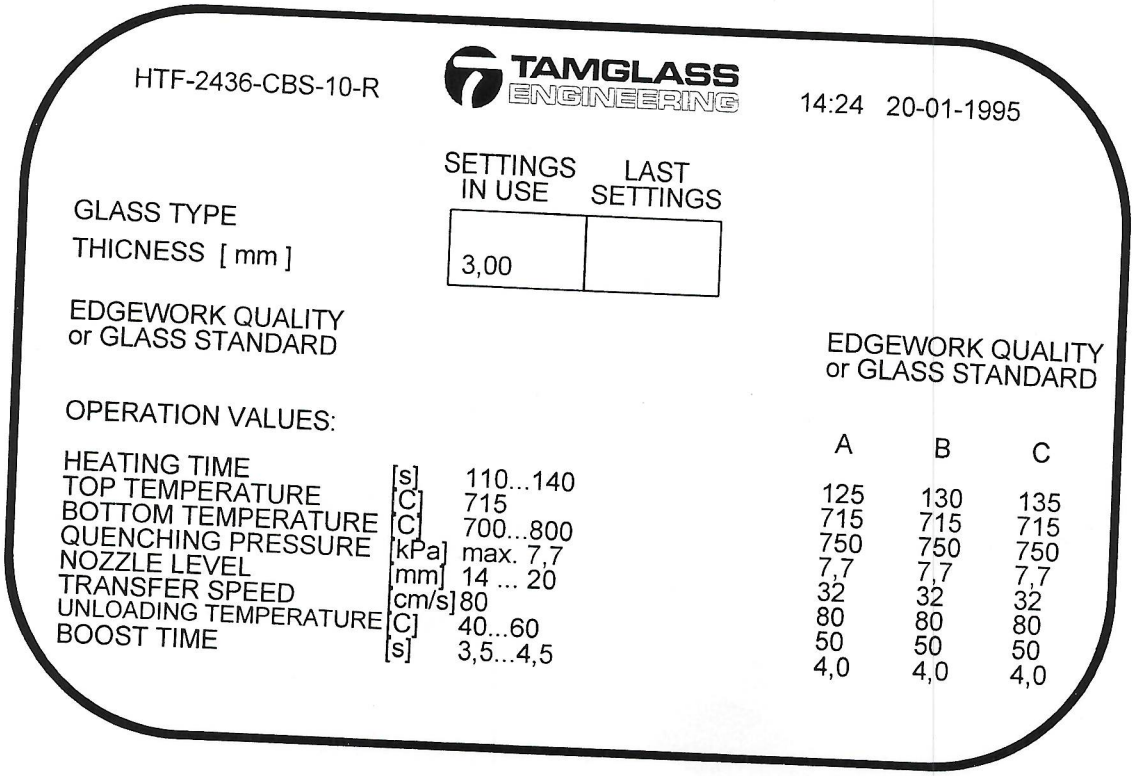
3. TEMPERING INSTRUCTIONS FOR DIFFERENT GLASS THICKNESSES



Display

GLASS THICKNESS 3 MM.	METRIC	SAE	REMARKS
SO_2 gas pressure	0,5 bar	7 psi	
SO_2 gas flow	1...7 cm^3/min	0,06...0,4 cu.in./min	
Heating balance blowing pressure for glass sizes:	**bar**	**psi**	
500 x 500 mm (20x20 in)	4,0...5,0	60...70	
1000 x 1000 mm (40x40 in)	1,8...2,4	25...35	
1000 x 2000 mm (40x80 in)	1,3...1,8	20...25	
Bigger	0,5...1,0	7...15	

Boost pressure 3,0 - 4,5 bar

Air balance More on top, for big sheets remarkably more on top.

Temperature differences Group 1: -15 Group 3: -15 Group 4: -30 Group 6: -30

HTF-2436-CBS-10-R

TAMGLASS ENGINEERING

14:24 20-01-1995

		SETTINGS IN USE	LAST SETTINGS
GLASS TYPE			
THICNESS [mm]		19,00	
EDGEWORK QUALITY or GLASS STANDARD			

OPERATION VALUES:			EDGEWORK QUALITY or GLASS STANDARD		
			A	B	C
HEATING TIME	[s]	700...950	710	750	800
TOP TEMPERATURE	[C]	670...680	670	670	670
BOTTOM TEMPERATURE	[C]	740...800	780	780	780
QUENCHING PRESSURE	[kPa]	0,005...0,01	0,007	0,007	0,007
NOZZLE LEVEL	[mm]	55 ... 65	55	55	55
TRANSFER SPEED	[cm/s]	20	20	20	20
UNLOADING TEMPERATURE	[C]	40...50	45	45	45
BOOST TIME	[s]	0	0	0	0

