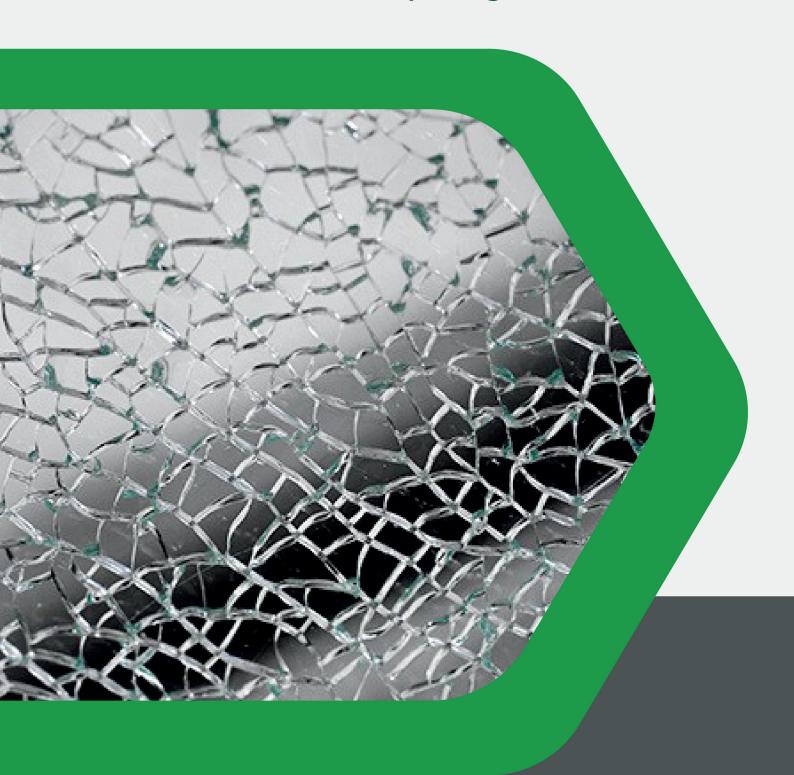


## **Glass Tempering Furnaces**

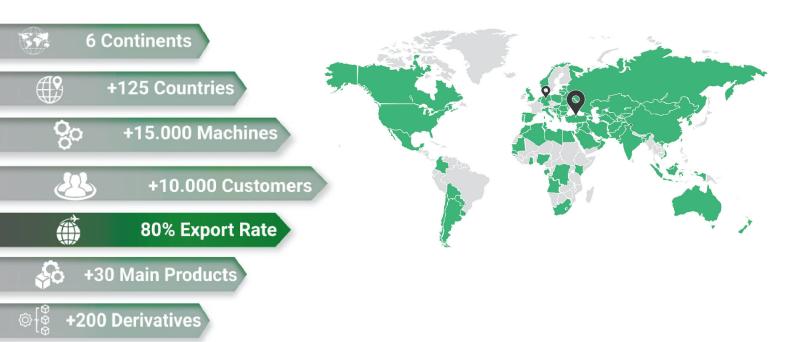


## **Billco Teams Partners**

Our partner was founded in 1995 in Istanbul and has become the first major company in Turkey producing flat glass processing equipment and technologies. Today, due to the technology and innovation studies performed in their R&D Center, they have become one of the unique global corporations that is able to build a whole glass processing facility on its own, through 30 main products and over 200 derivatives.

While being a leading domestic company in its own field, our partner has also become a global brand with 80% export rate. They have created solutions for more than 10.000 customers in 127 countries with more than 15.000 machines supplied and have become one of the key vendors leading the global glass processing market.

Our partner has achieved to be listed along with the top global key player companies according to the surveys conducted by international organizations. They are counted among the most reputable manufacturers in the market with both its technical operation departments such as Sales, R&D Center, Production, After Sales Services, and its corporate infrastructure together with 26 years of industrial processing know-how.





## **Glass Tempering Furnaces**

In addition to its functional features, it has an elegant look and stylish design that suits your company. Our partner's furnaces are designed to temper cut and processed flat glass, reflective glass, colored glass, hard-coated low-E glass, or soft-coated Low-E glass at maximum speed and quality.





