



Business Background



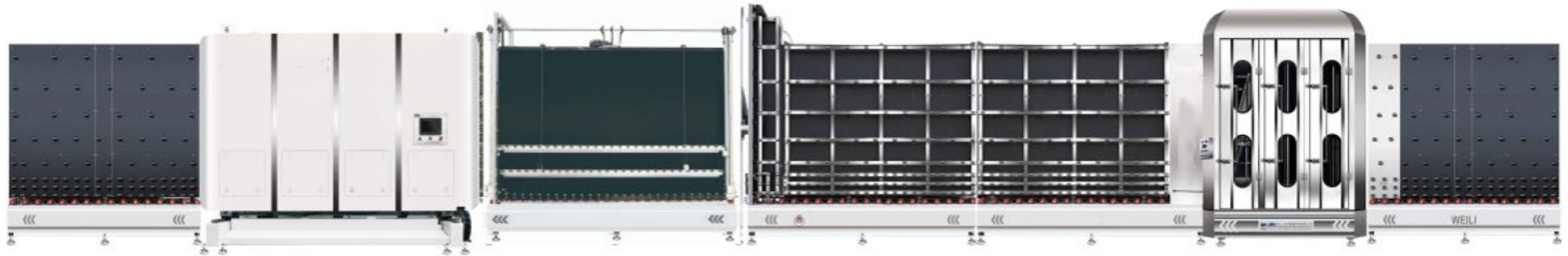
1. The industry's cutting-edge technology represented by Austria's LISEC and Swiss Bystronic has fully reached the international standard. These high-end brands have advanced technology and can reach more than 85% inflatable concentration. But the equipment is expensive, not in line with China's national conditions, and not in line with the purchasing power of our Chinese masses.
2. Some domestic first-line brand manufacturers are also following the international brands in research and development, but the effect is not very satisfactory, they do not have the core technology research and development capabilities, and did not achieve the expected results.
3. At present, there are not many domestic manufacturers that have technologies that are in line with international standards, and most of them are in progress.
4. At present, the structure of the most intelligent in-panel automatic inflation technology in China: One fixed baffle blocks one end of the glass, and the other movable baffle automatically moves according to the length of the glass to block the other end of the glass, and then the lower inflatable bottom plate is based on the length of the glass to provide gas by area.



智能充气线板内充气结构示意图

Four P roduct Overview

LBW3300PC Automatic Insulating glass gas filling inside flat press production line



The argon gas filling volume is $\geq 95\%$, which can meet the demand for argon gas filling volume at home and abroad



Automatic detection of aluminum bar thickness, glass thickness, glass length, glass height



Automatically calculate the volume of insulating glass, set the inflation parameters according to the volume and inflation concentration requirements, automatically control the inflation according to the parameters, and have high-pressure and low-pressure inflation modes according to the size of the glass.



The argon utilization rate is $\geq 80\%$, the baffle driven by the servo motor automatically follows up according to the length of the glass, and the gas filling nozzles outside the partition stop working, saving argon to the greatest extent.



Short inflation time, 5+9+5 insulating glass one square meter inflation time ≤ 4 seconds



Five

product details



01-Input section

Protection, safe,
beautiful, firm



The high-density board adds a metal film on top of it, which is moisture-proof and splash-proof in the cleaning room



Imported optical fiber LOW-E glass membrane surface detection to ensure that the membrane surface is not damaged



Every two wheels are equipped with raised blocking wheels to prevent large glass from being damaged



The silicone material is backed by the wheel, so there is no abrasion on the glass surface, and the base is made of screws and nuts

Fixed, strengthened the stability of the back-to-wheel, and avoided falling due to glass collision



Well-known designer design guard plate, beautiful appearance, safety protection

Five Product details

02-Galss washing machine

No rust, soundproof, sealed, intuitive

The high-quality 304 cleaning cabinet body is made of mirror stainless steel, which has the advantages of non-rusting, sturdy, beautiful, durable and value-preserving.

