

OPERATING MANUAL
FOR CONTROL
SYSTEM OF BLOW
MOLDING MACHINE

Business Mission

Streamline Controls Pvt. Ltd. (SCPL) is in the business of providing electronic & computerized automation solution for different industries so as to enhance the quality and productivity. Our motto is to provide indigenous, reliable and proven products & hence to ensure consistent performance. Our concept of value to the customers is to supply indigenous control systems designed with latest technology, developed through extensive R & D, incorporating state of art technology (world technology trend), manufactured under strictest quality control system and duly tested, at competitive prices, delivered in time and supported by service teams.

We feel it to be our responsibility to ensure that our business operates at a reasonable profit, as profit provides opportunity for R&D, growth and job security. Therefore we are dedicated to profitable growth - growth as a company and growth as an individual.

For detailed inquiry and trouble shooting please contact :

***STREAMLINE CONTROLS PVT.LTD.
401/402,"meghansh"complex,opp.Oxford tower,
Gurukul road,Memnagar,Ahmedabad-380 052.
Gujrat,India.***

Ph.No. - (079) 30910812(0)

E-mail -

customercare@streamlinecontrols.com

web - www.streamlinecontrols.com

PREFACE

BLOkon is multi functional controller incorporating micro controller, making it most versatile and cost effective solution optimally designed to best suit the automation needs of blow molding machines.

For better usage and maintenance of control system, detail study of this operating manual will be helpful.

We would be glad to assist your queries.

Specifications are subject to change without prior notice.

CONTENTS

- (A) SYSTEM SPECIFICATIONS**
- (B) INTRODUCTION**
- (C) FEATURES**
- (D) SCOPE OF SUPPLY**
- (E) PROGRAMMING OF THE SYSTEM**
- (E) OPERATING PANEL DESCRIPTION**
- (G) MANUAL MODE OF OPERATION**
- (H) PRECAUTIONS**
- (I) ON LINE VIEW SCREEN DESCRIPTION**
- (J) LIST OF PROGRAMMABLE PARAMETERS**
 - (1) TEMPERATURE CONTROLLER**
 - (2) TIMERS**
 - (2) MISC.FUNCTIONS**
 - (2) PRESSURE**
 - (2) FLOW**
- (K) LIST OF INPUTS AND OUTPUTS**
- (L) WIRING DIAGRAM AND BLOCK DIAGRAM**
- (M) SEQUENCE OF OPERATION**
- (N) INTERLOCKS**

STREAMLINE CONTROLS PVT.LTD.
BLOkon 00/2.0/ Manual

(A) SPECIFICATIONS:

Input

Power:

Voltage	--	0-230-440Vac ± 10%
Frequency	--	49-50 Hz
Consumption	--	30 VA Max.

Control:

Thermocouple	--	J / K type - Isolated
Proximity/ Limit switches	--	NPN (NO type) 10-30Vdc - 50mA Max.

Output

For Solenoids	--	For 230VAC - 2Amp. Max. - SSR Output
	--	For 24VDC - 2 Amp. Max. – MOSFET Driver Output
For Heater	--	SSR Output - 2 Amp max 230Vac contactors

Environment

Temperature	--	0°C to 55°C
Humidity	--	5 to 95% RH non condensing

MECHANICAL DIMENSIONS (All are in MM)

Operating Box	--	Depth X Width X Height 95 mm X 133 mm X 280 mm
---------------	----	---

(B) INTRODUCTION

- BLOkon is a complete proven & reliable control system for Blow Molding Machine.
- System consists of three units.
 - (1) Display unit
 - (2) Input/ Output drivers
 - (3) Transformer/ C.V.T. (Optional)

(0) Operating Panel:

This is small light weight Display unit with soft touch keypad & LCD display. This unit is connected to Input/Output drivers Via 25core factory assembled flexible cable.

(0) Input/Output Drivers:

Following type of cards will be provided depending on the Input/ Output requirement of the machine.

Junction card

- Junction card is junction between all Input/Output driver cards & Display unit.
- Require Power supply for driver cards and display unit is provided by this junction card.
- Thermocouples for measuring barrel temperature is also connected to this card.

Digital Input Card (Standard for 2, available extend to 6)

All the inputs to the system are connected to digital input cards. Each input card accepts 8nos. of digital inputs.

Digital Output Card (Standard for 2, available extend to 6)

All the outputs of the system are connected to digital output cards. Each output card is provided with 8nos. of digital output.

Heater Output Card (Standard for 1, available extend to 2)

All the Heater controlling contactors are connected to heater output card. Each card is provided with 8nos. of outputs.

Analog Output Card(Standard for 2, available extend to 3)

Analog output driver card is driver unit that gives proportional output to drive the Proportional valve. One card is able to drive only one Proportional valve.

Analog Input Card (Standard for 2, available extend to 2)(Optional)

Analog Input Card is 4 Channel A/D voltage input interface card.

This package has some obvious advantages over existing conventional Electrical Systems. This occupies lesser space than conventional system. The simplicity of wiring from solenoids to systems or limit switches to system and from Thermocouples to system make it easier and less time consuming for commissioning. This system has no moving parts, so periodical maintenance is drastically reduced and there for reliability is definitely improved. Function like Heating ON-OFF and Cycle Time Interlock makes this system much more superior than the conventional system.

(C) FEATURES

- Inherently reliable Micro controller based technology 8051 / 20MHz CPU.
- Offers up to 64 digital inputs, Up to 64 digital outputs, 8zone time Proportional controlled Temperature Controllers, timers, Extensive feather touch membrane keypad for user interface for manual/Set/fully auto functions of the machine.
- Latest E2PROM Technology ensures security of programmed parameters.
- User friendly programming through an extensive membrane keypad for easy operator interface (Details of manual mode operations available is appended on separate sheet)
- Five digit counters to count Number of Pieces.
- Facility for counting cycle time helpful in production analysis.
- Thermocouple "Open" & "Reverse" conditions are self detected and are displayed as "Opn" and "rev" respectively.
- Programmable High & Low limits for all temperature zones.
- Automatic cold junction compensation for Thermocouple inputs.
- Inbuilt interlocks for Low & High temperature, Right and/or Left doors, Maximum Cycle Time, Emergency stop, Hydro motor overload and many others.
- Built in 25 nos. mold memory.
- Operating Input/Output diagnosis.