Low-e Glass **Tempering** 



(Opt.) Raising The Top Of The Oven For Service



Remote Access



Quick Profile Reconfiguration



Double Belt Drive



Automatic **Blower Positioning** 



Bending (Opt.)



Shards Tank



Emergency Unloading System



Order Management



Economy Cooling (Opt.) (From 8 mm Thickness)



High Temperature Protection



Heating **Zones Control** 



PLC Controlled System Turbo Cooling Mode



(Full Load For 4mm)



Standby Mode

#### 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 glass

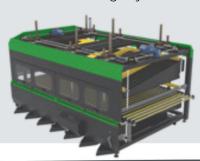
#### **B- Heating Furnace**

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.



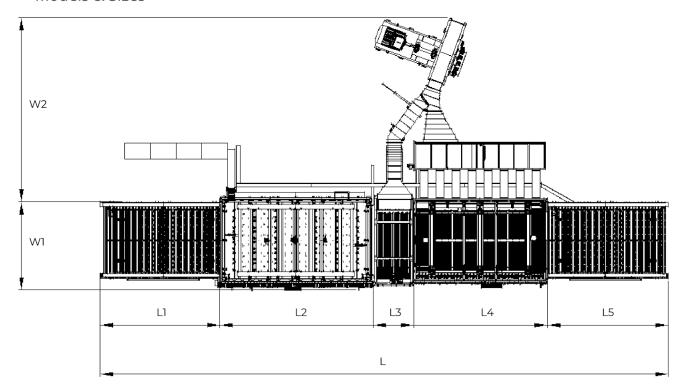
#### C- Cooling System & Collector / Blower Group

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





### Models & Sizes



FGTF	Glass Size		Furnace Size						
	max. W x L	min. W x L	W1	W2	L1	L2	L3 (Opt.)	L4	L5
1630	1600x3000	260x100	2700	5100	3450	4620	1720	4000	3450
2236	2200x3660	300x100	3130	5800	4050	5500	1720	4600	4050
2436	2440x3660	300x100	3600	5800	4050	5500	1720	4600	4050
2442	2440x4200	300x100	3600	5800	4700	6050	1720	5200	4700
	4	,							

(Blower and the collector group can be configured according to production conditions.) \*Measurement units - mm.

	_				
	FGTF1630	FGTF2236	FGTF2436	FGTF2442	
Min. Flat Glass Size	1600×3000 mm	2200×3660 mm	2440×3660 mm	2440×4200 mm	
Max. Flat Glass Size	100×300 mm	100×300 mm	100×300 mm	100×300 mm	
Flat Glass Thickness	4-19 mm	4-19 mm	4-19 mm	4-19 mm	
Bended Glass Thickness	5-12 mm	5-12 mm	5-12 mm	5-12 mm	
Min. Bended Glass Size	150x350 mm	150x350 mm	150x350 mm	150x350 mm	
Max. Bended Glass Size	e contact to your cus	tomer representative	L.		

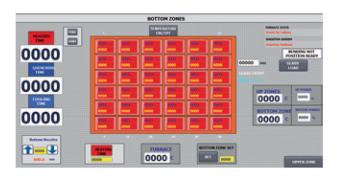


### **Key Features**

The main functions and features included as standard in our machines are structured to respond quickly and effectively to user needs.

✓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,



#### **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

### **Optional Features**





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 8mm 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. Fan/Collector

We develop the best solution for you with our personalized designs suitable for your needs and workspace. You can get information about detailed engineering studies with your sales representative when ordering.

24 7 365

#### **Billco Services**

Billco provides the backbone for flat glass production lines, large and small, with high-quality equipment and 24 | 7 | 365 never-fail relationships. Our stability and expertise are proven with high customer satisfaction ratings, uptime statistics, impressive ROI, and a multi-million dollar inventory of ready-to-ship replacement parts. Our Solution Specialists, 24 | 7 | 365 Technical Support, and Replacement Parts Team are fully dedicated to keeping your line moving. Call or visit our website for more information.