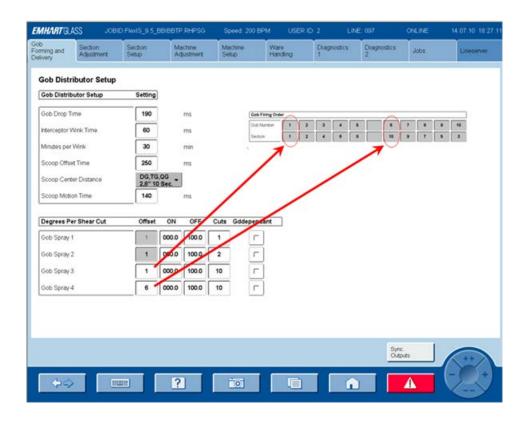


Technical News Bulletin

Steinhausen, July 2010



FlexIS Software Release V. 1.07.02.16

- New software is a major release with several new features.
- On the Gob Spray setup there is an additional column "Offset".
- Now possible to synchronize all gob spray outputs.



Introduction

FlexIS software version 1.07.02.16 has now been officially released.

The new software is a major release, 2nd of 2010, with several new features. Please contact our Technical Service Group through your local sales office for support in installing the new software.

New Features included in the 1.07.02.16 release

Gob Forming and Delivery

Gob Distributor screen:

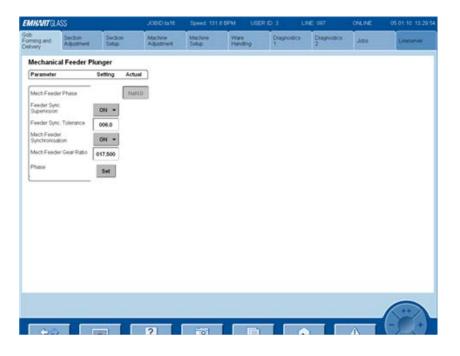
On the Gob Spray setup there is an additional column "Offset".

It is now possible to trigger to a certain section ('Offset') for the gob spray if a multiple of the number of running sections is entered in the 'cuts'-field. The picture shows that "gob spray 3" is always triggered on section 1 and "gob spray 4" always on section 10.

It is now also possible to synchronize all gob spray outputs by pressing the button on the Gob Distributor page.

Mechanical Feeder:

If the proximity switch does not deliver a valuable signal and the "Feeder Sync Supervision" is ON, the GD swings out.



Section Setup



Event Configuration:

Now the Interceptor Event can be configured like another event. If the machine does not have an Emhart Gob Distributor (scoop or different gob distributor) the Interceptor Event must be configured "Angle-Angle" and operator can program the ON and OFF angle of the Interceptor. The duration of the Interceptor movement will be related to the speed of the machine and it will be not necessary to change the duration (msec) on the "Dongle page".

EMh	hart gla	SS	JOBID:	Test_Stotzle_2G	Speed: 192 E	IPM USER ID	:3 LIN	E: 1234	ONLINE	04.06.10 12:34:34
Gob Formir Delive	ng and Hy	Section Adjustment	Section Setup	Machine Adjustment	Machine Setup	Ware Handling	Diagnostics 1	Diagnostics 2	Jobs	Lineserver
Sec	ction 1 / E	vent - Config								
No	o. Event N	ame	Event 1	Гуре	Event Mode	State				
01	Gob Interc	eptor		A	ngle-Duration	assigned	-			
02	Blanks Clo	psed	Output	A	ngle-Angle	unassigned				
03	Thimbles (Jp		Event M	lode(1)	undefined	IT			
04	Plungers L	Jp (Inner)	Output	Angle-	Angle	assigned				
05	i Plungers L	Jp (2)	Output	Angle-	Duration	(* assigned				
06	i Plungers l	Jp (3)		-		undefined				
07	Plungers U	Jp (4)				undefined				
08	Funnel Do	4νm	Output	A	ngle-Angle	unassigned				
09	Funnel Up					undefined				
10) First Baffle	9	Output	A	ngle-Angle	unassigned	-			
		Fill Even Sections	AI C	pply hanges	Reset	Section+	Section-		d Event ections	++
	¢¢			?	O					



Special Cycle Configuration:

Now, it can be selected whether the bottles should be rejected or not in the CoMo cycles after manual swab, configuring "Swab Cold Mold" in the Dongle Section Parameter (see Machine Setup / Dongle Configuration):

a) if "no reject" is configured, after Manual Swab the section controller reject the number of bottles programmed on "Reject Cycle Blank" and "Reject Cycle Blow" independently of the number of CoMo cycle.

b) if "rejected" is configured the section controller reject the highest value programmed between CoMo Cycle and reject cycle.