(D) SCOPE OF SUPPLY

SCPL to provide:

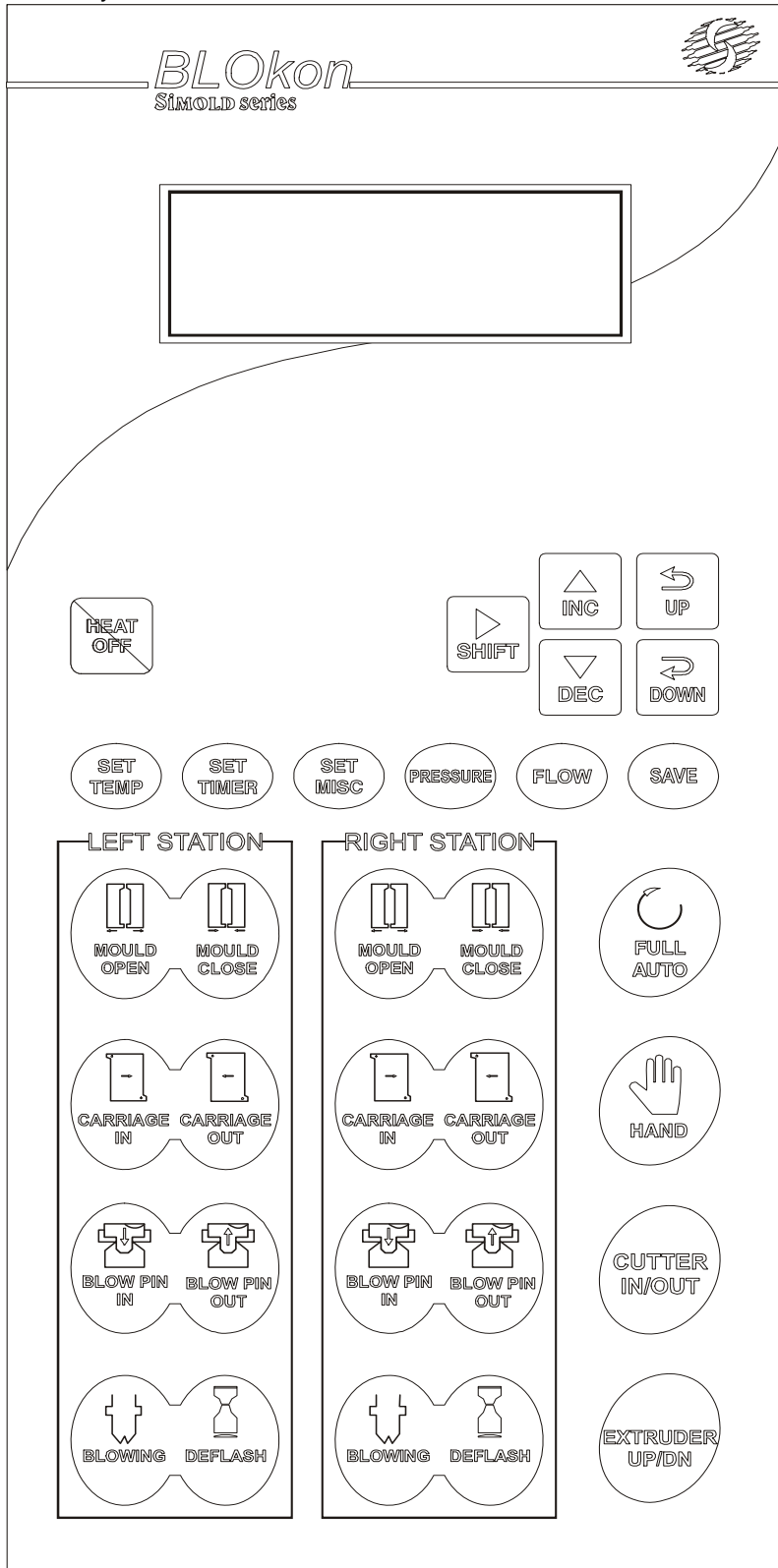
- 1 Hand Panel.
- 2 Input & Output cards.
- 3 Inter connecting cables.
- 4 Operating Manual.

(E) PROGRAMMING OF THE SYSTEM

The system will be programmed to suit your application by us.


Operating Panel Description :


Front key board Sticker





KEY'S DESCRIPTION


1. CURSOR KEY

- 

PROG. MODE: Push this key to move cursor from left to right direction for parameter setting in any menu.
ONLINE MODE: Also use for open the password menu in online display.
- 


PROG. MODE: To increase parameter value in any menu
Also use for function on/off.
- 


PROG. MODE: To decrease parameter value in any menu.
Also use for function on/off.
ONLINE MODE: Alarm reset for all mode.
- 


PROG. MODE: For shift to previous parameter.
- 


PROG. MODE: For shift to next parameter.


2. MENU SELECTOR


- 

Set temperature key to set all zones set point.
- 

Set timer key to set all function's timer.
- 




Set misc key to set On/ Off for selectable function.
- 

Set pressure key to set all function's proportional pressure.
- 

Set flow key to set all function's proportional flow.
- 

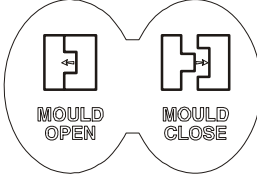
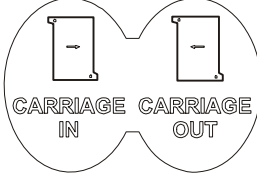
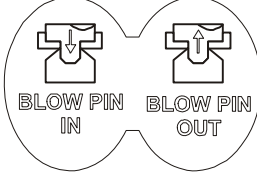
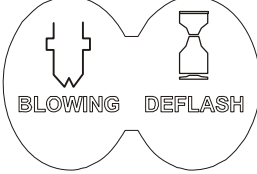
Save key to save set parameter.
Also use for scroll online display

3. OPERATING MODE SELECTOR

-  Push this key to start or stop the heating.
-  Machine operating at fully automatic production mode.
Restarted by cycle delay timer.
-  Operating machine by manual key.

