LD-Cyclone Series Convection Glass Tempering Furnace

Application Fields:
Architecture&Furniture, Automobile Industries, Household Appliances and Solar Power Industries, etc.

Heating Mode:
Cyclone™ convection technology

Glass can be Tempered:
On-line and Off-line Low-E (E=0.02) Glass, Ultra Clear Glass, Screen Printed Glass, Pattern Glass, Tinted Glass, Clear Glass, etc.

Product Introduction
As various coated glasses, especially the online and offline low-E glass, are being used more and more extensively in the building industry, JetConvection™ series tempering furnaces introduced by LandGlass have been winning high reputation in the domestic and foreign markets and heralded as efficient equipment in tempering high end glass products by glass processing companies. In 2015, LandGlass introduced a brand new series of forced convection tempering furnace, i.e. Cyclone™ series, which achieved significant improvement in terms of product quality, productivity, energy saving, intelligent control, and wireless...
Technical Features

Five Advantages:

1. Outstanding Quality

The quality of the tempered glass produced by LandGlass Cyclone™ is improved significantly with the application of the leading Cyclone™ convection technology, IsoTherm™ technology and GeniusCool™ technology.

2. High Productivity

LandGlass Cyclone™ can increase the productivity by 40% when tempering double-silver and triple-silver Low-E glass.

3. Low energy Consumption

With its leading energy-saving technologies, LandGlass Cyclone™ can reduce the energy consumption by 10%, compared with the standard convection tempering furnace.

4. Intelligent Control

Automatic production can be realized by LandGlass Cyclone™ with its eAdapt™ system and eVision™ technology.

5. Wireless Connection

Safe and stable running can be guaranteed by its remote control and message notification system.

Eight Technologies

1. Cyclone™ Convection Technology

Cyclone™ convection technology is for high efficiency of heat transfer in heating furnace and for the best quality tempered glass from float glass to double-silver and triple-silver Low-E glass.

2. IsoTherm™ Technology

IsoTherm™ technology enhances the evenness of the thermal field and is for the most even heating ever done in a tempering furnace.

3. GeniusCool™ Technology

GeniusCool™ achieves unbelievable even quenching and cooling pressure for most even stress distribution.

4. StraightEdge™ Technology

StraightEdge™ technology effectively eliminates the edge kink and lifts the optical quality to highest level.

5. EnergySave™ Technology

EnergySaveTM dynamically adjust power output in quenching and cooling processes, and lower power consumption.
6. ThermoLock™ Technology

ThermoLock™ technology increases the thermal resistance of the furnace walls, and minimizes the heat loss out during operation.

7. eVision™ Technology

eVision™ scans sizes, shapes and quantities of the glass sheets and transfers datum to control system, which allows for easier operation.

8. eAdapt™ System

eAdapt™ technology makes digital production come true, and largely reduce the dependence on professional skill of the operator.

① The best matched parameters can be selected automatically according to the analysis results based on the data transferred by the detectors at the loading table.

② It can adjust the cooling time and air pressure and detect the temperature of the glass surface automatically. The blower will stop blowing once the glass reaches the temperature at which it is ready to be unloaded.

③ It reduces the dependence on professional skill of the operator.

### Technical Parameters

<table>
<thead>
<tr>
<th>LD-Cyclone Series Convection Glass Tempering Furnace</th>
<th>5 mm Clear Glass</th>
<th>5 mm Low-E Glass</th>
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<tbody>
<tr>
<td>LD-Cyclone™</td>
<td></td>
<td></td>
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<tr>
<td>Product Quality</td>
<td>Waviness&lt;0.1</td>
<td>Waviness&lt;0.12</td>
</tr>
<tr>
<td>Productivity (Loads/h)</td>
<td>21</td>
<td>18</td>
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<tr>
<td>Power Consumption</td>
<td>3.5 - 3.7 kWh/m²</td>
<td>3.75 kWh/m²</td>
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<tr>
<td>eAdapt™ System</td>
<td>Digital production has been realized according to China National Industrial Standard 4.0.</td>
<td></td>
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### Customer Case

<table>
<thead>
<tr>
<th>Company</th>
<th>Wuhua Tianbao Glass Co., Ltd (Hebei)</th>
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<tbody>
<tr>
<td>Location</td>
<td>Hebei, China</td>
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</table>

Wuhua Tianbao Glass Co., Ltd (Hebei), located in Gu’an industrial park in Hebei Province, is affiliated with Beijing Wuhua Tianbao Glass Co., Ltd (WHTB Glass) which is one of the leading provider of
processed glass products, working on the transformation and upgrading of glass processing industry. Wuhua Tianbao Glass Co., Ltd (Hebei), has introduced the cutting-edge glass processing equipment and glass process software. At present, Wuhua Tianbao Glass Co., Ltd (Hebei) owns two glass tempering lines which can temper triple-silver Low-E glass with an annual processing capacity of 1,500,000 m². The main products include post-temperable Low-E, insulated glass units, tempered glass covering lot of fields, like architecture, military and industrial glass.

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<th>Furnace Type</th>
<th>LD-Cyclone Series Convection Glass Tempering Furnace</th>
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<tr>
<td>Main Products</td>
<td>Low-E glass, Insulated glass, safety glass, etc.</td>
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Site: [http://www.landglass.net/Products/Cyclone/LandGlass-Cyclone-Series-Glass.html](http://www.landglass.net/Products/Cyclone/LandGlass-Cyclone-Series-Glass.html)