# **2015** WinFlow Manual





Polyfa Kalima 16-06-201!

# **WinFlow Manual**

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English

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# **Main Form**

iles <u>E</u> dit Fund	ctions <u>H</u> elp					Log off sy	/stem (Bjarne Mad
Place number i							
Place no.	2						
Mould no.	102	Article a2	23	Mould no.	101	Article	
Mould name	rør 2			Mould name	lille rør		
Maskine 1				Maskine 2			
Shot	1/1			Shot	1/1		
Mould no.	102			Mould no.	101		
Status	Waiting MH or	oen		Status	Waiting MH ope	n	
	Set	Actual			Set	Actual	
Time	1.000	0.000	Sec.	Time	0.995	0.000	Sec.
Weight	0,280	0.000	Kg.	Weight	0.970	0,000	Kg.
Ratio	1,460	1,462	1022	Ratio	1.875	0,967	
Index	100.0			Index	125.0		
olyol				Iso BH 2			
005000	Set	Actua		alana ang a	Set	Actual	
Flow	113.8	0.1	Gr/S	Flow	339,1	0.2	Gr/S
Pressure	150.0	195.1	Bar	Pressure	171.0	15,2	Bar
Temperature	25.0	25.0	C.	Temperature	25.0	21.0	C°
so	Set	Actua		p5	Set	Actual	
Flow	166.2	0,2	and the second	Flow	635.8	0,1	Gr/S
Pressure	150.0	149,9		Pressure	170.0	17,4	Bar
Temperature	25.0	25,0	C°	Temperature	25.0	23.0	C*
Tatal	0.0	00 Kr	Chatastat	3	Chatagent		3
Total		00 Kg.	Shot robot	3	Shot counter		
Total right mou	uld 0,0	00 Kg.			Shot counter right		31
					Precount left (lefts)		14997
					Precount right (lefts)	)	14969
Shot ongoing	MeassEnab		voreg1				=

This manual will illustrate a large part of the message boxes and menus in WinFlow.

#### **Figure 1 Main Form**

The illustrated main form is from a machine setup with 2 mixing heads and "Left/Right" mould handling.

The small box in the bottom right corner will change between green and yellow, when connected to the embedded program.

# Menus

<u>F</u> iles	<u>E</u> dit	Functions	<u>H</u> elp
P	rint		
E	xit Win	Flow	

### Figure 2 Menu Files

Files	Edit	Functions	Help
		Mould place	F5
		Mould data	F6
		F2	
		F8	
		Index 100	
		Tolerance	
		Density	
		Index 100 offs	et

### Figure 3 Menu Edit

Files Edit	Functions Help	
	Setting	
	Servo calibration	
	Different	Machine Log Ctrl+M
	F3 menu F3	Ctrllog Ctrl+O
	F4 menu F4	Profil eksport
	F5 min/Max	Klima eksport
	Show errors F7	
	Shotlist F9	
	Reset Consumption	
	User code	
	Backup	

### **Figure 4 Menu Functions**



### Figure 5 Menu Help

Log on system

### Figure 6 Menu Log On

# **User Code Form**

In this form the user code is entered to log onto the system.

To make the form appear, click the menu item "Log On System" or use the shortcut keys <CTRL> + <TAB>.

🖳 Log on menu		×
User code		

Figure 7 User Code

Press "ENTER" after entering the user code.

To log off use the menu item or shortcut keys again.

The super user can create new users in the menu "Setup User Codes", see page 9.

# **Setup User Codes Form**

This form is used to create new users with individual user codes, so they can log onto the system.

Amongst other things the user name is used to log into the "Machine Log", see page 12 and to make adjustments in the "Index Offset", see page 16.

_	Name	Code	Profile		Â	Profile
•	System		Administrator	•	E	
	Bjarne Madsen	bhm	Administrator	-		
	Jacob	pcflow	Operator	•		
	Chris	jes	Administrator	-		
	Suzanne	12345	Production	•	-	
9	Save					



The table shows existing users.

### **Functions:**

- Create a new user: Select the bottom row marked "\*" type name, code and select a profile from the drop down box. Then click the "Save" button.
- Make changes to an existing user: In the appropriate row type the changes or select a new profile. Then click the "Save" button.
- Delete a user: Mark an entire row, by clicking to the far left. Then press the key "DEL". Then click the "Save" button.