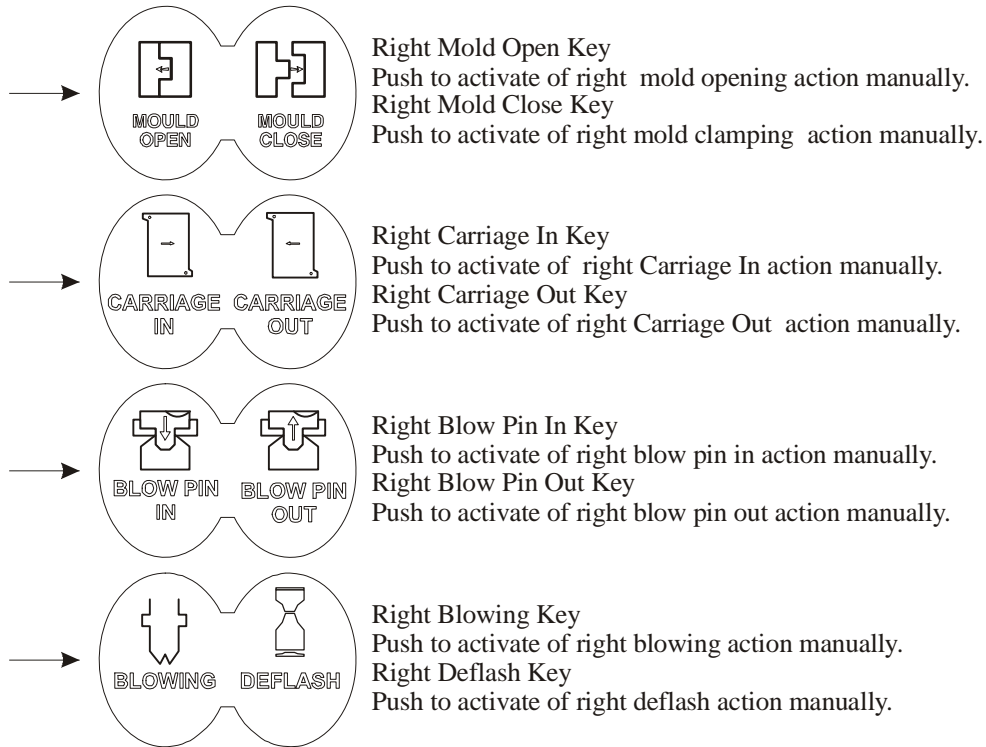
4. Manual Operation Key

Left Station

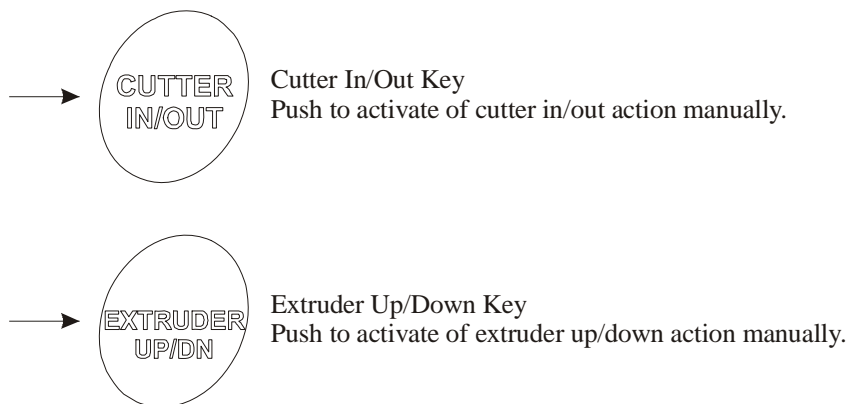
-  Left Mold Open Key
Push to activate of left mold opening action manually.
Left Mold Close Key
Push to activate of left mold clamping action manually.
-  Left Carriage In Key
Push to activate of left Carriage In action manually.
Left Carriage Out Key
Push to activate of left Carriage Out action manually.
-  Left Blow Pin In Key
Push to activate of left blow pin in action manually.
Left Blow Pin Out Key
Push to activate of left blow pin out action manually.
-  Left Blowing Key
Push to activate of left blowing action manually.
Left Deflash Key
Push to activate of left deflash action manually.

STREAMLINE CONTROLS PVT.LTD.
BLOkon 00/2.0/ Manual

Right Station



Common Functions



(G) MANUAL MODE OF OPERATIONS

1. Left Mould Open
2. Left Mould Close
3. Left Carriage In
4. Left Carriage Out
5. Left Blow Pin In
6. Left Blow Pin Out
7. Left Blowing
8. Left Deflash
9. Right Mould Open
10. Right Mould Close
11. Right Carriage In
12. Right Carriage Out
13. Right Blow Pin In
14. Right Blow Pin Out
15. Right Blowing
16. Right Deflash
17. Cutter in/out
18. Extruder up/down

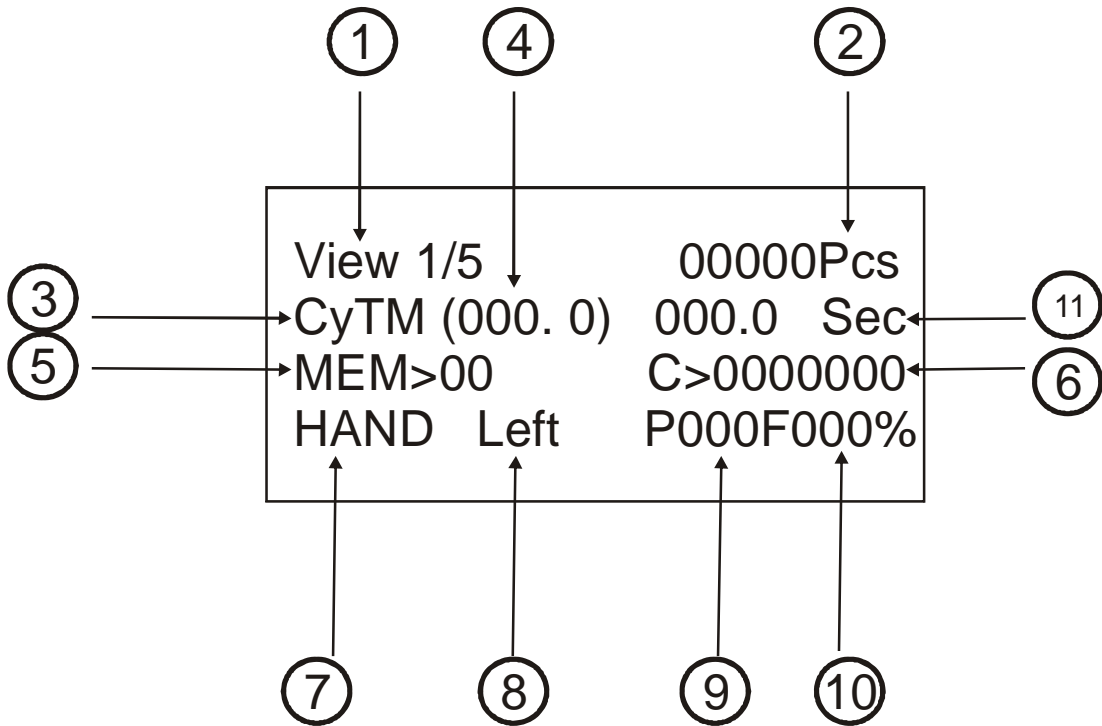
(H) PRECAUTIONS

To prevent damage from human and machine, please obey the following safety caution.

- Equipment must be operating under correct power.(Install a voltage stabilizer while need)
- Earth terminal must be connected to qualified terminal.
- All electrical elements with EARTH terminal, it is necessary for users to connect with the EARTH terminal.
- The high power cables should be separated from the low power cables to avoid interfere.
- To prevent fire or hazard shock, do not expose the unit to rain or moistly place.
- Please understanding the operating process before use.
- When system shut down, wait 10seconds for re-start.
- Thermocouples used for this system must be isolated(ungrounded) Fe/k type.
- The wiring of each zone starting from thermocouple of heater must be verified.
For ex: first zone thermocouple must be connected to first channel of the system and heater of first zone must be connected to heater 1of the system.
- The limit switch and solenoids wiring must be done as per given wiring diagram.
- If the proximity switches are used then use only PNP-NO type proximity switches.