Soundproof baffle setting, noise reduction, sound insulation, auxiliary glass high-speed transmission

Connecting rod handle tongue lock for cold storage, tightly sealed and easy to operate

Equipped with tempered glass observation port, easy to observe, intuitive and safe



Noise reduction, double air knife, four-stage cleaning, fast speed



4 pairs of brushes for four-level cleaning, 4 soft brushes in the front and 4 normal brushes in the back



Sound insulation cotton is used around the air-drying section for sound insulation and heat preservation protection, noise reduction and strong wind



Double air knife, double circulating air, wind heating design, noise reduction high pressure fan, faster cleaning speed



Five Product Details

02-washing part



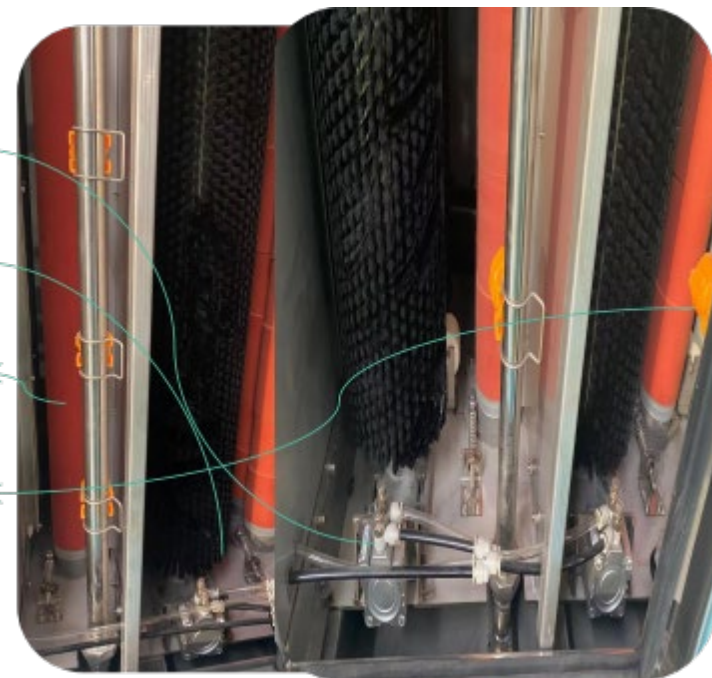
Automatic pitch adjustment, waterproof bearing, speed up

The brush is automatically adjusted forward and backward through the cylinder according to the thickness of the glass, which is convenient and quick

The bearing adopts non-lubricated stainless steel waterproof thrust spherical ball bearing

The solid rubber roller squeezes out the water on the glass and speeds up the drying speed.

Stainless steel water pipe high-pressure nozzle design, the water pressure is increased, it is convenient and quick to adjust the water direction of different glass nozzles, and the cleaning is faster



Automatic adjustment of the air knife, plastic umbrella tooth transmission, automatic start and stop of the tuyere



Automatically adjust the distance of the air knife according to the thickness of the glass that is not used, and the air outlet is made of precision-machined aluminum parts, which fully ensures that the distance between the air outlet and the glass surface is consistent, and the cleaning effect of thick glass is better and more convenient and faster.



Unique transmission design, engineering plastic umbrella teeth + connecting rod for transmission. Maintenance-free, fast transmission, stable operation of small glass



During automatic operation, if the glass stays in the air-drying section due to manual work, a photoelectric switch controls the closing and opening of the air inlet to ensure that the coated glass surface is not damaged in the air-drying section.