Please note! The user "System" cannot be deleted.

# **Setup User Profile Form**

To create new profiles, click the "Profile" button and the illustrated form will appear.

	id	Name	Mould	Mould	Tolerance	F4	Mould view	Setting	Index 100	Index 100 offset	Density	Servo	1
Þ	1	Administrator	V	J		V				1		V	
	3	Operator		1									
	5	Production				V							E
	13	Chemi	<b>V</b>	V	V	V			<b>V</b>	1	1	V	
	14	Cleaning		V		V				<b>V</b>		V	
*													
•					III								F.

### **Figure 9 Configuration User Profiles**

A profile allows access to one or more functions in WinFlow. Each profile is identified by a name of your choice.

The user profile id in the column "id" is automatically created by the system and cannot be changed.

### **Functions:**

- Create a new profile: Select the bottom row marked "\*". Type a name and tick the functions the profile is allowed access to. Then click the "Save" button.
- Make changes to an existing profile: In the appropriate row type the changes and tick/untick the appropriate functions. Then click the "Save" button.

### • Delete a profile:

Mark an entire row, by clicking to the far left.

Then press the key "DEL".

Then click the "Save" button.

If you try to delete a profile that is already in use, the following error message will appear when you click the "Save" button:

	13	Chemi	V	V	V	V		V	J	V	V	V	
	14	Cleaning		1			<b>V</b>	<b>V</b>				V	
*							x					100	
			Error										
•		201	-										•
S	ave	]	It is not po	ssible to de	lete a prof	ile that is	in use!						
_		r											
	ок						ОК						
						l		_					

Figure 10 Cannot Delete User Profile

# **Machine Log**

/is	All				
	Name	Date	Text	Description	id code
•	Bjarne Madsen	15. juni 2015 10:58:56	Activat	Maskinlog menu	506
	Bjarne Madsen	15. juni 2015 10:58:53	Finished	Indstil brugerkoder	525
	Bjame Madsen	15. juni 2015 10:57:36	Activat	Indstil brugerkoder	525
	Bjame Madsen	15. juni 2015 10:57:31	Finished	Kode OK!	530
	System	15. juni 2015 10:57:30	Activat	Log on	526
	System	15. juni 2015 10:57:28	Activat	En WinFlow er connected	101
	System	15. juni 2015 10:57:28	Activat	WinFlow system er startet	200
	System	15. juni 2015 10:57:25	Activat	Embedded process-program startet	100
	Bjarne Madsen	15. juni 2015 10:48:24	Activat	Indstil brugerkoder	525
	Bjarne Madsen	15. juni 2015 10:48:20	Finished	Kode OK!	530
	System	15. juni 2015 10:48:04	Activat	Log on	526
	Bjarne Madsen	15. juni 2015 10:47:22	Finished	Log af	527
	Bjarne Madsen	15. juni 2015 10:26:32	Finished	Fomplads menu	505
	Bjarne Madsen	15. juni 2015 10:26:28	Finished	Indstil formdata fra pladsmenu	515
	Bjarne Madsen	15. juni 2015 10:26:00	Activat	Indstil formdata fra pladsmenu	515
	Bjarne Madsen	15. juni 2015 10:25:57	Activat	Fomplads menu	505
		4F		The Loop	500

### Figure 11 Machine Log

The machine log is a list of recent activities.

The column "id code" to the far right is used for software development and/or troubleshooting.

### **Functions:**

- The green fields indicate the time a function has been started.
- By clicking the column header the list will be sorted by this column. The first click will sort the data in ascending order, the second click in descending order.
- The data can be filtered selecting "All", "Only Users", "Only System" or "Only Embedded" from the combo box.

The log registers all activities made by users, the system itself and activities from another PC.

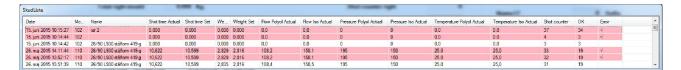
# **Clear Consumption Form**

Clear consumption Menu	ך ר
Clear shot counter	
Seperated counters	
Ex: 1,3,5-12	
Clear Consumption	
Latest Reset 6. maj 2008 09:08:15	
OK Cancel	

Figure 12 Clear Consumption

The consumption counters can be reset in this form.