(I) Online View Screen Description:

View Screen 1:

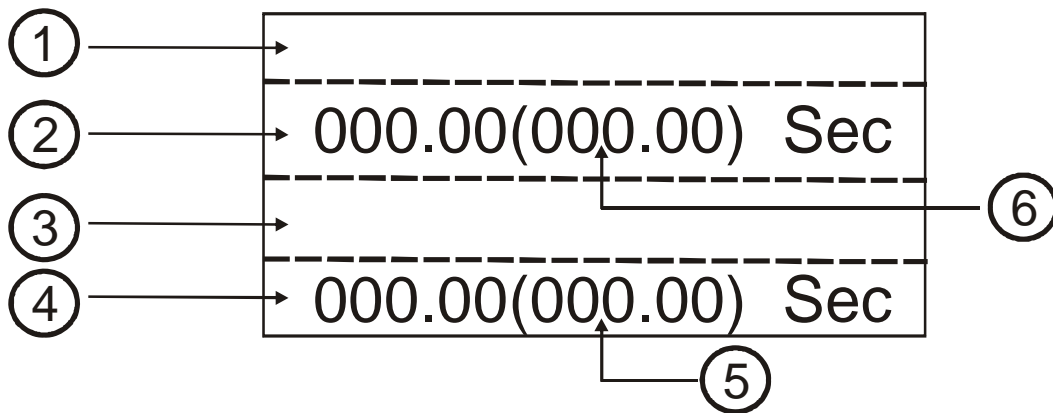


Description of Page

Screen Number	Display View	Description
1	View 1/5	No. of Display View
2	00000Pcs	Display Batch Counter
3	CyTM	Display Cycle Time
4	(000.0)	Display Previous cycle time
5	MEM>00	Display Memory count
6	C>00000000	Display Totlizer counter
7	HAND	Display select mode
8	LEFT	Display select station
9	P000	Display pressure setting
10	F000%	Display flow setting
11	000.0 SEC	Display current cycle time

View Screen 2

To go this page press save key in view screen1

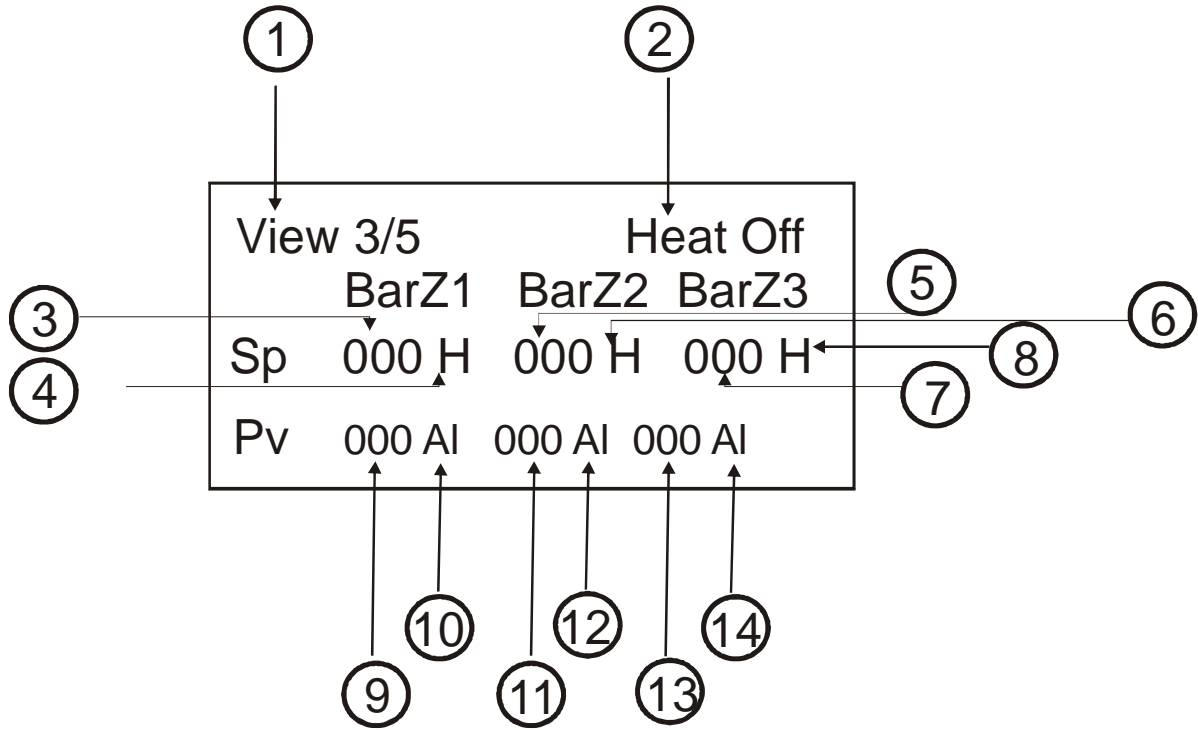


Description of Page

Screen Number	Display View	Description
1		Display online function's message Or Display left station interlock message
2	000.00	Display actual time of left station's function
3		Display online function's message Or Display right station interlock message
4	000.00	Display actual time of right station's time
5	(000.00)	Display set time of left station's function
6	(000.00)	Display set time of right station's function

View Screen 3

To go this page press save key in view screen2

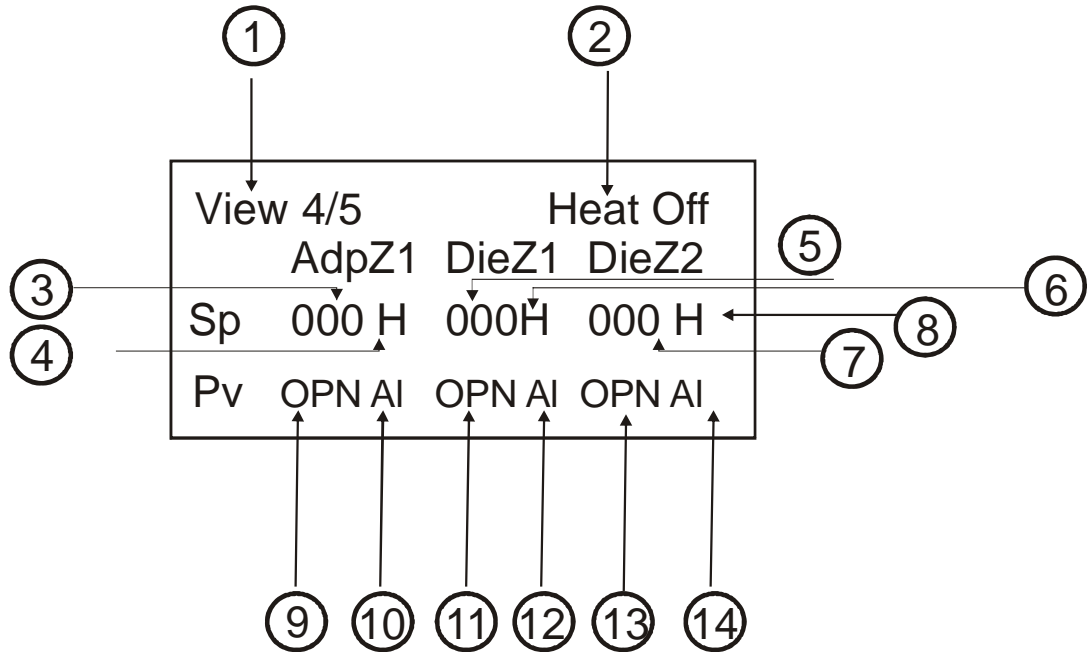


Description of Page

Screen Number	Display View	Description
1	View 3/5	No. of Display View
2	Heat Off	Display heating off or on
3	000	Display barrel zone 1 set temperature
4	H	Display heater or blower on status
5	000	Display barrel zone 2 set temperature
6	H	Display heater or blower on status
7	000	Display barrel zone 3 set temperature
8	H	Display heater or blower on status
9	000	Display barrel zone 1 actual temperature
10	AI	Display alarm low or high status
11	000	Display barrel zone 2 actual temperature
12	AI	Display alarm low or high status
13	000	Display barrel zone 3 actual temperature
14	AI	Display alarm low or high status

