

# Straight Line Edging & Bevelling



EN

Flat Glass Technology

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we • glass

# we • glass

As a global leader in flat glass and hollow glass processing technology, we have been helping to shape one of the most beautiful and useful materials in the world for over 60 years. Its unique qualities, combined with the passion for technology and innovation, guide us in seeking for newer and more effective solutions to improve and expand its use.

**We grind glass**

**We bevelling glass**



# Uncompromised quality

Bottero's vertical edge grinding and bevelling machines allow the highest quality results to be achieved when processing edges, thereby guaranteeing a perfect finish and allowing use in the most elegant applications, in which quality is considered an essential element.



Bottero's vertical edge grinding and bevelling machines offer great expressive possibilities and are well suited to produce refined furnishing elements.





# The Range

The vertical edgers and beveling machines are designed to ensure maximum production and maximum reliability. The availability of numerous machine set-up configurations allows you to choose the right product for both simple and extremely advanced processing operations.



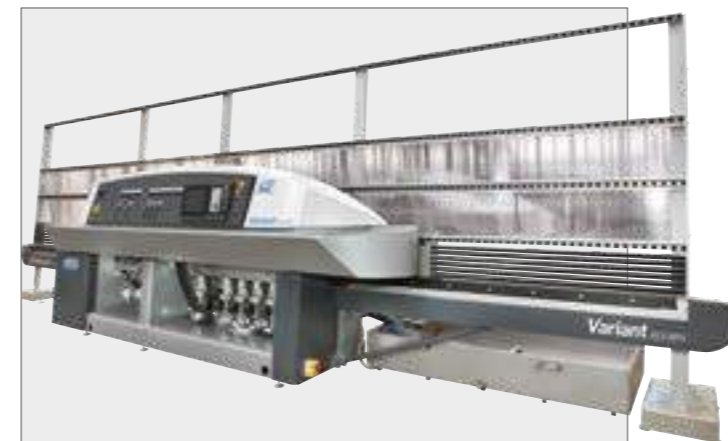


### Victralux

Victralux is the range of Bottero Straight Line Edgers. The 5 models available within this range of machines allow working the edge with arrises and the possible dubbing system.

Type of Processing	<b>Flat edge with arrises</b>
Automation level	★★★★●

Flat edge processing with arrises



### Variant

Variant is the range of Bottero variable angle Straight Line Edgers. The 8 models available within this range of machines allow working the flat edge of an angle varying up to 45° and removing the arris.

Type of Processing	<b>Variable angle up to 45°</b>
Automation level	★★★★●●



### Vision

The 5 models available within this range, produce a bevel on the front face of the glass and either a simple pencil edge profile on the edge of the glass, or on the 913T, a full flat edge and arris profile.

Type of Processing	<b>Variable bevelled 45° angle</b>
Automation level	★★★★●●

Evaluation based on comparison with other Bottero products of the same category.



# Why choose them?

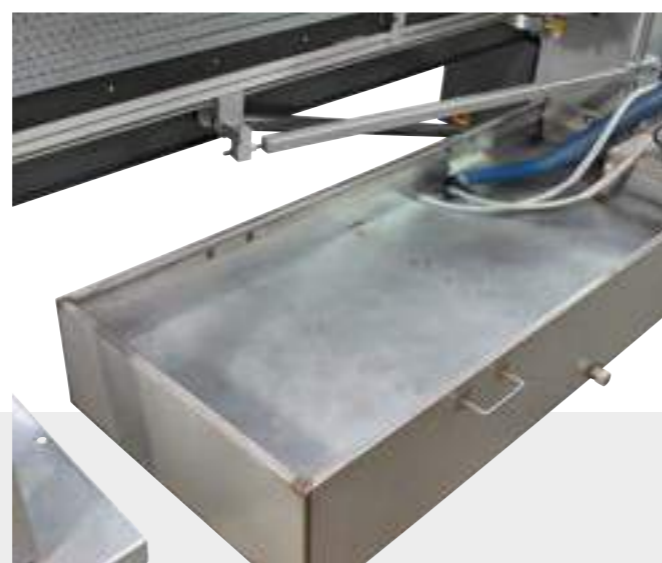
Why choose Bottero straight line edgers and bevellers?



## Because of their high build quality



Bottero straight line edgers and bevellers are built on a heavy duty electro-welded steel frame. Anti-corrosive materials are extensively used throughout the machine, such as stainless steel and water resistant technical polymers.