# **Shot List**



**Figure 13 Shot List** 

This function shows a list of the last 30 shots including the most relevant information.

The shortcut key <F9> will show /hide the list.

When WinFlow is closed the size and position of the window will be saved.

# **Index 100 Form**

The ratio between the individual components for each mixing head is entered in this form.

	Maskine 1	Maskine 2	MK3
Polyol	100,0	100,0	100
\$0	146.0	150,0	100
ndex 100 ratio	1,460	1,500	0.000

### Figure 14 Adjust Index 100

### Polyol:

Enter the index for Polyol. Iso: Enter the index for Iso. Index 100 ratio: This is a readonly field showing the Iso/Poly ratio.

### ОΚ:

When clicking "OK" all the mould data will be updated using the new index. The data will be validated during the update. Possible errors found during the validation can include that the recommended flow set value for the mould exceeds or falls short of the limit of the work range selected in the "Servo Calibration", see page 17.

If any errors are detected after the update, the below message box will pop-up, containing a list ofall the errors.

Index 100 mer	าน					1
		Ma	iskine 1	Maskine 2	МКЗ	
Polyol		10	0,0	100,0	100	
lso		14	6,0	150,0	100	
	🚽 Index10	0 errorl	ist			
Index 100	Follow er	rors are	found at	upgrading		
	Mould	MH	Shot	Describtion		<u>^</u>
	92	1	1	Isocyanat 427,81 Gr/S (børflow) er over	grænseværdien for den valgte i Servokalibrering	g 🔔
	94	1	1	Isocyanat 427,81 Gr/S (børflow) er over	grænseværdien for den valgte i Servokalibrering	3
_	201	1	1	Isocyanat 420,60 Gr/S (børflow) er over	grænseværdien for den valgte i Servokalibrering	9
	250	1	1	Isocyanat 420,07 Gr/S (børflow) er over	grænseværdien for den valgte i Servokalibrering	,
	114	4	4	1 1400.000 /04 /0 1	E C L LL VOL L HL V	19

Figure 15 Index 100 Error List

# **Index Offset Form**

The required offset to be carried out on all the moulds that are set to "Index Offset" is entered in this form.

Machine 1		Machine 2	
ndex offset	0,000	Index offset	
Accumulate offset	0,571 Reset	Accumulate offset 0,000 Reset	
Latest updated by:	Bjame Madsen 3. oktober 2006 kl. 14:11:01	Latest updated by: None	
Latest Reset by:	None	Latest Reset by: None	

### Figure 16 Adjust Index Offset

### **Reset:**

The accumulated offset can be reset by clicking the "Reset" button. This action will be recorded in the "Machine Log", see page 12.

### Index offset:

Enter the required offset.

### OK:

When clicking the "OK" button alle the moulds for which the "Index Offset" is ticked will be updated with the new offset value. The data will be validated during the update. Possible errors found during the validation can include that the flow set value of the mould exceeds or falls short of the limit of the work range selected in the "Servo Calibration", see page 17.

If any errors are detected after the update of the mould data, a messagebox will pop-up, containing a list of all the errors.

# **Servo Calibration Form**

The work range of the pumps is set in this form.

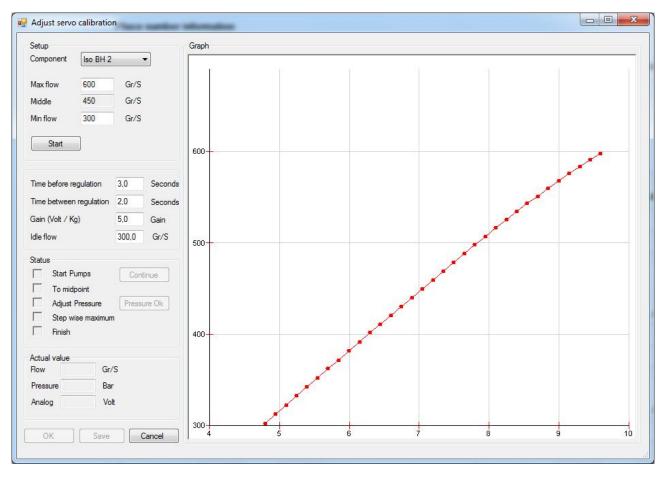


Figure 17 Servo Calibration

### Component:

Select the required component.