action 1	/ Bpec. Cyclex Cor	fu								-		-
No. Eve	nthiame	Man Swab	Auto Ser	**	Altern See	*	BW Spec.		_ /	Man Der		Value
01 Geb	Merceptor	disabled -	- enabled	٠	enabled	•	enabled		-	Cultur-Ci	chet Dianie	<u>•</u>
(C Elwi	te Closed	disabled -	- enabled	٠	enabled	•	enabled			CoMe-Ci	cies (thise	4
03 Third	dates 1/8	disabled -	- enabled	.*	enabled	•	enabled	-		ENVIO	cies there.	0
04. FM	pers Lik (Inner)	disabled	- anabled		anabled	•	enabled	-		1000	cie Stierte	2
US Pan	pers Libr (2)	disabled -	- enabled	•	enabled	•	anabled			Enert Co	cis Blow	1)
OR Flat	pen la Ct	disabled -	- anabled	•	enabled	•	enabled	-		0		
07 Phm	pers Ltp (4)	disabled -	- anabied	•	anabied	•	enabled	-		Auto Be	eb	Value
Di Fue	wi Down	disabled -	- enabled		enabled	•	enabled		L	Cycles		10
09 Fue	wit Up	disabled .	- anabled	•	enabled	•	enabled	-	L	Altern 8	web	Value
10 First	Caffer	disabled .	- enabled		enabled		enabled		L	COMPLEX	cles Blare	2
11 540	e Dow	disabled -	- enabled		enabled		enabled		L	12.13	ciet Blow	1
12. PM	perDown (Inner)	forced on .	enabled		beldene.		enabled		L	15.9.3	cies Elizen	
13 PM	per Dowrd 2)	forced on -	- enabled		enabled		enabled			Read O		-
14 Pan	per Drave(2)	forced on .	- enabled		enabled		enabled			Franci Co		1

New "on" Section Control

Normal / Alternate stop with non-Emhart servo GD:

When stopping the section with delivery on, the section did not clear the remaining glass out of the section but just stopped with the next critical event, this has been changed.

Cold Blank/Mold Reject:

This function has been completely revised and optimized. It should no longer happen that the last good bottles before entering the swab cycle are rejected. It should also no longer happen that the bottles produced during the swab or CoMo cycles are rejected incompletely.

Version settings:

a) New DA file for the 860 pusher with Jet Move 204 (affects TS-E only) has been added, a wrong error was displayed.

b) New DA file for Servo Takeout to improve motion controller settings.

BUCHER emhart glass

Machine Setup

Sect Controller Dongle

Swab CoMo:

See Special Cycle above

Plunger Cooling MS:

With this parameter, it can be selected whether the plunger cooling could be activates or not in the MS cycles. **"enabled"** only with section in delivery and P&B or NNPB process configured (see Job/ Process screen) pressing MS the plunger cooling event will be activated automatically and the "CoMO blue lights" on BK and BW panels will flash , operator can stop it just pressing the blue pushbutton of CoMo.

"**Disabled**" plunger cooling will be deactivated in MS.

NKW73LASS	JOED PM	JOBD Purgerosing/hTest Speed 1918PM			A USERIC	0.8	LPE 099	CHLINE	15 07 10 17 53
Sector Integrated Adjust	net Sector		AND A	Machine Setup	Ware Handing	Depred	a Diagnomica	JUNE	Linearow
Section Controller									
Parameters							Servomechs		
VO Config	[2x1064	3	Serie 7	Aubori in Normal Sto	Enabled	3	Darkmoth		
Panel Inputs	Strabed		Fune S	(pervision	Alarm only	-	Datte		
Mech. Overside	Available		COMO	OFF Behaviour	Separate	*	inet		
FPS	DAL & DA		Micht	nds	[inc	-	Downoids		
luttore .	Standard	2	(See)	lone	reject	-	Donhead		
Debug	C	540	(F1/00	Cooling during MS	enabled		Takeout		
HEWR Output	C	101	6	X	-	_	Pusher	r No Pushe	
Del request iutput	C	-1		1			1.000	r 860	
Dell, request pulse ler	yph (ma)	240		1				# Fielbale	
Max no. pusher-traci emors [MMn]	long [6			7		Fumel		
Manual Dwate Stop D (Cycles)	elay	0	5		-				
Banks Homog Delay V-Battle (ms)	the	50	(Sw	ab Corno		reject	-)	
Atlemate Swatt mout	Fligh Active	(NO)	0	nger Cooling o	Luina MC	enable	ed 💌		
Harriste prist rest			1 1 10	iger cooing c	ang ma			1	



WHC Dongle

Conveyor Height Adjust:

Both supported motor types can now be selected. Encoders can also be disabled.