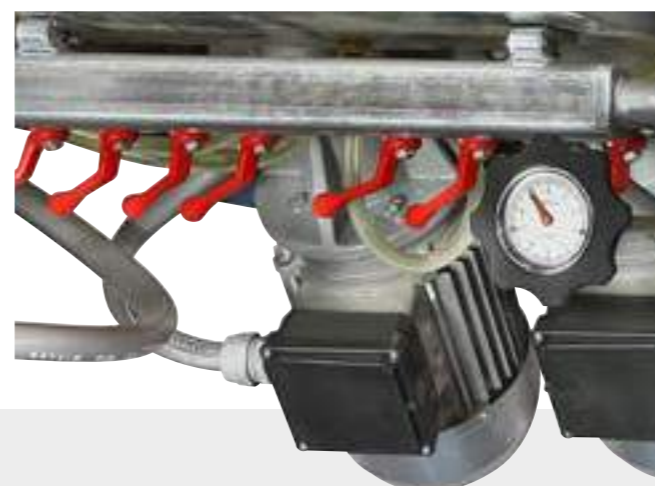
The water tanks are manufactured from stainless steel. This gives them greater longevity compared to other materials. Their design makes them easy to clean.

Flat edge processing with oversized bevel up to 45°





Flat edge processing with oversized bevel up to 45°



All parts coming into contact with water are manufactured from stainless steel. This guarantees that the mechanical components enjoy the longest possible lifespan.



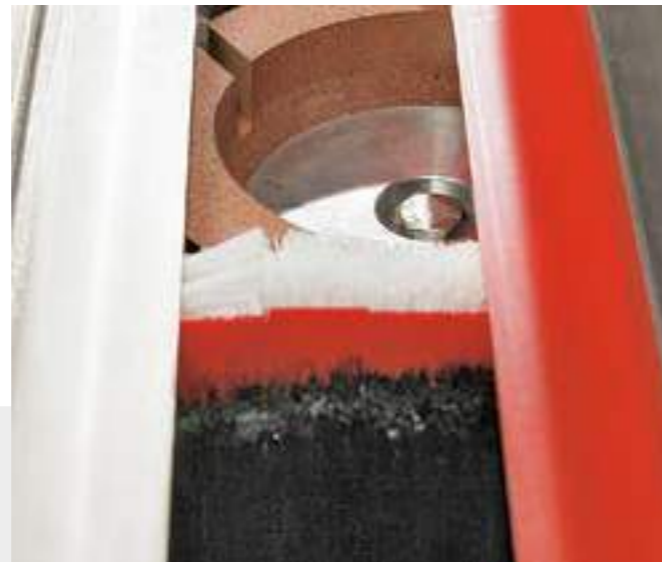
Straight line edgers and bevellers are designed to cope with 24 hour running. The machine needs only be stopped when the operator requires a break.



## Because they guarantee quality



The heavy duty spindles eliminate any vibration that may affect the final product quality. The spindles are driven directly from the motor. This eliminates the need for drive belts and pulleys and drastically reduces the number of mechanical parts that may be subject to wear.



The water separator units are constructed from both brush and rubber sections. These prevent any grinding residues from crossing over into the cerium section of the machine, guaranteeing maximum finished product quality and gloss.



The in-feed conveyor belt system guarantees that the glass always enters the machine in a perfectly flat orientation. The in-feed drive can also be equipped with a pneumatic clutch to avoid any heavy belt wear.



Thanks to the automatic lubrication the machine belts on Variant and Vision always work in optimal conditions, avoiding all consumption due to friction.

