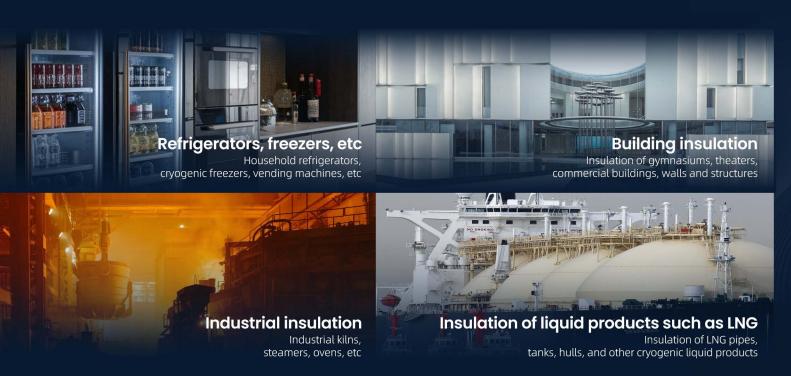
## **New Process**

More thorough exhaust, orders of magnitude optimized leakage rate, more regular appearance, and higher degree of automation bring great improvement in reliability.

## Multi-field Applications

Supertech-VAP delivers high-efficiency thermal insulation solutions across household, construction, and transportation sectors, while extending its application to extreme environments (-200°C cryogenic LNG storage to 500°C industrial processes).











Lianfeng Town, Liancheng County, Longyan City, Fujian Province

## Supertech -VAP

Supertech has innovated and developed a new VIP product structure - Shell type four-sided sealing vacuum insulation Panel (Vacuum Armour Panel, VAP).

The product is composed of hard bottom shell and high barrier film, the hard bottom shell is formed by hot stamping, the angle deformation and the whole process can be controlled, the new process edge banding is formed on one side of the product, the shape is regular and flat, and the slotted holes can be prefabricated and the size can be customized according to the VIP core material, and there is no dotted edge.

#### No folds, more fidelity

Effectively avoid the hidden damage caused to the product in the process, and fundamentally solve the problems of traditional bag VIP damage, air leakage and hemming.

#### **Puncture resistant**

The shell has excellent impact resistance, can effectively resist external impact, the material is stable, not easy to age, to ensure long-term use.

#### Morphology-unrestricted

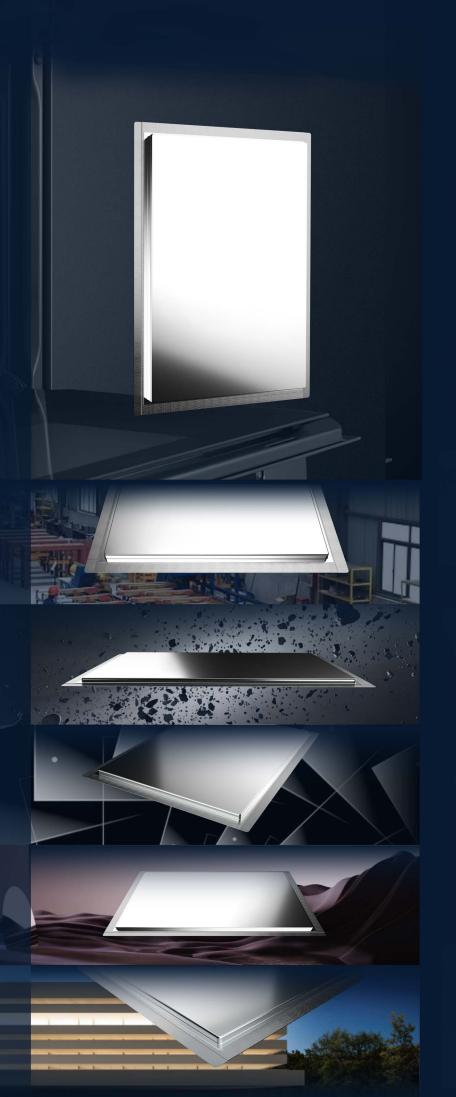
The shape can be customized, the appearance is regular, and the thermal bridge of product assembly is reduced.

#### Stability meets excellence

The new process exhausts thoroughly, has high vacuum degree, and More significant energy savings.

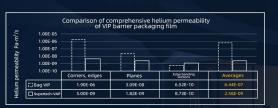
### Long service life

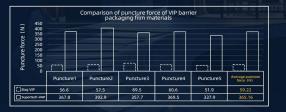
The corners are more wear-resistant, reducing air leakage and extending service life.

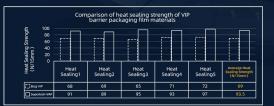


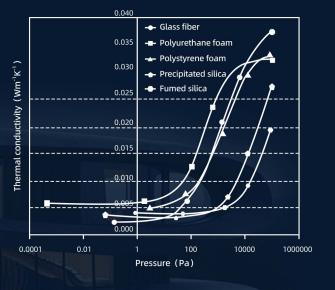
# Leakage rate subversion

Supertech-VAP utilizes pre-molded barrier shells with corner deformation control, achieving leakage rates <3×10<sup>-9</sup> Pa·m³/s to enhance product reliability and lifespan.









### Puncture resistance exceeds 6.2 times and heat sealing strength surpasses 1.4 times traditional VIP packaging

The introduction of APET material has improved the impact resistance, tear resistance and heat resistance of the material, so that Supertech-VAP has excellent performance in various tests and has a longer service life. At the same time, it allows greater freedom in its production and use without air leakage.

# Multi-fit series Any size, any form, any thermal need

Supertech-VAP	Core Shell code material code	Aluminum -laminated films(AL)	Stainless steel foils(ST)	Aluminized films (Vm)
	M Mineral wool Thermal Conductivity: 2.5 ~ 3.0 mW/m⋅K	VAP-M·AL	VAP-M·ST	VAP-M∙Vm
	W Centrifugal glass Wool Thermal Conductivity: 1.5 ~ 2.0 mW/m⋅K	VAP-W·AL	VAP-W·ST	VAP-W·Vm
	F Glass fiber Thermal Conductivity: ≤ 1.5 mW/m·K	VAP-F-AL	VAP-F·ST	VAP-F·Vm
Special-shaped with mounting holes		Custom c	:hamfer & Relief	grooves