1x1064 I/O Config . Aachine Conver Debug 0 . Type 1 CHA_Motor 1 CW ross Convey HA_Motor 2 CW . Modules MCU CHA A Enable 9 Encoder CHA B Enable c En ? [EMHART GLAS ing and Sei Jobs Flexline Set-Up Value Setting Actual Section Pusher Pusher

Machin Setup

Warehandling Controller

Parameters

FlexLine & EFRA Parameter Setup

With the existing software Version, as announced with TNB 170, it is possible to load special firing orders calculated with "Firing Order Generator" but, in case of EFRA, all the parameters must be calculated and loaded manually.

With this new V 1.02.07.16 it is possible to calculate and load, also for conveyor and WT with gear ratio not standard EG, the EFRA No, Nb and Nw parameters.

Also for the very slow machine, where it is necessary to **duplicate or**

triplicate all the gear ratio of the cinematic chain to increase the speed of the synchronous motors, it is possible to select this "Slow Machine Factor" and to calculate and load the EFRA parameters.

Set-Up Value	Setting	Actual	Section	Calc	Actual	Pusher calc. Diff	Pusher act. Diff	
Bottles/Cav/Minute	010.00	010.00						
Starting Section	1	1	Section 1	1	1	000.00	000.00	
Sections in Operation	8	8	Section 2	8	8	000.00	000.000	
No. of Gobs	2	2	Section 3	2	2	000.00	000.00	
Belt Advance	21.000 -	10.500	Section 4	7	7	000.00	000.00	
		10.000	Section 5	3	3	000.00	000.00	
Ware Xfer Finger Dist.	06.000 -		Section 6	5	6	000.00	000.00	
Conveyor Direction	Left 👻		Section 7	4	4	000.00	000.00	
Pusher Radius	06.472 -		Section 8	6	6	000.00	000.00	
Cross Conveyor %(Nc)	072.5		Section 9				000.00	
Belt Trim Percent(Nt)	098.2		Section 10				000.00	
Number of Gap	16)						
<u></u>		1	Section 11			-	000.00	
			Section 12	-	(*)		000.00	



For Belt Advance higher than 21", on the Flexline screen, it is indicated the "Number of gap" per machine cycle (virtual bottles = (Belt Adv-21)/21 x # Sect. in operation x # of cavity) and on the EFRA Set UP screen the parameter "Total Belt Advance" indicate the real belt advance in Inch.

EMHART GL	LASS	JOBID Plunge	rcoolingMsTest	Speed: 160 BP	M USER ID	:3 LIN	E: 099	ONLINE	15.07.10 18:45:40
Gob Forming and Delivery	Section Adjustment	Section Setup	Machine Adjustment	Machine Setup	Ware Handling	Diagnostics 1	Diagnostics 2	Jobs	Lineserver
EFRA Se	tup Options								
EFRA Fac	tors	Value		Calc EFRA Fact	ors	Value			
Belt Advar	nce Factor(No)	48		Belt Advance Fa	ctor(No)	48			
Ware Tran	isfer Factor (Nb)	96		Ware Transfer Fa	actor (Nb)	96			
Ware Tran	isfer Divider (Nw)	60		Ware Transfer D	ivider (Nw)	60			
Stacker M	ultiplier (Nstm)	2		Ware XFer Finge	er Dist.	06.000			
Stacker Di	ivider (Nstd)	20		Total Belt Advan	се	00.000			
Line Spee	d (Fo)	80		Conveyor Gear F	Ratio	90.000			
Belt Trim P	Percent (Nit)	98.2		Conveyor Travel	per Revolution	63.000			
Cross Cor	rveyor % (Nc)	72.5		Ware Transfer G	ear Ratio	60.000			
				Ware Transfer Tr	avel per Revolution	30.000			
				Slow Machine Fa	actor	1			
				Calculate		Load			
									++
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Job

Process Type

As mentioned before "Plunger Cooling in MS" if this function needs to be active it is necessary to program on this page, for each section, the type of process that is running.

As you can see there are four options:

B&B

P&B

NNPB

Unknown

The plunger cooling MS works only with P&B and NNPB.

MHARTGL)	ASS	JOBID:Plung	ercoolingMsTest		IPM USER ID			ONLINE	
b ming and livery	Section Adjustment	Section Setup	Machine Adjustment	Machine Setup	Ware Handling	Diagnostics 1	Diagnostics 2	Jobs	Lineserver
Process 1	Types								
Section	Process Type	s							
Section 01	B & B	-							
Section 02	P & B	-							
Section 03	NNPB	-							
Section 04	Unknown	-							
Section 05	Unknown	-							
Section 06	Unknown								
Section 07	P & B								
Section 08	NNPB								
Section 09	B & B								
Section 10	Unknown	-							
Section 11	Unknown	-							
Section 12	Unknown	-							