## Because they make sense

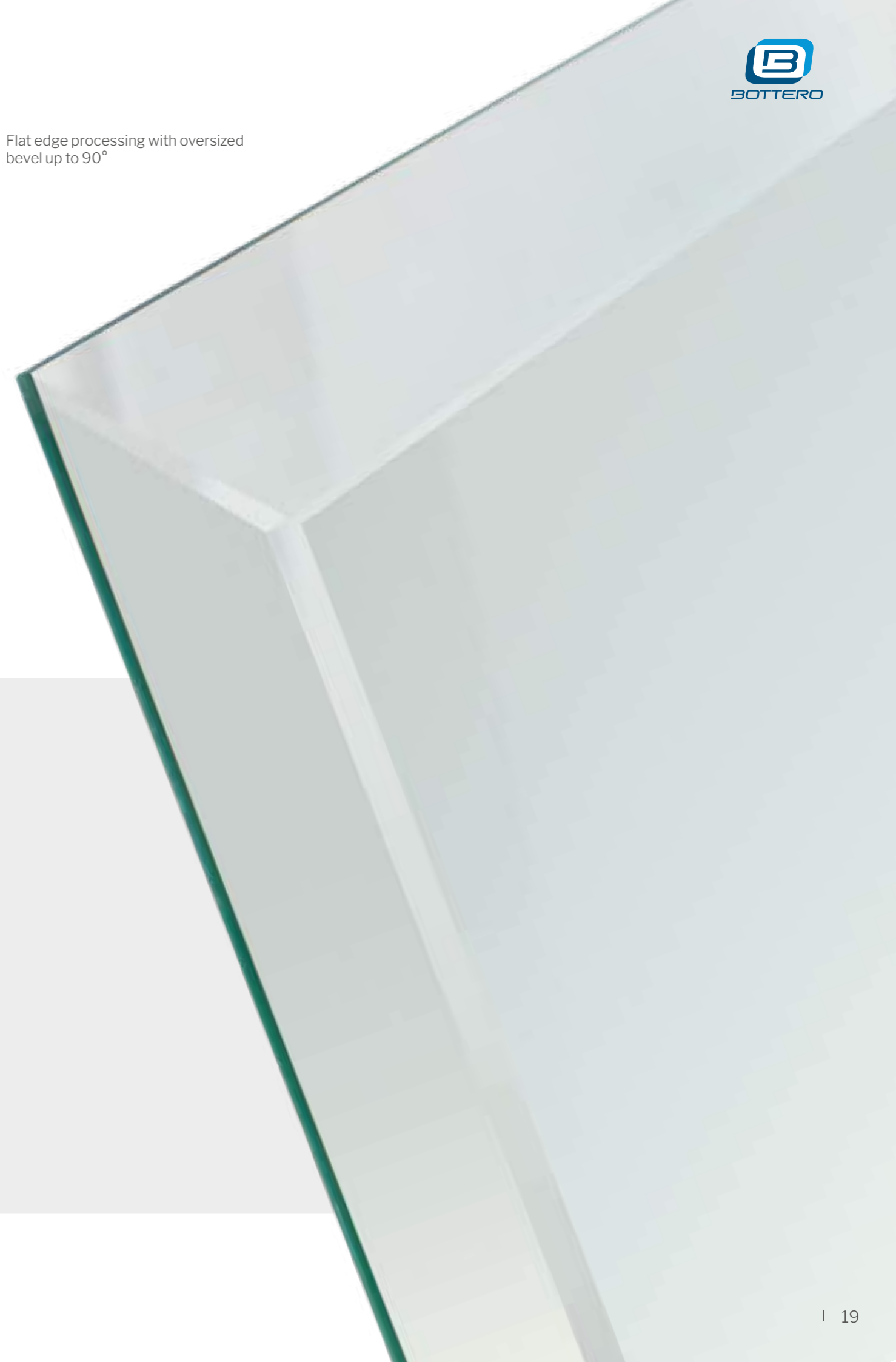


A glass thickness device mounted at the inlet of the main drive tracks prevents glass thicker than that for which the machine is set from entering the machine. This prevents damage occurring to the main tracking system.

