

TPE Thermoplastic edge for insulating glass (warm spacer)

中空玻璃专用TPE 热塑性隔条 (暖边)

TPE 由热塑性基材和复合干燥剂所组成，使得两玻璃之间保持长久干燥。

TPE 配合适当的涂布机直接挤涂在玻璃上完全取代传统的金属、塑料隔条，分子筛和丁基胶。第二道胶使用双组份密封胶（聚硫胶、硅酮胶）用于中空玻璃的生产。

The TPE consists of the thermoplastic substrate and the composite desiccant to maintain the glasses dry for a long time.

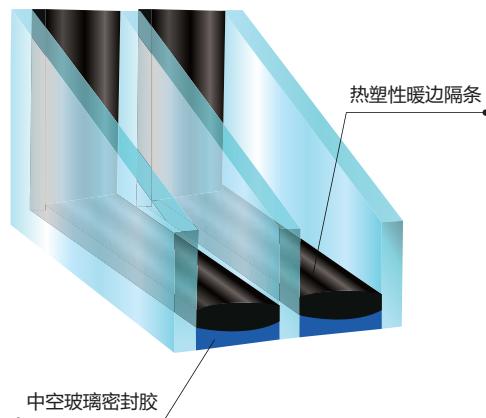
TPE is directly extruded onto the glass with a suitable coating machine to completely replace the traditional metal, plastic partition, molecular sieve and butyl rubber. Secondary sealants are still used in the insulating glass production with the verified two-component sealants Polysulfide and Silicone.

产品特征

- * 出色的暖边材料，由于去掉金属隔条，该密封胶可提高中空玻璃的热阻隔能力。
- * 较低的水汽和气体透过率
- * 提高边缘的 U 值（“暖边”）
- * 最大减少中空玻璃边缘结露现象
- * 高自动化生产

Product Features

- * Excellent warm edge material can improve the thermal barrier of insulating glass due to the removal of metal spacers.
- * Lower water vapor and gas permeability.
- * Improving the U value of the edge (Warm Edge).
- * Minimizing condensation at the edges of insulating glass.
- * High automation production.



技术数据

基材	人工合成橡胶 (聚异丁烯) , 不含溶剂
颜色	黑色
粘稠度	固体化合物, 在高温下配合涂覆机可供使用。
稳定性	用于 -20°C 至 +70°C 宽泛的外界条件下
密度	约 1.24g/cm ³
气体透过率	<0.01g/m ² .h
水汽透过率	<0.395g/m ² .h
挥分	≤ 0.5%
雾状	无可视雾气
水分容纳量	3.9%
撕裂强度	0.6N/mm ²
转矩	375Nmm
热传导率	0.3W/(m.k)
分子筛孔径	3A

Technical Parameters

Base Material	Artificial Rubber(Polyisobutene), Solvent-Free.
Color	Black
Viscosity	Solid compound can be used with coating machine at high temperature.
Service Temperature of insulating glass	From -20°C to +70°C
Density	About 1.24g/cm ³
Gas Transmission Rate	<0.01g/m ² .h
Water Vapor Transmission	<0.395g/m ² .h
Volatile	≤ 0.5%
Vaporific	No visible fog
Moisture tolerance	3.9%
Tear Strength	0.6N/mm ²
Torque	375Nmm
Pyroconductivity	0.3W/(m.k)
Molecular Sieve Pore Size	3A



优势

TPE 热塑性隔条进一步的优势：比较需要用手工放置在玻璃上的刚性的隔条，TPE 的直线度及放置位置的精确度更好，尤其在大型中空玻璃上尤为明显。对于三层中空玻璃，TPE 的应用使得在两个隔条之间没有错位，解决了三层中空的隔条重叠问题。

- ★ 边缘的凝露最小化
- ★ 霉化的潜在性更少
- ★ 维修成本与频率降低 (如：木质窗户的油漆更少)
- ★ 居室的舒适性得到改善
- ★ 在玻璃和窗框之间的视觉效果更诱人

Advantages

- ★ The spacer is always parallel to the glass edge, also for big glass sizes.
- ★ The spacer gives a consistent and accurate seal depth, this is particularly important with triple insulating glass.
- ★ The overall thickness of the insulating glass can be adjusted to exact measurements, independent of glass tolerances.
- ★ The corners are formed perfectly each time.
- ★ The color of the window frames reflected on to the spacer.
- ★ Completely metal free material with very low heat conductivity.
- ★ Minimizes condensation formation.
- ★ Improves the internal environment, giving more comfort.
- ★ Reduces heating costs.

用途

建筑玻璃、工业玻璃、电器、冰柜门、汽车玻璃、火车、高铁等行业用密封剂。

Application Scope

Suitable for building glass, industrial glass, electrical equipment, freezer door, automobile glass, train, high-speed railway and other industries.

中空玻璃专用TPE热塑性隔条(暖边)

TPE热塑性隔条中空系统性能特点：

- * 热塑性材料相比铝条的热传导系数降低 60% 以上，降低能源消耗
- * 长久保持惰性气体 25 年以上，并含量高于 80%；
- * TPE 具备高密封性并含有干燥剂成分，玻璃无起雾、凝露、漏水现象产生；
- * 有效降低干燥剂消耗，保护 Low-E 膜，中空玻璃实际使用寿命延长 1.6-5 倍；
- * 有效缓解泵效应，避免密封胶内溢或开裂现象。

全新的中空玻璃生产系统解决方案：

- * 双胶桶供胶系统可在生产中进行换胶，实现连续性生产；
- * 可不间断生产各种异形玻璃、三边大小片、多腔体与不等腔等；
- * 减去了普通铝条的锯切、折弯、分子筛灌装、丁基胶涂布等复杂工序；
- * 无需储存不同类型和规格的金属间隔条，以及分子筛，节省空间；
- * 可轻松实现玻璃间隔条宽度的切换；



TPE Insulating Glass Characteristics

- * The thermal conductivity of the thermoplastic material is reduced by more than 60% compared with aluminum spacer, reducing energy consumption.
- * Keep the gas for more than 25 years and the content is more than 80%
- * TPE has high sealing performance and contains desiccant, the IG units without fog, condensation and water leakage
- * Effectively reduce desiccant consumption, protect Low-e film, the IG units service life extended by 1.6-5 times
- * Effectively reduce thermal expansion and contraction, to avoid sealant overflow or cracking

New Insulating Glass production system solution

- * Double pump supply system can change sealant during production to achieve continuous production Non-stop production for all kinds of special shape and multi-chamber units
- * Remove complex processes such as spacer sawing, bending, desiccant filling and butyl coating
- * No need to store different types and specifications of metal spacers, as well as desiccant, saving space
- * The width of the spacer can be easily changed from 6mm to 19mm