Five Product Details

03-Transition part



Industrial aluminum structure, LED light, intuitive detection, dual transmission



- Adopt high-density board substrate industrial aluminum structure, easy to adjust the flatness and wheel spacing
- The silicone material is backed by the wheel, so there is no abrasion on the glass surface
- LED energy-saving lamps detect glass, the light is soft, the inspection is intuitive and not fatigue
- Section 03 is composed of two independent sections, dual transmission, capable of storing two small glasses
- Well-known designer design guard plate, beautiful appearance, safety protection

Five Product Details



04- Aluminum frame placement section

Industrial aluminum structure LED light detection intuitive dual transmission



Adopt high-density board substrate industrial aluminum structure, easy to adjust the flatness and wheel spacing



The aluminum frame is placed and positioned using manual adjustment and digital display design, accurate and convenient positioning



LED energy-saving lamps detect glass, the light is soft, the inspection is intuitive and not fatigue



Section 03 is composed of two independent sections, dual transmission, capable of storing two small glasses

Accurate positioning, accurate placement, automatic thickness detection

The aluminum frame side positioning and lower positioning adopt precise devices --- Double thin cylinder + linear guide + screw adjustment + digital display + adjustment hand valve



The positioning stop rod adopts the structure of cast aluminum parts + spring + leather + 8 adjusting screws, All-round adjustment is convenient and fast, fixed and accurate

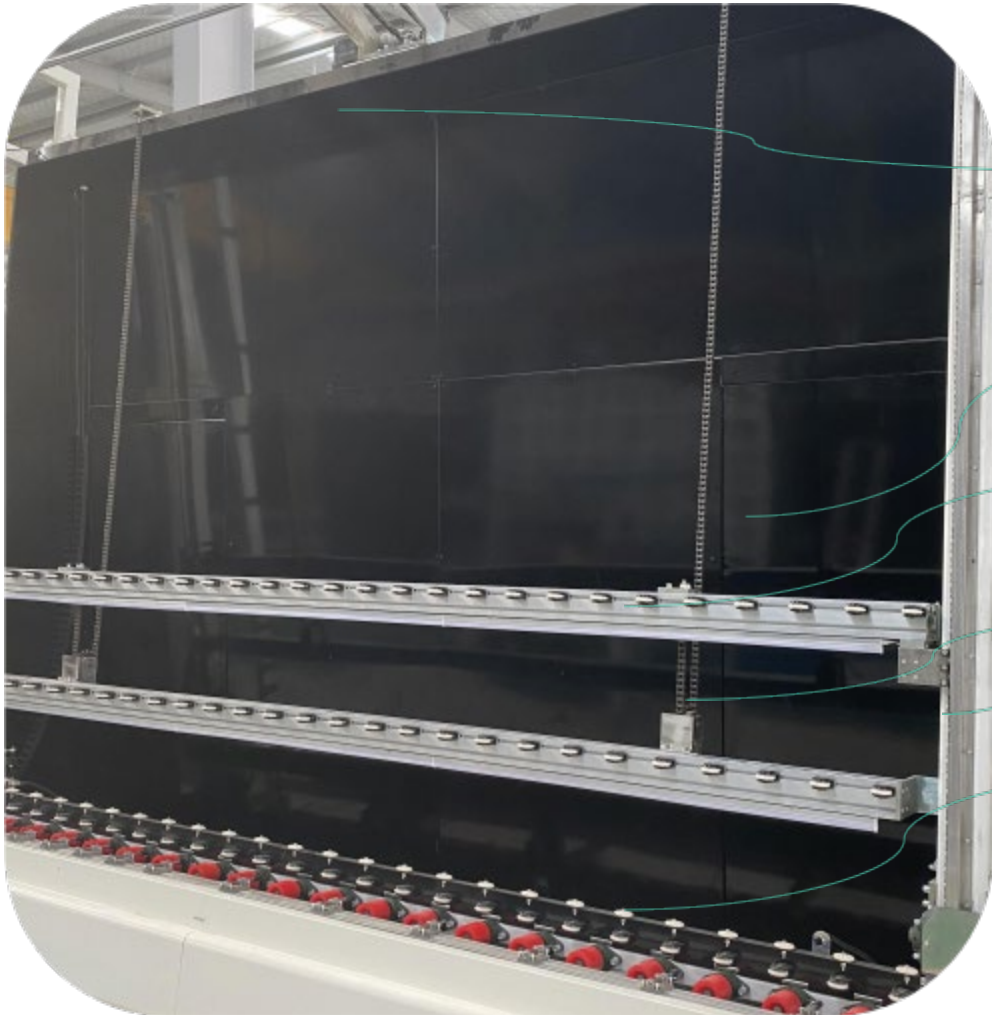


Automatic detection of glass thickness and aluminum strip thickness device



Product details

05- Double beam transition section



Embedded hollow double beams, self-adjusting height, fast and stable operation



The whole adopts an embedded hollow design, which is convenient to check the cleanliness of the glass in all directions



