 重 Basic Weight(g/㎡)	厚 度 Thickness(mm)	保温率 Thermal Insulation Efficiency (%)	传热系数 Heat Transfer Coefficient (w/m2oC)	克罗值 CLO Value (㎡·°C/W)
IM-F40	40	4	53	9.5	0.7
IM-F180	180	6	79	2.8	2.3

备注/Note:

1.采用进口弹性体材料，适用于对伸展性和回复性有较高要求的领域。
2.可以应客户要求设计定制其它规格。
1.The product is made out of special Elastomers from famous brands, designed for applications where stretch and recovery are important.
2.Can be tailor made for special requirement.

7S 差别化熔喷非织造布
7S Specialty Meltblown Nonwoven (MB)

7S-FM差别化熔喷滤材（一代品）
7S-FM Specialty Melt-blown Nonwoven for Air Filtration Technical Data Sheet

规格型号 Type	克重 Basic Weight (g/m^2)	初始阻力 Initial Resistance (Pa)	初始效率 Initial Efficiency (%)
		@2% NaCl, 0.3 μm，32 L/min（或：5.33 cm/s）	
FM-P65/MB10	10-12	≤10	≥65
FM-P75/MB12	12-15	≤12	≥75
FM-P85/MB15	15	≤14	≥85
FM-P90/MB20	20	≤16	≥90
FM-P95/MB25	25	≤18	≥95
FM-P98/MB25	25	≤25	≥98
FM-P995/MB30	30	≤35	≥99.5

备注/Note：
1.克重偏差：+/-2 g/m^2；
2.可以应客户要求设计定制其它规格。
1.Deviation of Basic Weight: +/-2 g/m^2；
2.Can be tailor made for special requirement.

7S 差别化熔喷非织造布
7S Specialty Meltblown Nonwoven(MB)

7S差别化系列熔喷非织造布的制备，利用了进口的先进熔喷设备、国际技术领先的进口高熔指原材料以及自身专有的静电驻极技术，三者完美结合后获得。熔喷微纤直径可在1μm 以下。该产品的最大特点是过滤效率高但阻力低、过滤效率衰减周期长，而且基本无挥发性气味。其广泛地应用于精密空气过滤、优质口罩、空气净化器等诸多领域。

Advanced meltblown equipment, special/imported raw materials and state-of-art static-electret technology are the three key factors for 7S Specialty Meltblown Nonwoven.The fiber diameter achieved is around 1μm. This perfectly balances between high filtration efficiency, lowest possible resistance and longest possible shelf time. It is widely used HEPA, masks, air purifiers and other fields.

7S-FM高效低阻系列熔喷滤材（新品）
7S-FM Specialty Melt-blown Nonwoven latest version for Air Filtration Technical Data Sheet

规格型号 Type	克重 Basic Weight (g/m^2)	初始阻力 Initial Resistance (mmH_2O)	初始效率 Initial Efficiency (%)
		@2% NaCl, 0.3 μm，32 L/min（或：5.33 cm/s）	
FM-P65/MB16N	16	≤0.4	≥65
FM-P75/MB18N	18	≤0.6	≥75
FM-P85/MB20N	20	≤0.8	≥85
FM-P95/MB20N (H11)	20	≤1.0	≥95
FM-P98/MB20N (H11)	20	≤1.4	≥98
FM-P995/MB20N (H12)	20	≤2.0	≥99.5
FM-P995/MB25N (H12)	25	≤2.0	≥99.5
FM-P9997/MB25N (H13)	25	≤3.0	≥99.97
FM-P9997/MB30N (H13)	30	≤3.0	≥99.97
FM-P99996/MB40N (H14)	40	≤4.2	≥99.996

备注/Note：
1.克重偏差：+/- 2 g/m^2；
2.可以应客户要求设计定制其它规格。
1.Deviation of Basic Weight: +/- 2 g/m^2；
2.Can be tailor made upon requirement.

7S 特种熔喷产品新开发与新应用方面
7S New Developments of Specialty Meltblown Nonwoven(MB)

- 除了普遍的PP以外，积极联合相关单位进行更多、更新聚合物，如：PBT、PLA 和PA6/PA66 熔喷非织造布的新产品开发与应用推广
  Besides PP, new development on specialty meltblown nonwoven of other polymers such as: PBT, PLA and PA6/PA66.
- 拓展特种熔喷非织造布、超柔暖棉等新产品在卫生材料、医疗保健、液体过滤等领域的应用
  More applications on hygiene, medical care and liquid filtration.
- 针对精密仪器和特种器械的清洁擦拭市场、吸油吸液等专用吸附材料，开发、推广适宜的专用产品
  Tailored products can be used as Wipers and oil or other liquid absorbents.