Display

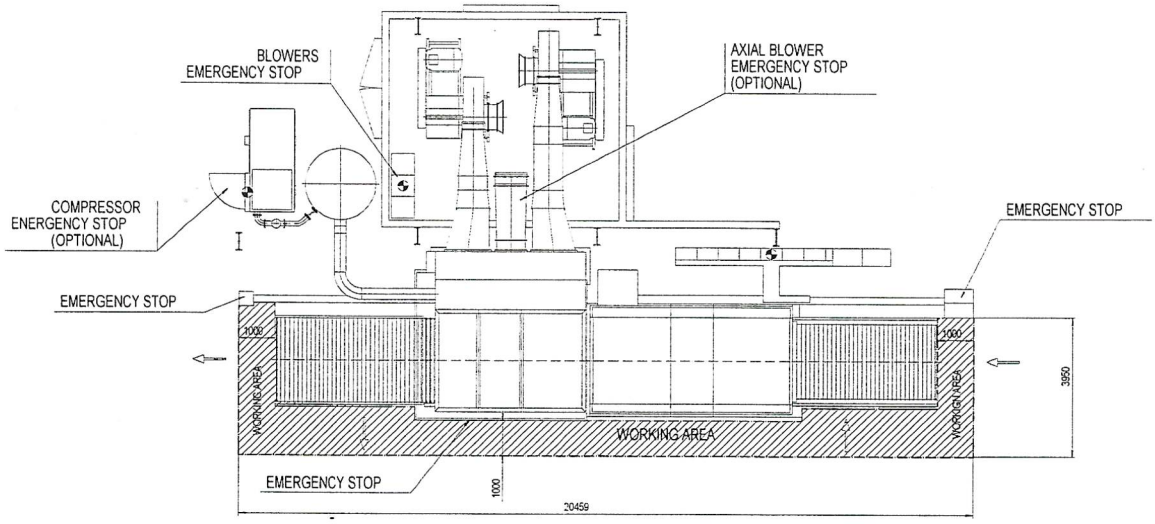
GLASS THICKNESS 19 MM	METRIC	SAE	REMARKS
SO_2 gas pressure	0,5 bar	7 psi	
SO_2 gas flow	1...7 cm^3/min	0,06...0,4 cu.in./min	
Heating balance blowing pressure for glass sizes:	**bar**	**psi**	
500 x 500 mm (20x20 in)	6,0...8,0	90...115	
1000 x 1000 mm (40x40 in)	4,0...6,0	60...90	
1000 x 2000 mm (40x80 in)	3,0...5,0	40...70	
Bigger	2,0...4,0	30...60	

Boost pressure ---

Air balance Equal, For big sheets slightly more on top, for small sheets more on bottom.

Temperature differences Group 1: -15 Group 3: -15 Group 4: -30 Group 6: -30

4.1 Location of Emergency Stops



TAMGLASS ENGINEERING	ELECTRICAL DATA	PROJECT 1887 4844 DATE 7. Jan, 2000 HTF-1730-C-10-L

SUPPLY VOLTAGE	415 V / 50 Hz
NUMBER OF PHASES	3
WIRE SYSTEM	4 WIRE
NEUTRAL LINE	NO
PROTECTIVE EARTH	YES
VOLTAGE PHASE TO NEUTRAL	239
VOLTAGE VARIATION	+/- 5 %
FREQUENCY VARIATION	+/- 1 %
CONTROL VOLTAGE	220 VAC

* NOTE THIS M/C DOES REQ A NEUTRAL LINE FOR THE CORNER HEATERS. (RETRO FITTED BY SAINT)

FURNACE MAIN CONTROL PANEL

UPPER HEATING ELEMENTS

EH1 - EH15	15 pcs	Pn=10.2 kW	In=24.6 A	153,00 kW
EH25, EH26	2 pcs	Pn= 6.0 kW	In=14.5 A	12,00 kW

BOTTOM HEATING ELEMENTS

EH1 - EH15	15 pcs	Pn=10.2 kW	In=24.6 A	153,00 kW
EH25, EH26	2 pcs	Pn= 6.0 kW	In=14.5 A	12,00 kW

TOTAL HEATING POWER	330,00 kW

AC - MOTORS

MAIN DRIVE	M041	Un= 415 V	In=7.5 A	4,00 kW
FURNACE LIFT	M042	Un= 415 V	In=5.0 A	2,20 kW
LOADING CONVEYOR	M043	Un= 415 V	In=0.7 A	0,25 kW
AIR BALANCE	M044	Un= 415 V	In=0.7 A	0,25 kW
CULLET CONVEYOR	M045	Un= 415 V	In=2.6 A	1,10 kW
NOZZLE FRAME LIFT	M048	Un= 415 V	In=1.8 A	0,75 kW
UNLOADING CONVEYOR	M049	Un= 415 V	In=1.8 A	0,75 kW

TOTAL AC-MOTOR POWER	9,30 kW

DC - DRIVE MOTOR	M0412	Un= 24 VDC	In=34.0 A	0,70 kW

TOTAL DC-MOTOR POWER	0,70 kW

BLOWERS MAIN CONTROL PANEL

BLOWER 1	M161	Un= 415 V	(In=200 A)	110 kW
BLOWER 2	M181	Un= 415 V	(In=200 A)	110 kW

TOTAL AC-MOTOR POWER	220 kW

560 kW