Add a back door for maintenance to facilitate cleaning of stains on the back of the glass that are difficult to clean



Double beam design, automatically adjusts up and down according to the height, so that the large plate glass runs more stably



The upper and lower beams are designed with double chains + double synchronous belts + round guide rails, which are stable and precise

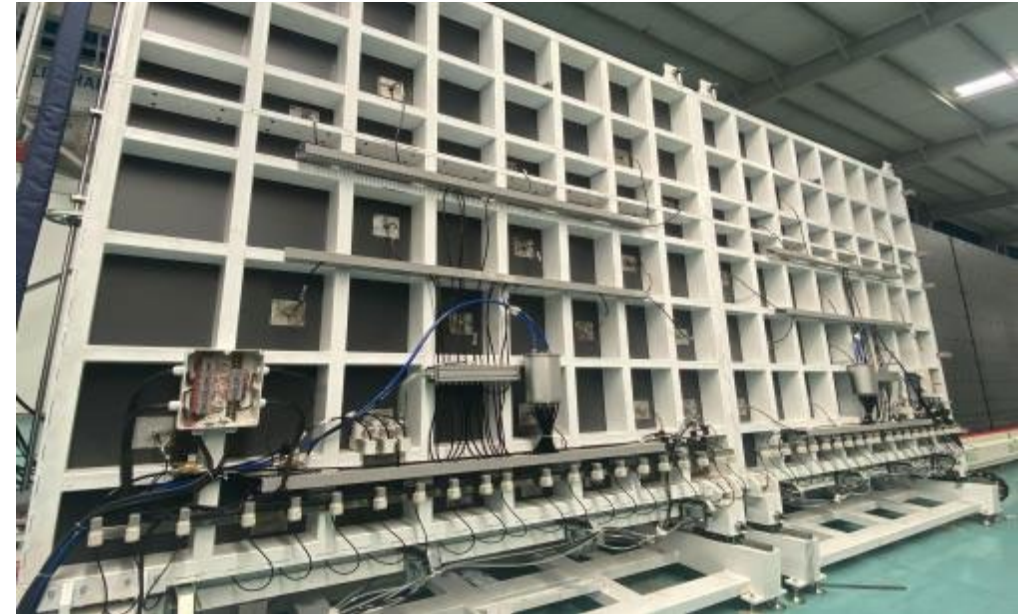


The bottom double row of auxiliary backrest wheels makes the glass conveying faster and more stable

Five P roduct detail5



06 - Inflatable board press



Double plate pressure 12-80mm fast inflation



Double plate pressure design, the maximum inflatable processing size is 3300 × 7000mm



Processing insulating glass thickness 12-80mm



Inflation time 3-4 seconds/square meter (5+ 12+5 benchmark)



Schneider touch screen, real-time monitoring of input monitoring, output monitoring

Double plate pressure 12-80mm fast inflation



SMC ball solenoid valve controls the start and stop of inflation, with precise control and stable operation



SMC multi-stage vacuum generator + suction cup, the adsorption of glass is more stable, and the load is larger



The frame around the shelf is reinforced with 10-20mm steel plate, and the main frame is made of 60 × 120mm square pipe, processed by CNC gantry milling machine, and stress relief treatment to ensure that the plate will not be deformed for life.