View Screen 4

To go this page press save key in view screen3

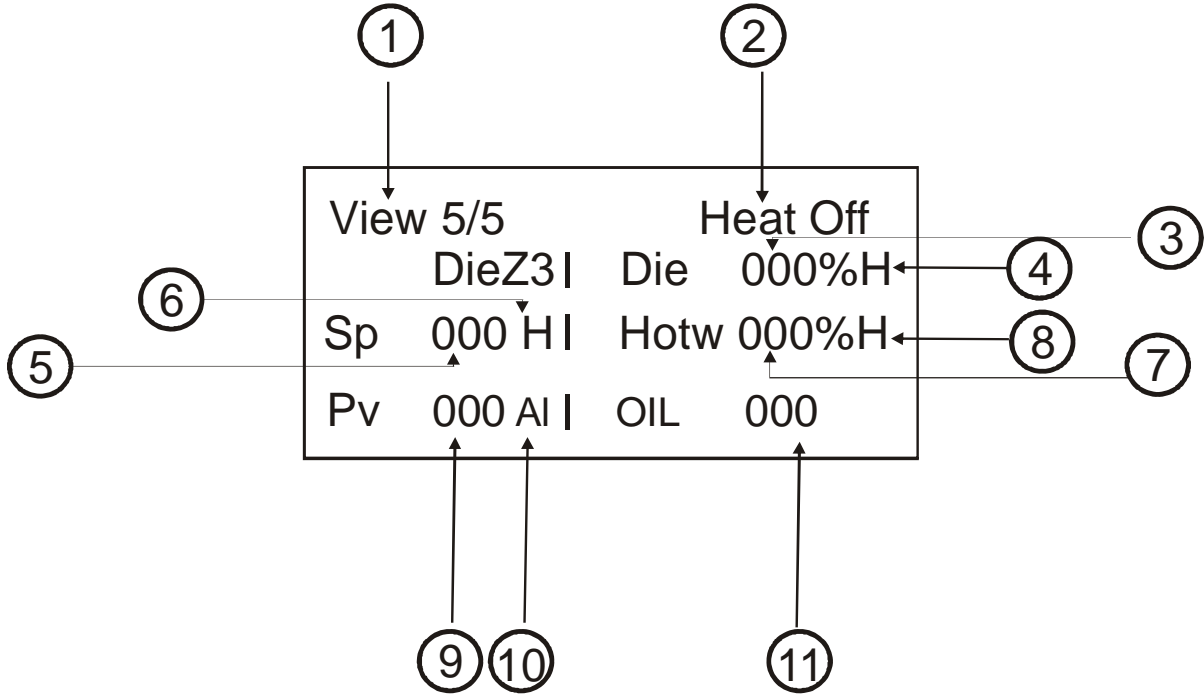


Description of Page

Screen Number	Display View	Description
1	View 4/5	No. of Display View
2	Heat Off	Display heating off or on
3	000	Display adapter zone 1 set temperature
4	H	Display heater or blower on status
5	000	Display die zone 1 set temperature
6	H	Display heater or blower on status
7	000	Display die zone 2 set temperature
8	H	Display heater or blower on status
9	000	Display adapter zone 1 actual temperature
10	AI	Display alarm low or high status
11	000	Display die zone 2 actual temperature
12	AI	Display alarm low or high status
13	000	Display die zone 3 actual temperature
14	AI	Display alarm low or high status

View Screen 5

To go this page press save key in view screen4



Description of Page

Screen Number	Display View	Description
1	View 5/5	No. of Display View
2	Heat Off	Display heating off or on
3	000%	Display die ring set temperature
4	H	Display heater or blower on status
5	000	Display die zone 3 set temperature
6	H	Display heater or blower on status
7	000	Display hot wire set temperature
8	H	Display heater or blower on status
9	000	Display die zone 3 actual temperature
10	AI	Display alarm low or high status
11	000	Display oil temperature

STREAMLINE CONTROLS PVT.LTD.
BLOkon 00/2.0/ Manual

(J)List of Programmable Parameters

Set Temperatures

Press set **TEMP** key.

First line of LCD will show “ Set Temperatures”.

Second, third and fourth lines of LCD show zone number and set temp.

Select require zone using UP/ DOWN key.

Set require temperature using INC, DEC and SHIFT key.

On pressing SAVE key the set value will be saved.

List of temperature parameter is given below.

No.	Message	Description	Range	Level
1	SetTmp BZ1 C	Set Temperature of Barrel Zone 1	0-400 C	User
2	SetTmp BZ2 C	Set Temperature of Barrel Zone 2	0-400 C	User
3	SetTmp BZ3 C	Set Temperature of Barrel Zone 3	0-400 C	User
4	SetTmp AZ1 C	Set Temperature of Adapter Zone 1	0-400 C	User
5	SetTmp DZ1 C	Set Temperature of Die Zone 1	0-400 C	User
6	SetTmp DZ2 C	Set Temperature of Die Zone 2	0-400 C	User
7	SetTmp DZ3 C	Set Temperature of Die Zone 3	0-400 C	User
8	SetTmp DR %	Set Temperature of Die Ring	0-100 %	User
9	SetTmp HW %	Set Temperature of Hot Wire	0-100 %	User
10	SetTmp Ol C	Set Temperature of Oil	0-100 C	User
11	Barl Zon 1	Barrel Zone 1 On/Off	On/Off	User
12	Barl Zon 2	Barrel Zone 2 On/Off	On/Off	User
13	Barl Zon 3	Barrel Zone 3 On/Off	On/Off	User
14	Adpt Zon 1	Adapter Zone 1 On/Off	On/Off	User
15	Die Zon 1	Die Zone 1 On/Off	On/Off	User
16	Die Zon 2	Die Zone 2 On/Off	On/Off	User
17	Die Zon 3	Die Zone 3 On/Off	On/Off	User
18	Die Ring	Die Ring On/Off	On/Off	User
19	Hot Wire	Hot Wire On/Off	On/Off	User
20	Oil Temp	Oil Temperature On/Off	On/Off	User
21	LoAlrm BZ1 C	Low Alarm of Barrel Zone 1	0-400 C	User
22	LoAlrm BZ2 C	Low Alarm of Barrel Zone 2	0-400 C	User
23	LoAlrm BZ3 C	Low Alarm of Barrel Zone 3	0-400 C	User
24	LoAlrm AZ1 C	Low Alarm of Adapter Zone 1	0-400 C	User
25	LoAlrm DZ1 C	Low Alarm of Die Zone 1	0-400 C	User
26	LoAlrm DZ2 C	Low Alarm of Die Zone 2	0-400 C	User
27	LoAlrm DZ3 C	Low Alarm of Die Zone 3	0-400 C	User
28	HiAlrm BZ1 C	High Alarm of Barrel Zone 1	0-400 C	User
29	HiAlrm BZ2 C	High Alarm of Barrel Zone 2	0-400 C	User
30	HiAlrm BZ3 C	High Alarm of Barrel Zone 3	0-400 C	User
31	HiAlrm AZ1 C	High Alarm of Adapter Zone 1	0-400 C	User
32	HiAlrm DZ1 C	High Alarm of Die Zone 1	0-400 C	User
33	HiAlrm DZ2 C	High Alarm of Die Zone 2	0-400 C	User
34	HiAlrm DZ3 C	High Alarm of Die Zone 3	0-400 C	User
35	BIPont BZ1 C	Blower Point of Barrel Zone 1	0-100 C	User
36	BIPont BZ2 C	Blower Point of Barrel Zone 2	0-100 C	User
37	BIPont BZ3 C	Blower Point of Barrel Zone 3	0-100 C	User
38	BIPont AZ1 C	Blower Point of Adapter Zone 1	0-100 C	User
39	BIPont DZ1 C	Blower Point of Die Zone 1	0-100 C	User
40	BIPont DZ2 C	Blower Point of Die Zone 2	0-100 C	User