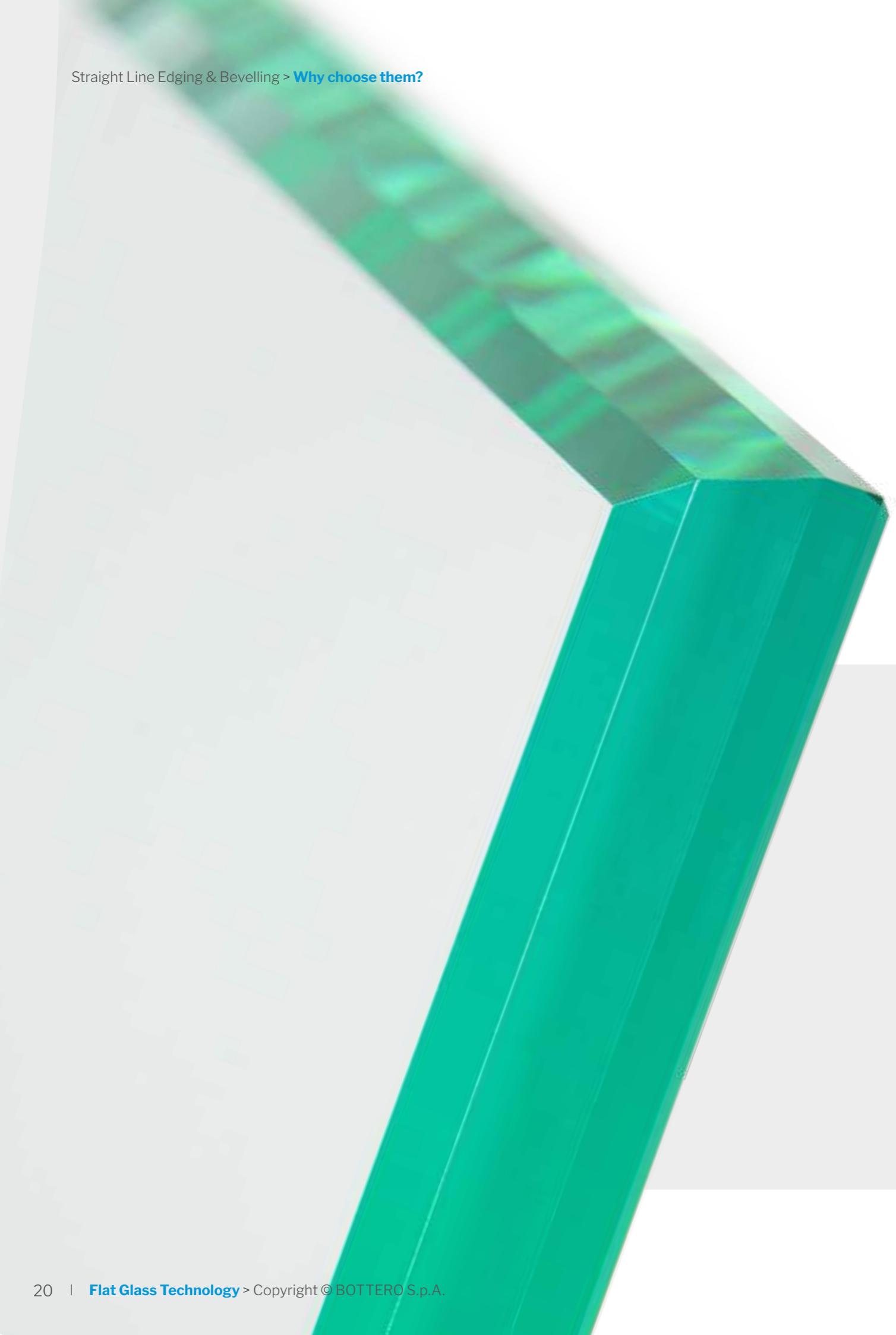


The pneumatic clutch is controlled by the glass thickness device. If glass of a greater thickness than the sliding blocks opening is detected, the clutch immediately disengages the track drive.

Flat edge processing with oversized bevel up to 90°







**Victralux | Variant**

The sliding guides of the slide blocks are made of extremely hard alloy steel. This material allows the bearings, fully built in stainless steel, to slide perfectly and the system to last for a long time. The guides and bearings of the slide blocks are protected by a labyrinth seal system to prevent infiltration of the grinding water.



**Vision**

The back track support guides are manufactured from tempered rectified steel. This maintains the back track surface in a perfectly flat condition. This avoids any distortion on the bevel mitres.

## Because they are easy to use



**Victralux**

In cases where very heavy glasses are being processed, the infeed conveyor can be equipped with a clutch which enables it to be stopped for loading heavy glasses, without interrupting the grinding of glass already in the machine main tracks.

The new digital touch screen display allows you to easily and precisely regulate opening of the machine's slide blocks and to constantly control grinding speed. On Victralux machines, the new touch panel also displays the automatic lubrication schedule, and displays production statistics such as hours worked and linear meters of glass processed.



**Vision | Variant**

The machine also has a set of manual controls through which all the various machine parameters can be adjusted.



**Vision | Variant**

The simple and intuitive control software enables the operator to select the bevel parameters that he requires in a matter of seconds. This is also the case for even complex processing.



## Because they offer something extra



All Bottero grinding machines use the same spindles, proving the great reliability of our components. The use of high precision bearings and the presence of labyrinth seals guarantee “long life” for the spindle.



**Vision**

Unlike some beveling machines, the Vision back track can be periodically rectified throughout its life. This very occasional operation is carried out at the customers premises. The process guarantees consistent bevel and mitre quality and avoids machine down time.



**Victralux**

The machine is equipped with servo assisted adjustment of the position of the front beam to correctly position the belt (set of slide blocks to hold the sheet) depending on glass thickness. A display, located on the operator console, allows you to set and view the opening position of the beam.



**Victralux**

Adjustment of the diamond spindles (flat edge and arris) is achieved by means of a graduated wheel with centesimal precision placed on the front of the machine.





