THERM GLASS GROUP · EQUIPMENT SALES

Own Your Factory

Turnkey Intelligent Continuous Warm Edge Vacuum Insulated Glass (VIG) production lines — from raw glass in to finished vacuum glass out. Manufactured in China. Turnkey pricing available worldwide.

100,000 – 300,000 m²/yr

Fully automatic or semi-automatic

Low-temperature warm edge sealing

No pump-out port

Request Turnkey Pricing

Why Vacuum Insulated Glass

A vacuum layer between two lites of glass nearly eliminates gas conduction and convection — the two main paths of heat loss in conventional insulating glass. VIG is a key material for passive-house and zero-energy buildings.

< 0.4

Ultra-low U-value

U-value can be reduced below 0.4 W/(m²·K).

0

Gas convection

The vacuum eliminates convective heat transfer between lites.

Anti-condensation

Inner surface stays above dew point in cold, humid conditions — preventing fogging and condensation for clear,

unobstructed vision.

Passive & zero-energy ready

Built for the most demanding energy codes and high-performance building programs.

Edge Sealing: Warm Edge vs. Cold Edge

The edge seal determines how long a vacuum unit keeps its vacuum — and how much heat leaks around the perimeter. These lines use warm edge composite sealing.

Warm Edge — Composite Sealing This line

- Low-melting-point composite, sealed at just above 300°C
- Forms a permanent, stable inorganic chemical bond
- Low thermal conductivity: 0.8–1.2 W/(m·K)
- 25–30 years of reliable service in harsh conditions
- Low sealing temperature does not compromise tempered glass strength

Cold Edge — Metal Sealing

- Stainless steel, tin alloy or aluminum frames
- Physical bonding only; organic sealants are prone to aging
- High metal conductivity creates a thermal bridge and heat loss
- Metal/glass expansion mismatch can bend the edge, crack the seal and cause failure

The Intelligent Continuous Production Line

Continuous, automated flow replaces batch processing — raising output while cutting energy and labor.

Unmatched efficiency

Full automation and continuous flow with minimal downtime, high yield and fast cooling.

1/5

Energy use

Production energy consumption about one-fifth of traditional processes, with significantly reduced labor costs.

Consistent quality

Uniform heating, advanced sealing and a fully automated, traceable system ensure uniform product quality.

Higher output, smaller crew

Substantially increased output with far fewer operators than batch production.

What the finished glass delivers

Non-invasive design. No pump-out port or cap — a clean appearance and no potential leak point, made possible by high-vacuum processing.

Advanced manufacturing. Made on a continuous line for high quality and consistency. Per the manufacturer, a longer continuous vacuum section yields longer VIG service life.

Superior sealing. Low-temperature warm edge composite seal, maximizing energy efficiency and durability.

Production Process

Fully Automatic Line

Raw glass to finished VIG

1. Raw glass loading & storage
2. Auto loader
3. Cutting & laser marking
4. Sorting
5. Dual edge grinding
6. Washing
7. Glass placement
8. Tempering furnace
9. Unloading & rotary conveyor
10. Sorting
11. Second washing
12. Edge pasting
13. Pillar (spacer) placement
14. Curing line
15. Inspection & clamping
16. Continuous vacuum line
17. Auto unloading & stacking
18. Finished warm edge VIG

Semi-Automatic Line

Starts from pre-cut, tempered glass

1. Glass loading area
2. Edge pasting
3. Pillar (spacer) placement
4. Curing line
5. Sorting
6. Inspection & clamping
7. Continuous vacuum line
8. Stacking & delivery
9. Finished warm edge VIG

The semi-automatic line omits cutting, grinding, washing and tempering — ideal if you already operate a tempering line or buy tempered glass.

Line Configurations & Layouts

Six standard layouts. Custom configurations available.

LAYOUT	TYPE	ANNUAL OUTPUT	OVERALL LENGTH	VACUUM LINE	C L
A	Fully automatic	300,000 m² ≈ 3.2M sq ft	262 m (860 ft) ~48 m / 157 ft wide	146 m (479 ft)	4 (
B	Fully automatic	200,000 m² ≈ 2.15M sq ft	262 m (860 ft) ~40 m / 131 ft wide	120 m (394 ft)	3 f
C	Fully automatic	100,000 m² ≈ 1.08M sq ft	262 m (860 ft) ~40 m / 131 ft wide	90 m (295 ft)	2 f
D	Semi-automatic	300,000 m² ≈ 3.2M sq ft	275 m (902 ft)	146 m (479 ft)	4 (
E	Semi-automatic	200,000 m² ≈ 2.15M sq ft	275 m (902 ft)	120 m (394 ft)	3 f
F	Semi-automatic	100,000 m² ≈ 1.08M sq ft	235 m (771 ft) ~26.6 m / 87 ft wide	90 m (295 ft)	2 f

Dimensions are from standard layout drawings and are approximate. Detailed layout drawings provided on request.

Turnkey, Worldwide

Lines are manufactured in China and offered as complete turnkey packages. Turnkey pricing is available globally — tell us your target capacity, site and timeline and we'll prepare a proposal.

Request Turnkey Pricing & Information

Tell us what you're planning. We'll respond with pricing, layout drawings and next steps.

Full name *

Company

Email *

Phone / WhatsApp

Country *

Planned plant location (city/region)

Line type

Not sure yet

Target annual capacity

Not sure yet

Do you have a building?

Not yet

Building size available (if known)

e.g. 300 m x 50 m

Target timeline

Exploring

Current glass operations

None – new to glass

I'm interested in

- [ ] Turnkey line pricing
- [ ] Layout drawings
- [ ] Factory visit
- [ ] Installation & training
- [ ] Financing / partnership
- [ ] Buying finished VIG

Your questions & requirements

Glass sizes, thicknesses, Low-E, power supply, delivery port, anything else...

Send Inquiry