STREAMLINE CONTROLS PVT.LTD.
BLOkon 00/2.0/ Manual

41	BIPont DZ3 C	Blower Point of Die Zone 3	0-100 C	User
42	PrBand BZ1 C	Proportional Band of Barrel Zone 1	0-100 C	Supervisor
43	PrBand BZ2 C	Proportional Band of Barrel Zone 2	0-100 C	Supervisor
44	PrBand BZ3 C	Proportional Band of Barrel Zone 3	0-100 C	Supervisor
45	PrBand AZ1 C	Proportional Band of Adapter Zone 1	0-100 C	Supervisor
46	PrBand DZ1 C	Proportional Band of Die Zone 1	0-100 C	Supervisor
47	PrBand DZ2 C	Proportional Band of Die Zone 2	0-100 C	Supervisor
48	PrBand DZ3 C	Proportional Band of Die Zone 3	0-100 C	Supervisor
49	InGain BZ1 S	Integral Gain of Barrel Zone 1	0-1000 Sec	Supervisor
50	InGain BZ2 S	Integral Gain of Barrel Zone 2	0-1000 Sec	Supervisor
51	InGain BZ3 S	Integral Gain of Barrel Zone 3	0-1000 Sec	Supervisor
52	InGain AZ1 S	Integral Gain of Adapter Zone 1	0-1000 Sec	Supervisor
53	InGain DZ1 S	Integral Gain of Die Zone 1	0-1000 Sec	Supervisor
54	InGain DZ2 S	Integral Gain of Die Zone 2	0-1000 Sec	Supervisor
55	InGain DZ3 S	Integral Gain of Die Zone 3	0-1000 Sec	Supervisor
56	CyTime BZ1 S	Cycle Time of Barrel Zone 1	0-100 Sec	Supervisor
57	CyTime BZ2 S	Cycle Time of Barrel Zone 2	0-100 Sec	Supervisor
58	CyTime BZ3 S	Cycle Time of Barrel Zone 3	0-100 Sec	Supervisor
59	CyTime AZ1 S	Cycle Time of Adapter Zone 1	0-100 Sec	Supervisor
60	CyTime DZ1 S	Cycle Time of Die Zone 1	0-100 Sec	Supervisor
61	CyTime DZ2 S	Cycle Time of Die Zone 2	0-100 Sec	Supervisor
62	CyTime DZ3 S	Cycle Time of Die Zone 3	0-100 Sec	Supervisor
63	CyTime DR S	Cycle Time of Die Ring	0-100 Sec	Supervisor
64	CyTime HW S	Cycle Time of Hot Wire	0-100 Sec	Supervisor

Set Timers

Press set **TIMER** key.
First line of LCD will show " Set Timers".
Second, third and fourth lines of LCD show timer's name and its set value.
Select require timer using UP/ DOWN key.
Set require timer using INC, DEC and SHIFT key.
On pressing SAVE key the set value will be saved.
List of timer parameter is given below.

No.	Message	Description	Range	Level
1	Lt Cyc Dly S	Left Cycle Delay	0-10.00 Sec	User
2	Rt Cyc Dly S	Right Cycle Delay	0-10.00 Sec	User
3	Lt Par Tim S	Left Parison Time	0-100.00 Sec	User
4	Rt Par Tim S	Right Parison Time	0-100.00 Sec	User
5	Cutter Dly S	Cutter Delay	0-10.00 Sec	User
6	Cutr Impls S	Cutter Impulse	0-10.00 Sec	User
7	Ext Up Dly S	Extruder Up Delay	0-99.99 Sec	User
8	Ext Up Tim S	Extruder Up Time	0-99.99 Sec	User
9	Seal Dly S	Sealing Delay	0-100.00 Sec	User
10	Seal Time S	Sealing Time	0-100.00 Sec	User
11	SupAir Dly S	Support Air Delay	0-100.00 Sec	User
12	SupAir Tim S	Support Air Time	0-100.00 Sec	User
13	Lt Ton Tim S	Left Tonnage Time	0-10.00 Sec	User
14	Rt Ton Tim S	Right Tonnage Time	0-10.00 Sec	User
15	Lt BPin DI S	Left Blow Pin In Delay	0-99.99 Sec	User

STREAMLINE CONTROLS PVT.LTD.
BLOkon 00/2.0/ Manual

16	Rt BPin DI	S	Right Blow Pin In Delay	0-99.99 Sec	User
17	Lt Bpin Fa	S	Left Blow Pin In Fast Time	0-9.99 Sec	User
18	Rt Bpin Fa	S	Right Blow Pin In Fast Time	0-9.99 Sec	User
19	Lt Bpin In	S	Left Blow Pin In Intermediate Time	0-9.99 Sec	user
20	Rt Bpin In	S	Right Blow Pin In Intermediate Time	0-9.99 Sec	User
21	Lt Bpin SI	S	Left Blow Pin In Slow Time	0-9.99 Sec	User
22	Rt Bpin SI	S	Right Blow Pin In Slow Time	0-9.99 Sec	User
23	Lt Blo Dly	S	Left Blow Delay	0-100.00 Sec	User
24	Rt Blo Dly	S	Right Blow Delay	0-100.00 Sec	User
25	Lt Blo Tim	S	Left Blow Time	0-100.00 Sec	User
26	Rt Blo Tim	S	Right Blow Time	0-100.00 Sec	User
27	Lt Ejct Tm	S	Left Ejector Time	0-100.00 Sec	User
28	Rt Ejct Tm	S	Right Ejector Time	0-100.00 Sec	User
29	Lt BPOt Re	S	Left Blow Pin Out Release Time	0-9.99 Sec	User
30	Rt BPOt Re	S	Right Blow Pin Out Release Time	0-9.99 Sec	User
31	Lt Exhaust	S	Left Exhaust Time	0-100.00 Sec	User
32	Rt Exhaust	S	Right Exhaust Time	0-100.00 Sec	User
33	Lt Deflesh	S	Left Deflesh Time	0-50.00 Sec	User
34	Rt Deflesh	S	Right Deflesh Time	0-50.00 Sec	User
35	CyOvr Time	S	Cycle Over Time (Limit for Total Cycle Time)	0-999.9 Sec	Supervisor
36	HeatOn Dly	S	Heat On Delay	0-999.9 Min	Supervisor
37	Analog Dly	S	Delay between Digital & Analog Outputs	0-99.99 Sec	Supervisor

Set Pressure

Press set **Pressure** key.