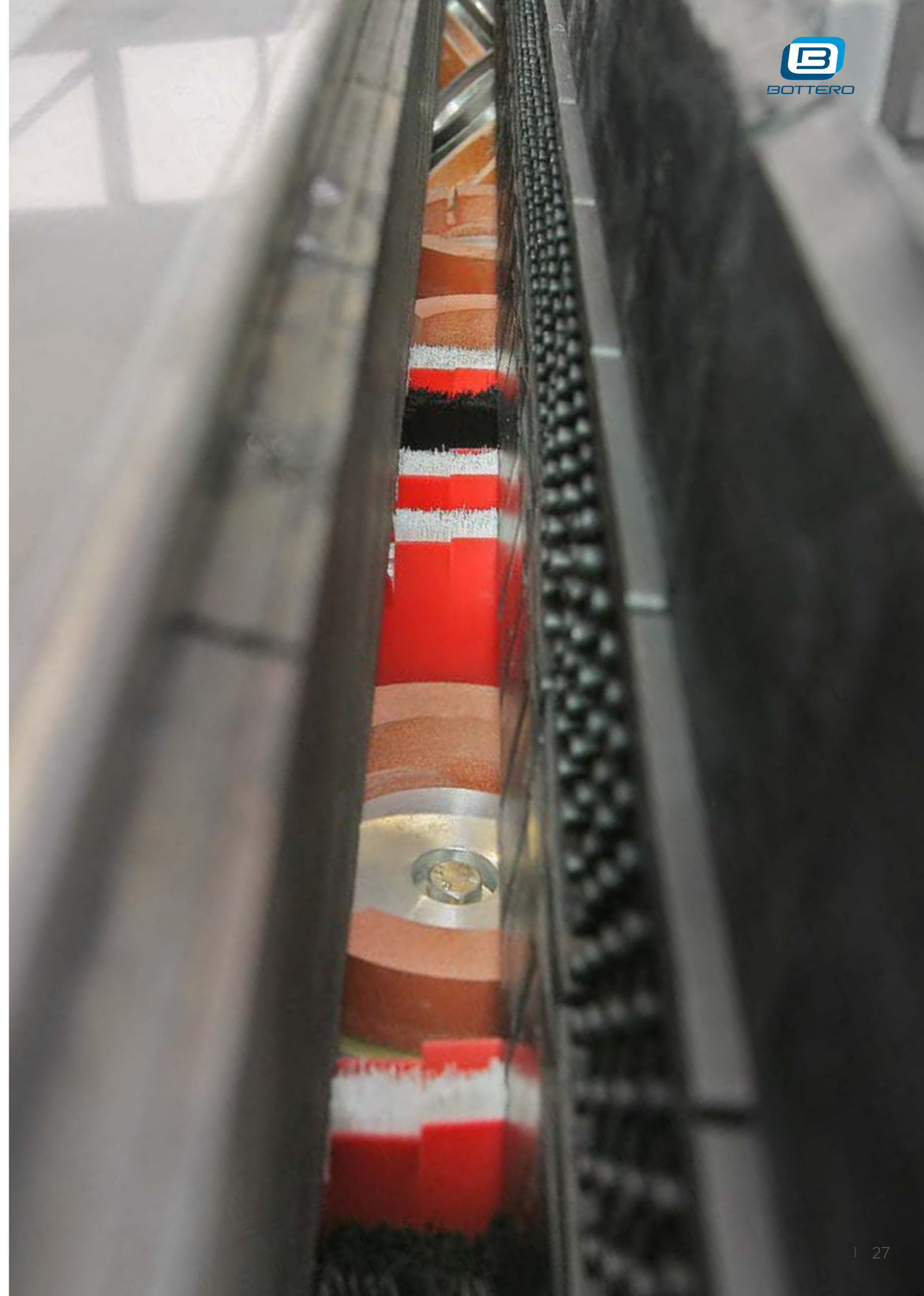
When processing sheets heavier than 1000 kg total or 250 kg per linear metre, there is a special set-up of the guides and of the relative back racks available. The new FX models also boast Stainless Steel back frame supports, and a greatly improved (Glass) load carrying capacity.



The machine can be equipped with automatic adjustment of the infeed guide (optional).



In order to minimise machine maintenance, the glass conveyor system is equipped with special guards that prevent water mixed with glass dust from penetrating and deteriorating the mechanical components.







**Executable processing**



Flat edge with arrises

# Victralux

The range of straight line grinders for flat edge.

## 108 FX

Straight line edger for heavy duty production of medium/thin glass.

## 110 FX

The presence of 3 diamond grinding wheels on the edge allows working glass that is up to 50 mm (1" 31/32) thick. The cerium oxide felt in the last position ensures an excellent brilliant finish for the profile.

## 111 FX

The presence of 3 diamond grinding wheels on the edge allows working glass that is up to 50 mm (1" 31/32) thick. It is possible to use one or two rubber Cerium impregnated wheels to obtain an optimal brilliant finish of the processed profile.

## 109 CDX

Straight line edger for heavy duty production of medium/thin glass, with possibility of automatic corner dubbing system.

## 112 FX

Model absolutely complete which guarantees heavy duty processing of medium/very thick glass with excellent finish quality.

# Technical features

Metric	108 FX	108 FX-HP	110 FX	110 FX-HP	111 FX	111 FX-HP	109 CDX	109 CDX-HP	112 FX	112 FX
Minimum glass dim	40 x 40 mm	100 x 100 mm	40 x 40 mm	100 x 100 mm	40 x 40 mm	100 x 100 mm	40 x 40 mm	100 x 100 mm	40 x 40 mm	100 x 100 mm
Glass thickness	3 ÷ 30 mm	3 ÷ 30 mm	3 ÷ 50 mm	3 ÷ 50 mm	3 ÷ 50 mm	3 ÷ 50 mm	3 ÷ 30 mm	3 ÷ 30 mm	3 ÷ 30 mm	3 ÷ 30 mm
Speed	0,6 ÷ 6 m/min	0,6 ÷ 6 m/min	0,6 ÷ 6 m/min	0,6 ÷ 6 m/min	0,6 ÷ 6 m/min	0,6 ÷ 6 m/min	0,6 ÷ 6 m/min	0,6 ÷ 6 m/min	0,6 ÷ 6 m/min	0,6 ÷ 6 m/min
Installed power	23,5 KVA	23,5 KVA	27 KVA	27 KVA	27 KVA	27 KVA	23,5 KVA	23,5 KVA	29 KVA	29 KVA
Weight	3200 Kg	3200 Kg	3600 Kg	3600 Kg	3600 Kg	3600 Kg	3200 Kg	3200 Kg	3600 Kg	3600 Kg

