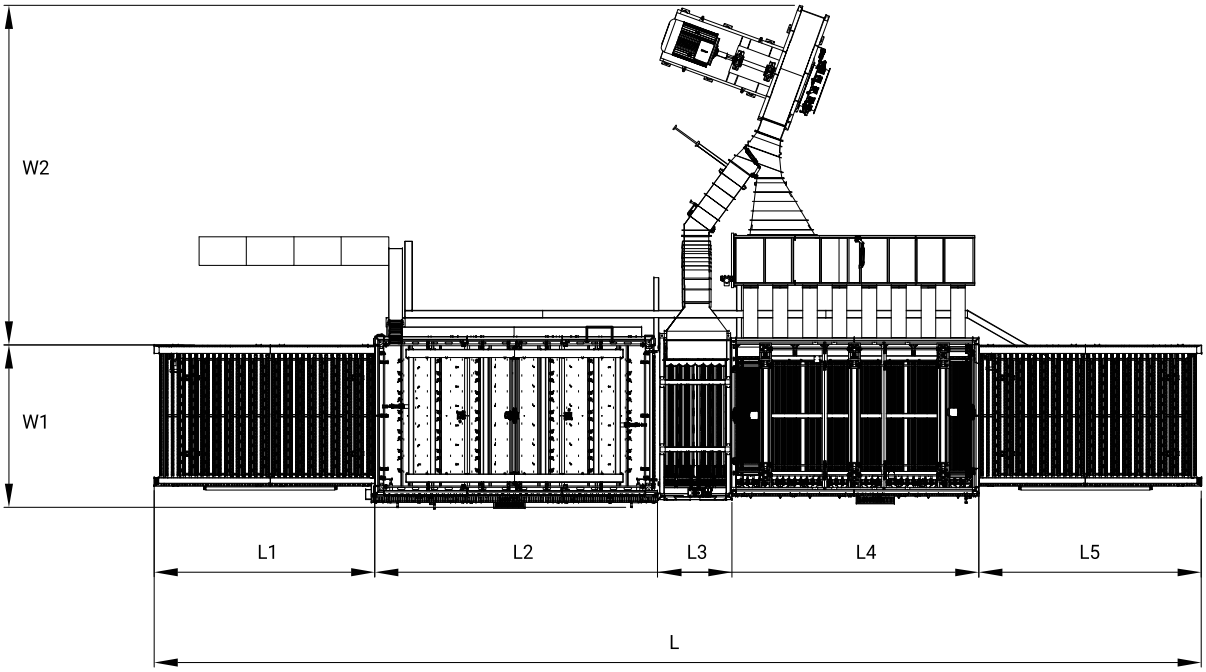
FGTF Glass Tempering Furnace

CMS

Strength
Sensitivity and
Elegance Together



FGTF	Glass Size (mm)		Machine Size (mm)						
	max. W x L	min. W x L	W1	W2	L1	L2	L3 (Ops.)	L4	L5
1630	1600x3000	260x100	2700	5100	3450	4620	1720	4000	3450
2236	2200x3660	300x100	3130	5800	4050	5500	1720	4600	4050
2436	2400x3660	300x100	3600	5800	4050	5500	1720	4600	4050
2442	2440x4200	300x100	3600	5800	4700	6050	1720	5200	4700

(Blower and the collector group can be configured according to production conditions.)

**Measurement units - mm.*

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System Configuration

In addition to its functional features, it has an outer coat and elegance that suits your company. CMS Glass Tempering Furnaces are cut and processed; It is used for tempering flat glass, reflective glass, tinted glass, hard coated (Low-E glass) and partially soft coated (Low-E) glasses. It performs tempering at maximum quality and speed.

A- Inlet / Outlet Conveyors

It is designed for feeding and unloading the glass ergonomically.

- Loading and unloading table that can get up and down in the chassis
- Idle side rolls on both sides for easy loading and unloading of large size glasses

B- Heating Furnace

The heating furnace is produced by CMS machinery experts using high quality insulation materials and precise workmanship. Tempering quality is increased with rigid body and homogeneous heating.

- Alloyed and high temperature resistant resistances
- Independent temperature-controlled district heating system
- Independent power relay for each resistance (Solid State Relay - SSR)

C- / Cooling System & Collector / Blower Group

It is designed to provide excellent flatness and transparency in flat glasses. Blower and Collector group can be customized according to your factory area.

