

AUTOMOTIVE CRB1[™]

Cylindrical Radius Bender System

Glasstech's CRB1 has been designed to meet customer requirements for simplicity, high throughput, ease of operation and productivity for forming flat glass into simple cylindrical shapes. Glass parts produced on this system are used primarily in the automotive industry, but there are also applications in the architectural and specialty markets.

The Glasstech CRB1 System

CRB1[™]

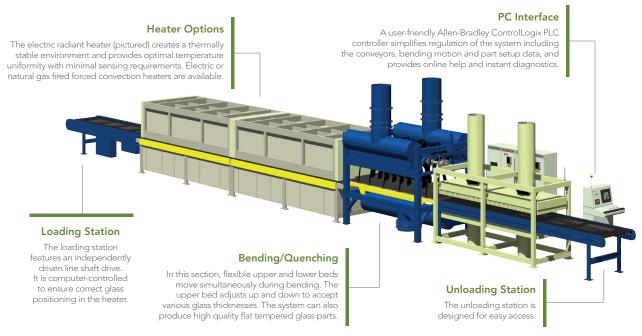
- Processes 3.0mm to 6.0mm (.118" to 1/4") thick glass parts
- Produces up to 240 loads per hour depending on glass thickness and glass size
- Can change shapes in as little as 15 seconds
- Forms glass without part-dedicated tooling
- Achieves superior quality optics
- Meets international fracture standards
- Produces high quality bent and flat tempered glass parts
- Can produce thin heat-strengthened parts for subsequent lamination

The CRB1 system is available in widths of 915mm (36"), 1220mm (48") and 1500mm (59") and features a combination bending/quenching section with upper and lower flexible beds. This allows the system to bend glass to a minimum radius of 890mm (35") for the 915mm and 1220mm wide systems, and to 1200mm (47") for the 1500mm wide system. When bending is complete, the glass is quenched by a high-efficiency quenching system incorporated in the flexible bed. This system can process parts up to 2m (6.56') long.

All production is controlled by a user-friendly Allen-Bradley ControlLogix[™] PLC controller. Setups can be stored and recalled, permitting changeover times of 15 seconds for glass of the same thickness, and only 5 minutes when changing between glass of different thicknesses.

Glasstech CRB systems form high quality cylindrical parts to exacting tolerances with the highest level of uniformity. The glass produced meets both automotive and architectural standards.

Glasstech's modular design combines total system flexibility and adaptability with impressive economy of operation.





AUTOMOTIVE CRB1[™] TECHNICAL FEATURES

CRB1 915mm Wide System	3mm ECE R43 Part Length*		3mm Z97.1 Part Length		4mm ECE R43 Part Length*		4mm Z97.1 Part Length		5mm ECE R43 Part Length		5mm Z97.1 Part Length		6mm ECE R43 Part Length		6mm Z97.1 Part Length		Total Heater
	1.0m	2.0m	1.0m	2.0m	1.0m	2.0m	1.0m	2.0m	1.0m	2.0m	1.0m	2.0m	1.0m	2.0m	1.0m	2.0m	kW
36" × 20'	54	27	54	27	44	22	44	22	36	18	36	18	28	14	28	14	600
36" x 70'	240	180	240	180	204	144	204	144	185	124	185	124	160	108	160	108	1460
Maximum Single Part Size (mm)	e 685 x 1000		915 x	2000	000 840 x 1520		915 x 2000		915 x 2000		915 x 2000		915 x 2000		915 x 2000		-
CRB1 1220mm Wide System	3mm ECE R43 Part Length*		3mm Z97.1 Part Length*		4mm ECE R43 Part Length*		4mm Z97.1 Part Length		5mm ECE R43 Part Length		5mm Z97.1 Part Length		6mm ECE R43 Part Length		6mm Z97.1 Part Length		Total Heate
	1.0m	2.0m	1.0m	2.0m	1.0m	2.0m	1.0m	2.0m	1.0m	2.0m	1.0m	2.0m	1.0m	2.0m	1.0m	2.0m	kW
48" x 18'	54	27	54	27	44	22	44	22	36	18	36	18	28	14	28	14	500
48" x 72'	240	180	240	180	204	144	204	144	185	124	185	124	160	108	160	108	1850
Maximum Single Part Size (mm)	e 685 x 1000		1000 x 2000 840 x 1520		1100 x 2000		1220 x 2000		1220 x 2000		1220 x 2000		1220 x 2000		-		
CRB1 1500mm Wide System	3.2mm ECE R43 Part Length*		3.2mm Z97.1 Part Length*		4mm ECE R43 Part Length*		4mm Z97.1 Part Length		5mm ECE R43 Part Length		5mm Z97.1 Part Length		6mm ECE R43 Part Length		6mm Z97.1 Part Length		Total Heater
	1.0m	2.0m	1.0m	2.0m	1.0m	2.0m	1.0m	2.0m	1.0m	2.4m	1.0m	2.4m	1.0m	2.4m	1.0m	2.4m	kW
59" x 24'	80	52	80	52	64	42	64	42	52	34	52	34	42	28	42	28	775
Maximum Single Part Size (mm)	685 x 1000		1000 × 2000		1500 x 2000		1500 x 2400		1500 x 2400		1500 x 2400		1500 x 2400		1500 x 2400		_

*Single part size limited.

Floor Space Requirements											
Heater System	Total	Length	Total Width		Total Height		Blower Room				
	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)			
36" × 20'	16	52.5	9.5	31.2	7	23	15 x 10 x 5	49.2 x 32.8 x 16.4			
36" x 70'	43	141.1	9.5	31.2	7	23	15 x 10 x 5	49.2 x 32.8 x 16.4			
48" x 18'	15	49.2	11.0	36.0	7	23	15 x 10 x 5	49.2 x 32.8 x 16.4			
48" x 72'	44	144.4	11.0	36.0	7	23	15 x 10 x 5	49.2 x 32.8 x 16.4			
59" x 24'	22	72.2	12.5	41.0	7	23	15 x 10 x 5	49.2 x 32.8 x 16.4			

Installed Power										
Heater	Heating	Quench Fan	Cooler Fan	Drives	Total					
System	(kW)	(kW)	(kW)	(kW)	(kVV)					
36" x 20'	600	525	60	30	1215					
36" x 70'	1400	525	112	32	2069					
48" x 18'	500	670	90	30	1290					
48" x 72'	1850	670	150	32	2702					
59" x 24'	775	900	90	32	1797					

Glasstech, Inc. Perrysburg, Ohio USA Tel: +1-419-661-9500 Fax: +1-419-661-9616

Glasstech, Inc. New York, New York USA Tel: +1-212-489-8040 Fax: +1-212-307-5781



www.glasstech.com

Glasstech, Inc. Shanghai, China Tel: +86-21-5836-7560 Fax: +86-21-5836-8968

Glasstech, Inc. Mumbai, India Tel/Fax: +91-22-2528-7575