Imperial	108 FX	108 FX-HP	110 FX	110 FX-HP	111 FX	111 FX-HP	109 CDX	109 CDX-HP	112 FX	112 FX
Minimum glass dim	1"37/64 x 1"37/64	3"15/16 x 3"15/16	1"37/64 x 1"37/64	3"15/16 x 3"15/16	1"37/64 x 1"37/64	3"15/16 x 3"15/16	1"37/64 x 1"37/64	3"15/16 x 3"15/16	1"37/64 x 1"37/64	3"15/16 x 3"15/16
Glass thickness	1/8" ÷ 1"3/16	1/8" ÷ 1"3/16	1/8" ÷ 2"	1/8" ÷ 2"	1/8" ÷ 2"	1/8" ÷ 2"	1/8" ÷ 1"3/16	1/8" ÷ 1"3/16	1/8" ÷ 1"3/16	1/8" ÷ 1"3/16
Speed	24 ÷ 240 ipm	24 ÷ 240 ipm	24 ÷ 240 ipm	24 ÷ 240 ipm	24 ÷ 240 ipm	24 ÷ 240 ipm	24 ÷ 240 ipm	24 ÷ 240 ipm	24 ÷ 240 ipm	24 ÷ 240 ipm
Installed power	33,3A@480V	33,3A@480V	38,3A@480V	38,3A@480V	38,3A@480V	38,3A@480V	33,3A@480V	33,3A@480V	41,1A@480V	41,1A@480V
Weight	7050 lbs	7050 lbs	7936 lbs	7936 lbs	7936 lbs	7936 lbs	7050 lbs	7050 lbs	7936 lbs	7936 lbs





# Wheel configuration

← Work management

## 108 FX



## 110 FX



## 111 FX



## 109 CDX



## 112 FX



### Key

- Diamond
- Resinoid
- Lucidante
- Felt
- Cerium impregnated wheel
- Beveling wheel
- Corner dubbing
- Front arris wheel
- Rear arris wheel

## Machine overall dimensions

mm	108 FX	110 FX	11 FX	109 CDX	112FX
L	7545 mm	8354,5 mm	8354,5 mm	8354,5 mm	11532,5 mm
H	2700 mm	2700 mm	2700 mm	2700 mm	2700 mm
P	1550 mm	1550 mm	1550 mm	1550 mm	1576 mm
h	800 ± 25 mm	800 ± 25 mm	800 ± 25 mm	800 ± 25 mm	800 ± 25 mm

in	108 FX	110 FX	11 FX	109 CDX	112FX
L	297"	328,9"	328,9"	328,9"	454"
H	106,3"	106,3"	106,3"	106,3"	106,3"
P	61"	61"	61"	61"	62"
h	31" ± 1"	31" ± 1"	31" ± 1"	31" ± 1"	31" ± 1"



# Variant

The range of Bottero variable angle Straight Line Edgers.

## Executable processing



Flat edge with arrises



Flat edge with bevel oversized up to 45°

### 810 BC|BR|BCS|BRS

This model is suited for customers whose production mainly involves flat edges and arrises, but who from time to time need to produce edges inclined up to 45°. The arrangement of the grinding wheels (6 on the tilting side and 4 fixed wheels for arrises), allow working up to 3 surfaces for each stroke.

### 810 CD|CDS

This model is suited for customers whose production mainly involves flat edges and arrises, but who from time to time need to produce edges inclined up to 45°. The arrangement of the grinding wheels (6 on the tilting side and 4 fixed wheels for arrises), allow working up to 3 surfaces for each stroke. This machine is equipped with a special corner dubbing system made of a peripheral edge grinding wheel by driven by two pneumatic cylinders.

### 814 BC|BR|BCS|BRS

This machine is suitable for high-quality work (typically required for furniture). It allows to process as many as 4 surfaces on the edge of the glass with just one stroke (3 of the surfaces are polished with liquid cerium). This is typically used wherever high-quality finish and gloss are called for, along with extreme precision like that required for table tops and aquariums.

### 815 BC|BR|BCS|BRS

This machine is suitable for high-quality work (typically required for furniture). It allows to process as many as 4 surfaces on the edge of the glass with just one stroke, all polished with liquid cerium. This is typically used wherever high-quality finish and gloss are called for, along with extreme precision like that required for table tops and aquariums.









# Technical features

Metric	810 BC-BR	810 BCS-BRS	810 CD	810 CDS	814 BC-BR	814 BCS-BRS	815 BC-BR	815 BCS-BRS
Minimum glass dim	100 x 100 mm	40 x 40 mm	100 x 100 mm	40 x 40 mm	100 x 100 mm	40 x 40 mm	100 x 100 mm	40 x 40 mm
Glass thickness	3 ÷ 55 mm	3 ÷ 55 mm	3 ÷ 55 mm	3 ÷ 55 mm	3 ÷ 55 mm	3 ÷ 55 mm	3 ÷ 55 mm	3 ÷ 55 mm
Speed	0,4 ÷ 6 m/min	0,4 ÷ 6 m/min	0,4 ÷ 6 m/min	0,4 ÷ 6 m/min	0,4 ÷ 6 m/min	0,4 ÷ 6 m/min	0,4 ÷ 6 m/min	0,4 ÷ 6 m/min
Processing angle	0 ÷ 45°	0 ÷ 45°	0 ÷ 45°	0 ÷ 45°	0 ÷ 45°	0 ÷ 45°	0 ÷ 45°	0 ÷ 45°
Installed power	27 KVA	27 KVA	27 KVA	27 KVA	36 KVA	36 KVA	38 KVA	38 KVA
Weight	4600 Kg	4600 Kg	5200 Kg	5200 Kg	5200 Kg	5200 Kg	5400 Kg	5400 Kg