First line of LCD will show " Set Pressures'.

Second, third and forth lines of LCD show function's name and it's pressure value.

Select require function using UP/ DOWN key.

Set require pressure value using INC, DEC and SHIFT key.

On pressing SAVE key the set value will be saved.

List of pressures parameter is given below.

No.	Message	Description	Range	Level
1	Lt MOpn Fa	% Left Mold Open Fast	0-100 %	User
2	Lt MCIs SI	% Left Mold Close Slow	0-100 %	User
3	Lt MCIs Fa	% Left Mold Close Fast	0-100 %	User
4	Lt MCIsTon	% Left Mold Close Tonnage	0-100 %	Supervisor
5	Lt CrIn Fa	% Left Carriage In Fast	0-100 %	User
6	Lt CrIn SI	% Left Carriage In Slow	0-100 %	User
7	Lt CrOutFa	% Left Carriage Out Fast	0-100 %	User
8	Lt CrOutSI	% Left Carriage Out Slow	0-100 %	User
9	Lt BPin Fa	% Left Blow Pin In Fast	0-100 %	User
10	Lt BPin In	% Left Blow Pin In Intermediate	0-100 %	User
11	Lt BPin SI	% Left Blow Pin In Slow	0-100 %	User
12	Lt BPOutFa	% Left Blow Pin Out Fast	0-100 %	User
13	Rt MOpn Fa	% Right Mold Open Fast	0-100 %	User
14	Rt MCIs SI	% Right Mold Close Slow	0-100 %	User
15	Rt MCIs Fa	% Right Mold Close Fast	0-100 %	User
16	Rt MCIsTon	% Right Mold Close Tonnage	0-100 %	Supervisor
17	Rt CrIn Fa	% Right Carriage In Fast	0-100 %	User

STREAMLINE CONTROLS PVT.LTD.
BLOkon 00/2.0/ Manual

18	Rt CrIn Sl	%	Right Carriage In Slow	0-100 %	User
19	Rt CrOutFa	%	Right Carriage Out Fast	0-100 %	User
20	Rt CrOutSl	%	Right Carriage Out Slow	0-100 %	User
21	Rt BPin Fa	%	Right Blow Pin In Fast	0-100 %	User
22	Rt BPin In	%	Right Blow Pin In Intermediate	0-100 %	User
23	Rt BPin Sl	%	Right Blow Pin In Slow	0-100 %	User
24	Rt BPOutFa	%	Right Blow Pin Out Fast	0-100 %	User

Set Flow

Press set **Flow** key.

First line of LCD will show " Set Flows'.

Second, third and fourth lines of LCD show function's name and its flow value.

Select required function using UP/ DOWN key.

Set required flow value using INC, DEC and SHIFT key.

On pressing SAVE key the set value will be saved.

List of flows parameter is given below.

No.	Message		Description	Range	Level
1	Lt MOpn Fa	%	Left Mold Open Fast	0-100 %	User
2	Lt MCIs Sl	%	Left Mold Close Slow	0-100 %	User
3	Lt MCIs Fa	%	Left Mold Close Fast	0-100 %	User
4	Lt MCIsTon	%	Left Mold Close Tonnage	0-100 %	Supervisor
5	Lt CrIn Fa	%	Left Carriage In Fast	0-100 %	User
6	Lt CrIn Sl	%	Left Carriage In Slow	0-100 %	User
7	Lt CrOutFa	%	Left Carriage Out Fast	0-100 %	User
8	Lt CrOutSl	%	Left Carriage Out Slow	0-100 %	User
9	Lt BPin Fa	%	Left Blow Pin In Fast	0-100 %	User
10	Lt BPin In	%	Left Blow Pin In Intermediate	0-100 %	User
11	Lt BPin Sl	%	Left Blow Pin In Slow	0-100 %	User
12	Lt BPOutFa	%	Left Blow Pin Out Fast	0-100 %	User
13	Rt MOpn Fa	%	Right Mold Open Fast	0-100 %	User
14	Rt MCIs Sl	%	Right Mold Close Slow	0-100 %	User
15	Rt MCIs Fa	%	Right Mold Close Fast	0-100 %	User
16	Rt MCIsTon	%	Right Mold Close Tonnage	0-100 %	Supervisor
17	Rt CrIn Fa	%	Right Carriage In Fast	0-100 %	User
18	Rt CrIn Sl	%	Right Carriage In Slow	0-100 %	User
19	Rt CrOutFa	%	Right Carriage Out Fast	0-100 %	User
20	Rt CrOutSl	%	Right Carriage Out Slow	0-100 %	User
21	Rt BPin Fa	%	Right Blow Pin In Fast	0-100 %	User
22	Rt BPin In	%	Right Blow Pin In Intermediate	0-100 %	User
23	Rt BPin Sl	%	Right Blow Pin In Slow	0-100 %	User
24	Rt BPOutFa	%	Right Blow Pin Out Fast	0-100 %	User

Set Mode Pressure

Press set **Pressure** key.

First line of LCD will show " Set Mode Pressure'.

Second line of LCD show set mode pressure and its pressure value.

Set required pressure value using INC, DEC and SHIFT key.

On pressing SAVE key the set value will be saved.

List of set mode pressure parameter is given below.

No.	Message		Description	Range	Level
-----	---------	--	-------------	-------	-------

STREAMLINE CONTROLS PVT.LTD.
BLOkon 00/2.0/ Manual

1	Set Mod Pr %	Set Mode Pressure	0-100 %	User
---	--------------	-------------------	---------	------

Set Mode Flow

Press set **Flow** key.
First line of LCD will show " Set Mode Flow".
Second line of LCD show set mode flow and it's flow value.
Set require flow value using INC, DEC and SHIFT key.
On pressing SAVE key the set value will be saved.
List of set mode flow parameter is given below.

No.	Message	Description	Range	Level
1	Set Mod Fl %	Set Mode Flow	0-100 %	User

Password Entry

Press **Shift** key in any of online display.
It is require to exit from any menu at the time of password entry.
First line of LCD will show " Enter Password".
Second line of LCD show Enter Password and it's value.
Set require password value using INC, DEC and SHIFT key.
On pressing SAVE key the set value will be saved.
List of password entry parameter is given below.