- Ease of Maintenance (Top Unit can be lifted 500mm)
- Driver controlled blower motor speed and precise pressure adjustment
- Easy to carry broken glass discharge trolleys

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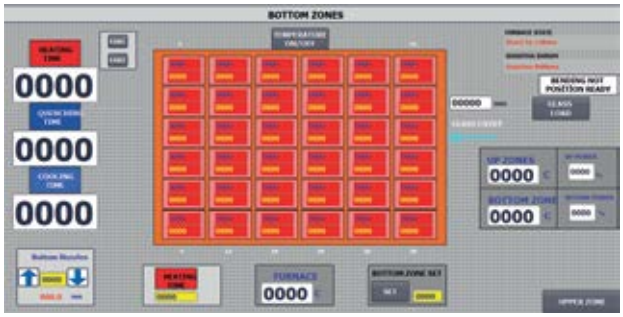
Key Features

Balanced Kevlar Coiled Roll Structure

High Energy Savings

Automatic Length Measuring and Swing Feature



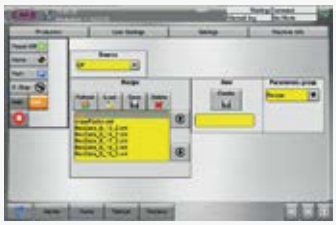
Regional Temperature Control System

(Automatic heating recipe according to Glass Thickness)

In minimized heat zones, homogeneous heating is provided by the heating and heat control system infrastructure. With CMS software technologies and infrastructures, heating is controlled parametrically depending on the recipe.

Recipe Management

Save your data and settings



Operator Panel

Thanks to the user-friendly operator panel, everything is under your control

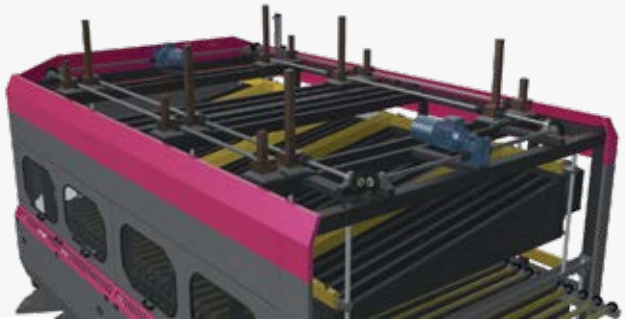
- PC+PLC Control System
- Easy to use with multi language support and user-friendly interface,
- The ability to manually control all functions,
- Ability to follow alarm alerts from operator panel,

Remote Access

Remote access feature provides advanced online assistance and troubleshooting

Automatic Cooling Nozzle Positioning

Cooling unit top nozzle is positioned automatically depending on glass thickness. In order to prevent glass breaks and surface fluctuations, the Screw Jack (Trapezoidal Spindle) is positioned precisely and reduced due to positioning errors compared to chain systems.



- Manual roll drive arm *(To discharge the glass inside the heating furnace in case of sudden power cuts)*
- Ease of maintenance *(Top Units can be lifted up to 500mm with Screw Jack Mechanism)*
- Possibility of tempering glass thinner than 4 mm with a single blower with half charge
- Energy saving mode when the furnace is not operating

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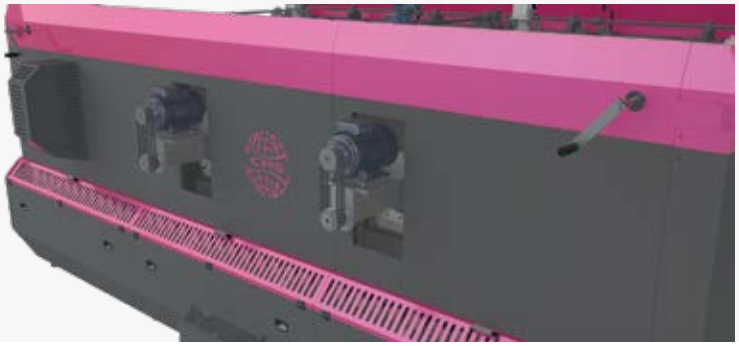
Optional Features

Opt. TC - Top Convectional Glass Tempering Feature

It has been developed to temper soft coated (Low-E 0.02) glasses at maximum quality and speed. Specially designed blower technology in the upper heating group gains convectional heating capability to the furnace.



Opt. ASB Small Cooling Blower

Energy savings are provided by the use of small blower for cooling 8 mm and above thick glasses.

Opt. AHS Auto Heating System with Timer

Automatic heating feature of the furnace according to the set date and time

Opt. FCL Full Charge Loading

Second big blower option is used to perform 4 mm glass tempering operation at full capacity.

Opt. Y - Bending Unit

Glass tempering furnace bending unit is designed for tempered glass tempering in glass tempering furnaces. The bending unit, controlled by a servo motor, can precisely bend the glasses coming out from the heating furnace.

Bending Glass Thickness: 5 - 12mm

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