imperial	810 BC-BR	810 BCS-BRS	810 CD	810 CDS	814 BC-BR	814 BCS-BRS	815 BC-BR	815 BCS-BRS
Minimum glass dim	4" x 4"	1"37/64 x 1"37/64	4" x 4"	1"37/64 x 1"37/64	4" x 4"	1"37/64 x 1"37/64	4" x 4"	1"37/64 x 1"37/64
Glass thickness	1/8" ÷ 2"11/64	1/8" ÷ 2"11/64	1/8" ÷ 2"11/64	1/8" ÷ 2"11/64	1/8" ÷ 2"11/64	1/8" ÷ 2"11/64	1/8" ÷ 2"11/64	1/8" ÷ 2"11/64
Speed	16 ÷ 240 ipm	16 ÷ 240 ipm	16 ÷ 240 ipm	16 ÷ 240 ipm	16 ÷ 240 ipm	16 ÷ 240 ipm	16 ÷ 240 ipm	16 ÷ 240 ipm
Processing angle	0 ÷ 45°	0 ÷ 45°	0 ÷ 45°	0 ÷ 45°	0 ÷ 45°	0 ÷ 45°	0 ÷ 45°	0 ÷ 45°
Installed power	33A@480V	33A@480V	33A@480V	33A@480V	43A@480V	43A@480V	45A@480V	45A@480V
Weight	10141 lbs	10141 lbs	11460 lbs	11460 lbs	11460 lbs	11460 lbs	11905 lbs	11905 lbs





# Wheel configuration

← Work management

Tilting wheels

Fixed wheels

810  
BC|BCS



810  
BR|BRS



810  
CD|CDS



814  
BC|BR|BCS|  
BRS



815  
BC|BR|BCS|  
BRS



Key

- Diamond
- Resinoid
- Lucidante
- Felt
- Cerium impregnated wheel

- Beveling wheel
- Corner dubbing
- Front arris wheel
- Rear arris wheel

## Machine overall dimensions

mm	810	814	815
L	8500 mm	9475 mm	9675 mm
H	2700 mm	2700 mm	2700 mm
P	1800 mm	1800 mm	1800 mm
h	850 ± 25 mm	850 ± 25 mm	850 ± 25 mm

in	810	814	815
L	28"	31"	31,7"
H	106,3"	106,3"	106,3"
P	6"	6"	6"
h	33" ± 1"	33" ± 1"	33" ± 1"



# Vision

The range of straight line beveling machines.

## 907 B

The 907 B is able to produce a bevel of up to 50 mm (2") in height. In a single pass, the machine produces the bevel and an arris on the front edge of the machine. This machine is most commonly used in conjunction with a Victralux straight line edger.

## 907 P

The 907 P is able to produce a bevel of up to 50 mm (2") in height. In a single pass, the machine produces the bevel and a full pencil edge grind on the edge of the glass.

## 910 B

The 910 B is able to produce a bevel of up to 60 mm (2,36") in height. In a single pass, the machine produces the bevel and an arris on the front edge of the machine. This machine is most commonly used in conjunction with a Victralux straight line edger.

## 910 P

The 910 P is able to produce a bevel of up to 60 mm (2,36") in height. In a single pass, the machine produces the bevel and a full pencil edge grind on the edge of the glass.

## 913 T

The 913 T is a combination machine. Not only is it able to produce a bevel of up to 60 mm (2,36") in height on the face of the glass. It is also able to produce a full flat edge and arris profile on the edge of the glass.