No.	Message	Description	Range	Level
1	Entr Paswd	Enter Password	0-9999	User

Set Miscellaneous

Press set **MISC** key.
First line of LCD will show " Set Miscellaneous".
Second, third and forth lines of LCD show function's name and it's value/status.
Select require function using UP/ DOWN key.
Set require value/ status using INC, DEC and SHIFT key.
On pressing SAVE key the set value will be saved.
List of miscellaneous parameter is given below.

No.	Message	Description	Range	Level
1	Station	Selection of Station to operate	Left/Right/Both	User
2	Set Mode	Set Mode to activate	On / Off	User
3	Cutter	Cutter Operation On/Off	On / Off	User
4	Memory No	Active Memory No.	0-25	Supervisor
5	Extr Up/Dn	Extruder Operation On/Off	On / Off	User
6	Paris thik	Parison Thik / Thin Operation On/Off	On / Off	User
7	Deflesh	Deflesh Operation On/Off	On / Off	User
8	Batch Count	Batch Counter On/Off	On / Off	User
9	Batch Count	5 Digit Batch Counter	0-65535	User
10	Paris Stp 1 %	Parison % Sharing Step 1	0-100 %	User
11	Paris Stp 2 %	Parison % Sharing Step 2	0-100 %	User
12	Paris Stp 3 %	Parison % Sharing Step 3	0-100 %	User
13	Paris Stp 4 %	Parison % Sharing Step 4	0-100 %	User
14	Auto Heat	Auto Heat On/Off	On / Off	Supervisor
15	Heat On Tim	Auto Heat On Time	XX:XX:XX	Supervisor
16	Heat On Dat	Auto Heat On Date	XX:XX:XX	Supervisor
15	Reset Count	Reset the Batch Counter	On / Off	Supervisor
16	Test Mode	Test Mode On/Off	On / Off	Supervisor

STREAMLINE CONTROLS PVT.LTD.
BLOkon 00/2.0/ Manual

17	Passwd Lvl1	Password for Level 1 Entry	0-9999	Supervisor
18	Time	Set Time	XX:XX:XX	Supervisor
19	Date	Set Date	XX:XX:XX	Supervisor

(N) INTERLOCKS

It is a one type of alarm system which activate when cycle or any other function does not operate properly because of those abnormal condition it indicate INTERLOCK

Following are the different interlock messages.

Sr.No.	Operation	Interlocks Messages On Screen	Description Of Messages	Type Of Mode	
				Hand	Fully Auto
1	Left Mold Open	IL.Lt MOpen End	Left Mold fully open end	y	y
		IL.Lt Mold Not Open	Left Mold is not fully open		y
		IL.Lt Mld Opn/Cls On	Left Mold open and close input on	y	y
2	Left Mold Close	IL.Lt Mclose End	Left Mold fully Close end	y	y
		IL.Lt Blow Pn no Out	Left Blow pin is not out	y	y
		IL.Lt Mld Opn/Cls On	Left Mold open and close input on	y	y
3	Left Carriage In	IL.Lt Cariage In End	Left Carriage in end	y	y
		IL Lt Blo Pn no Out	Left Blow pin is not out	y	y
		IL.Rt Station no Out	Right station is not out	y	y
		IL.Lt Carr In/Out On	Left carriage in and out input is on	y	y
4	Left Carriage Out	IL.Lt Carige Out End	Left Carriage out end	y	y
		IL.Lt Cariage no Out	Left Carriage is not out	y	y
		IL Lt Blo Pn no Out	Left Blow pin is not out	y	y
		IL.Lt Carr In/Out On	Left carriage in and out input is on	y	y
5	Left Blow Pin In	IL Lt Cariage no Out	Left Carriage is not out	y	y
6	Left Blow Pin Out	IL.Lt Blo Pn Out End	Left Blow pin out end	y	y
7	Right Mold Open	IL.Rt MOpen End	Right Mold fully open end	y	y
		IL.Rt Mold Not Open	Right Mold is not open		y
		IL.Rt Mld Opn/Cls On	Right Mold open and close input on	y	y
8	Right Mold Close	IL.Right Mclose End	Right Mold fully Close end	y	y
		IL.Rt Blo Pin no Out	Right Blow pin is not out	y	y
		IL.Rt Mld Opn/Cls On	Right Mold open and close input on	y	y
9	Right Carriage In	IL.Rt Cariage In End	Right Carriage in end	y	y
		IL R Blo Pn no Out	Right Blow pin is not out	y	y
		IL.Lt Station no Out	Left station is not out	y	y
		IL.Rt Carr In/Out On	Right carriage in and out input is on	y	y
10	Right Carriage Out	IL.Rt Carige Out End	Right carriage out end	y	y
		IL.Rt Cariage no Out	Right carriage is not out	y	y
		IL Rt Blo Pn no Out	Right Blow pin is not out	y	y
		IL.Rt Carr In/Out On	Right carriage in and out input is on	y	y
11	Right Blow Pin In	IL Rt Cariage no Out	Right Carriage is not out	y	y
12	Right Blow Pin Out	IL.Rt Blo Pn Out End	Right Blow pin out end	y	y
13	Emergency	IL.Emergency Press	Press Emergency Push Button	y	y
14	Hydro Motor	IL.Hyd Motor Not On	Hydro motor is not on	y	y
15	Hydro Motor Overload	IL.Hyd Motr Ovr load	Hydro motor is overload	y	y
16	Left Safety Door	IL.Lt Safty door Opn	Left safety door open	y	y
17	Right Safety Door	IL.Rt Safty door Opn	Right safety door open	y	y

STREAMLINE CONTROLS PVT.LTD.
BLOkon 00/2.0/ Manual

18	Cycle Time Over	IL.Cycle Time Exceed	Actual cycle time is exceed from set cycle time		y
19	Batch Count	IL.Batch Count Over	Set batch count is over		y
20	Extruder	IL.Extruder Up End	Extruder up end	y	y
		IL.Extruder Dn End	Extruder down end	y	y
		IL.Extrudr Motr Trip	Extruder motor is trip	y	y
21	Heating	IL.Low Temperature	Temperature is Low	y	y
		IL.High Temperature	Temperature is High	y	y
		IL.Oil Temp High	Oil Temperature is high	y	y

OUR PRODUCT RANGE

- Dedicated Controller for Plastic Injection/Blow molding Machines
- DC Stepper Drives
- PID Temperature Controllers - 6 CH/1CH
- Profile Generator
- Pre Programmable Logic Controllers - PPLCs
- Digital Timers & Counters
- Dedicated Controller for Plastic Bag /Pouch Making Machines
- Dedicated Controller for Food / Pharma labeling Machines
- Dedicated Controller for Grinding Machines
- 2/3/4 Axes Motion Controller (Using DC Stepper / AC Servo Drives)

AUTOMATION... PRODUCTIVITY THROUGH TECHNOLOGY.