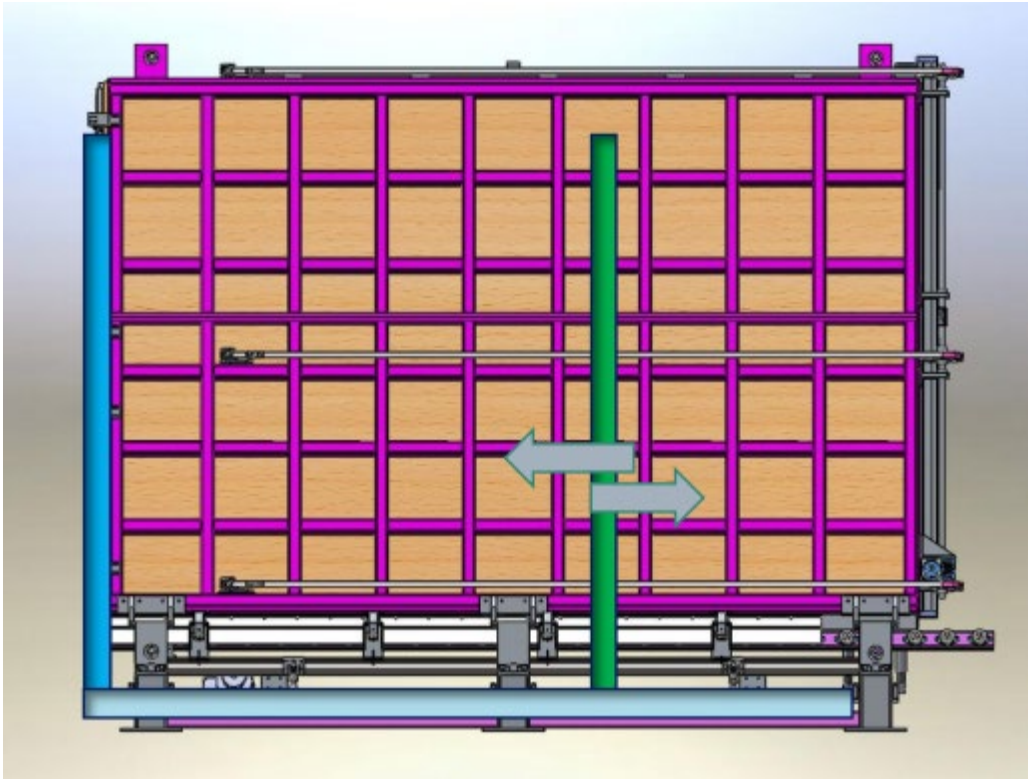
Use 400 × 400 grid frame to fix double-layer high-density board to ensure permanent flatness