### Executable processing



Flat edge with bevel oversized up to 45°



Flat edge with bevel oversized up to 90°





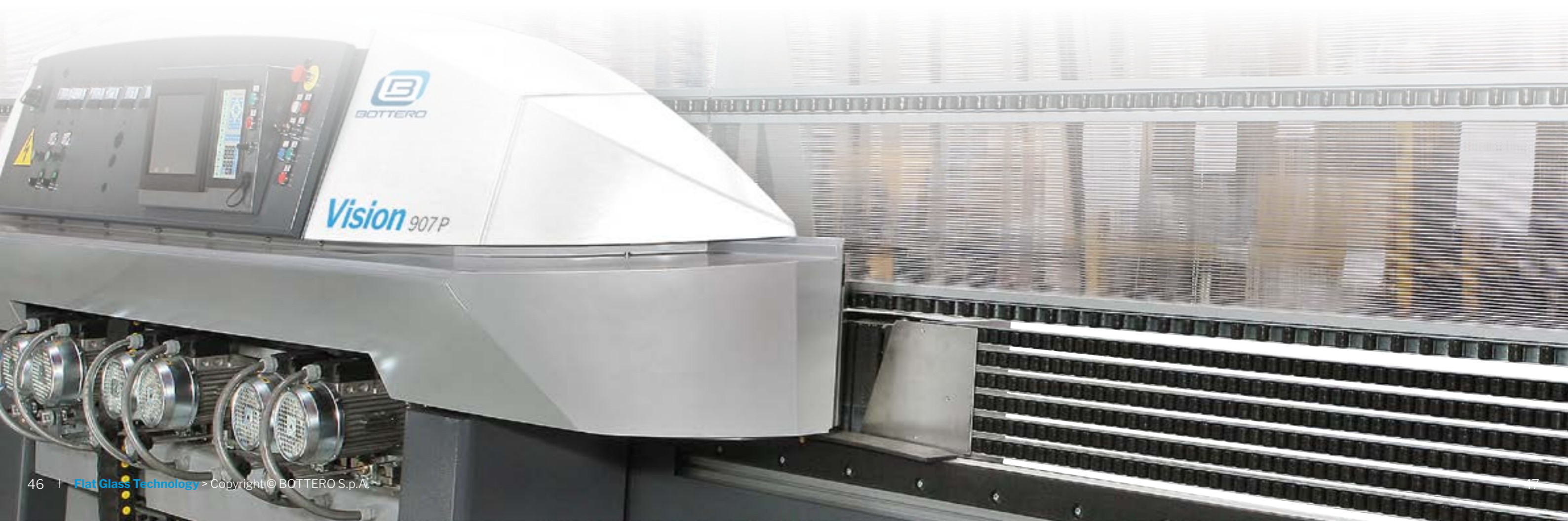




# Technical features

Metric	907	910	913
Minimum glass dim	40 x 40 mm	40 x 40 mm	40 x 40 mm
Glass thickness	3 ÷ 30 mm	3 ÷ 30 mm	3 ÷ 30 mm
Speed	0,4 ÷ 6 m/min	0,4 ÷ 6 m/min	0,4 ÷ 6 m/min
Processing angle	3 ÷ 45°	3 ÷ 45°	3 ÷ 45°
Max corner edge dim.	40 mm (50 mm opt.)	40 mm (60 mm opt.)	40 mm (60 mm opt.)
Installed power	23,5 KVA	32 KVA	40 KVA
Weight	3600 Kg	4600 Kg	5200 Kg

Imperial	907	910	913
Minimum glass dim	1"37/64 x 1"37/64	1"37/64 x 1"37/64	1"37/64 x 1"37/64
Glass thickness	1/8" ÷ 1"3/16	1/8" ÷ 1"3/16	1/8" ÷ 1"3/16
Speed	16 ÷ 240 ipm	16 ÷ 240 ipm	16 ÷ 240 ipm
Processing angle	3 ÷ 45°	3 ÷ 45°	3 ÷ 45°
Max corner edge dim.	1" 9/16 (2" opt.)	1"9/16 (2" 23/64 opt.)	1"9/16 (2" 23/64 opt.)
Installed power	28A@480V	38A@480V	48A@480V
Weight	7940 lbs	10140 lbs	11464 lbs





# Wheel configuration

← Work management

**907 B**

**907 P**

**910 B**

**910 P**

**913 T**

- Fixed wheels

**Key**

Diamond	Beveling wheel
Resinoid	Corner dubbing
Lucidante	Front arris wheel
Felt	Rear arris wheel
Cerium impregnated wheel	
Stone	

## Machine overall dimensions

mm	907	910	913
L	7650 mm	8200 mm	9100 mm
H	2700 mm	2700 mm	2700 mm
P	1800 mm	1800 mm	1800 mm
h	850 ± 25 mm	850 ± 25 mm	850 ± 25 mm

in	907	910	913
L	25	26,9"	30"
H	106,3"	106,3"	106,3"
P	6"	6"	6"
h	33" ± 1"	33" ± 1"	33" ± 1"





# Bottero, the choice of the greatest

## With us, you have all the experience and technology that we use to serve the largest industries

With Bottero, you don't simply buy products but the entire experience, the technology and the organisational skills of a company that can provide very high productivity glass processing plants, and the selected supplier of some of the most important companies in the world.

### more than 50.000 installations all over the world



With thousands of installations spread all over the world, Bottero guarantees first-class technical and commercial assistance.

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**Bottero Flat Glass Inc.**  
Kernersville - North Carolina - USA

**Bottero Glass Industry Co. Ltd**  
Shangai - China



Above and to the side: some high-productivity lines manufactured by Bottero.



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For photographic reasons the products is often shown complete with accessories that are not part of the standard equipment of the machine.

## Discover the Bottero technology for **Flat Glass**



- Float Cutting
- Glass Stock Management
- Straight Line Edgers & Bevellers
- Double Edgers
- Drilling
- CNC
- Laminated Lines

- Coating Lines
- Float Lines
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- Solar Lines

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