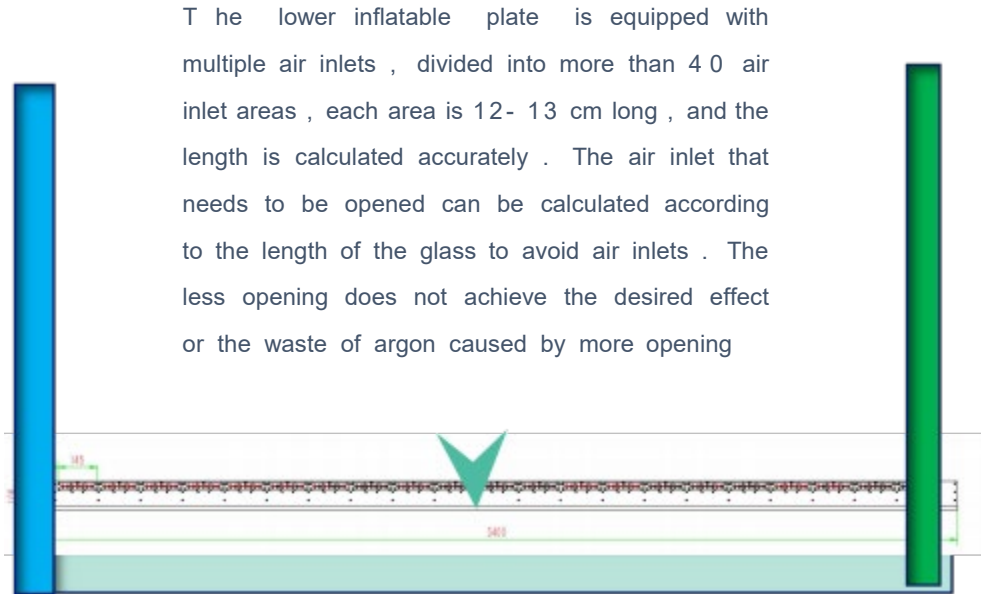
06 - Inflatable board press

The argon gas filling volume of the WEINIG automatic filling production line is $\geq 95\%$, and the utilization rate is $\geq 80\%$, which can exceed the argon gas filling volume at home and abroad

Schematic diagram of the inflatable structure in the WEILI smart inflatable line board



Schematic diagram of side baffle moving structure



The lower inflatable plate is equipped with multiple air inlets, divided into more than 40 air inlet areas, each area is 12-13 cm long, and the length is calculated accurately. The air inlet that needs to be opened can be calculated according to the length of the glass to avoid air inlets. The less opening does not achieve the desired effect or the waste of argon caused by more opening

The working principle of WEILI Online Automatic Inflatable Hollow Line

The inflatable bottom plate is controlled by a precision multi-stage vacuum

The right side baffle is controlled by a servo motor and the timing belt is accurately moved to the desired

Five Product Details

06 - Inflatable board press

precision, super thick,



Using servo drive + servo motor + ball screw + timing belt design to ensure ultra-high-precision pressing of glass, fast pressing speed, high precision, and can process super-large and super-thick glass



The glass is pressed by automatic torque pressure to ensure the best effect of glass pressing



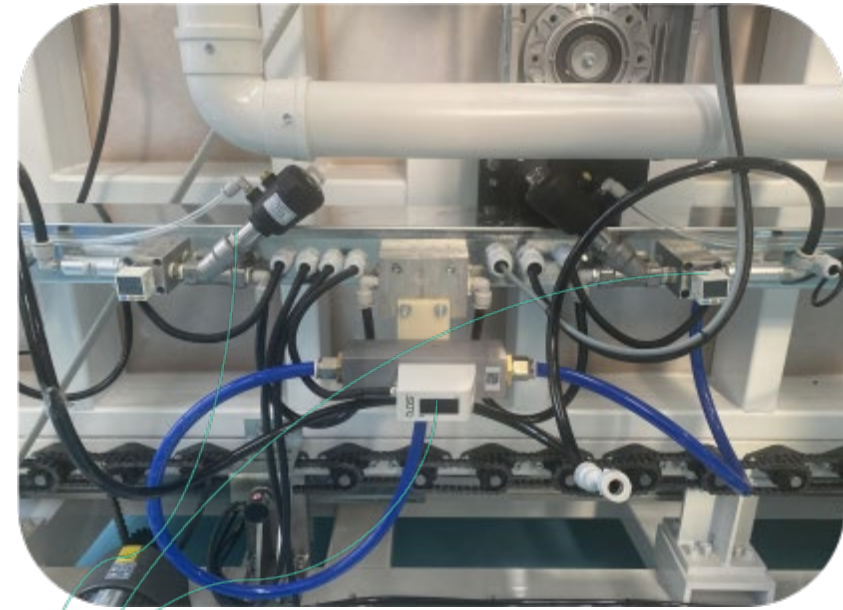
The board press on-line automatic inflation structure and inflation method have obtained national patents



Automatically stop pressing when the inflation concentration reaches the set value



The touch screen intuitively displays the inflation process in real time



CNC plate pressing, high precision, super large, super thick



Adopt German flow control valve for inflation, accurate start and stop, to ensure that the set concentration requirement is reached



High-pressure and low-pressure controlled inflation according to the size of the glass



Automatically detect and calculate the volume of the hollow glass, and accurately inflate according to the volume and the set parameters, and the inflation concentration can reach 99.99% (ignoring the loss of gas)