### **Procedure:**

- Enter the appropriate Min and Max flow determining the work range of the component.
- Click the "Start" button.
- The Status box will show "Start Pumps" in red until the pumps have been started and the button "Continue" has been clicked.
- WinFlow will now increase the performance of the pump until WinFlow records a flow equivalent to the midpoint between min and max.
- It is now possible to set the nozzles to the required pressure. Click the "Pressure OK", when the pressure is OK.
- The rest of the calibration is automatic.
- Click the "OK" button when WinFlow has completed.

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# **Configuration Mould Data**

Number 2 (48/	110 L930 stå	lform 553 g	1 -	Name 4	8/110 L930 st	ålforn 553 g		Article	133000481	100930	
								Shot counter	5351	Clear sh	not counter
Next Pause	Misc.	Cale	Next Paus	se 🔻	4,00 Sek.	Next Pau	se 🔻	5,00 Sek.	Next Pau	ise 🔻	5,00 Sek.
Shot 1	1,00	JGK.	Shot 2	5C ¥	4,00 Jek.	Shot 3	36 +	3,00 JOK.	Shot 4	3C T	3,00 JOK.
Shot Timer	10.000	Sek	Shot Z	7.124	Sek	Shot 3	7.066	Sek	Shot Timer	5.578	Sek
Shot Weight		Kg.	Shot Weight	2,308	Kg.	Shot Weight	- mentation	Kg.	Shot Weight		Kg.
Index	109.5	-	Index	90.0		Index	109,5		Index	95.0	
				00,0			100,0			00,0	
Polyol	120,0 G	r/S	Polyol	140,0	Gr/S	Polyol	110,0	Gr/S	Polyol	130,0	Gr/S
lso	191,8 G	r/S	lso	184,0	Gr/S	lso	175,9	Gr/S	lso	180,3	Gr/S
Iso/Poly	1,599		Iso/Poly	1,314		Iso/Poly	1,599		Iso/Poly	1,387	
Polyol	140 B	ar	Polyol	150	Bar	Polyol	150	Bar	Polyol	150	Bar
lso	140 B	ar	lso	150	Bar	lso	150	Bar	lso	150	Bar
	Cleaning	g Piston			aning Piston		Clea	aning Piston			
Total Weig	ght	Time				Edit	Latest 1	9. maj 2015 Clo	ock 09:27:17		
Machine 1 9,17	77 Kg.	29,768	Sek.								
Machine 2 0,00	10 Kg.	0,000	Sek.								

**Figure 18 Configuration Mould Data** 

All the data for each mould is configured in this form.

MK1 MK2	Misc.		
Next Paus	e <b>▼ 1,00</b> Sek.	Next	Off 👻
Shot 1			
Shot Timer	3. 🚺ek		
Shot Weight	0,935 Wrong	j format - us	e , instead
Index	109,5		

**Figure 19 Incorrect Number Format** 

#### WinFlow Manual

The regional settings of Windows determine the decimal separator i.e. "," (comma) for European Windows and "." (full stop) for English Windows. If the incorrect decimal separator is entered a red exclammation mark will appear and the reason will show upon mouse over the exclammation mark.

Number 2 (48/1	10 L930 stá	lform 553 g	)) 👻 Name	48/110 L930 stålform 5	53 g	Article 1330004811	00930
					Shot co	ounter 5351	Clear shot counter
ика мка м	sc.						
Stop carrousel	0,0		Open at station	0,01	Speed1	0	
With melamine	8,3		Position2	0,21	Speed2	0	
Fast	0,0		Position3	0,03	Speed3	0	
Slow	0,1		Position4	0,03	Speed4	0	
Tilt	0,0		Position5	0,03	Speed5	0	
Extra pressure	0,0		Position6	0,03	Speed6	0	
Shot robot	3		Pre Counter	15000	SpecialExtra 1	0	
ABB robot	0				SpecialExtra2	0	
					SpecialExtra3	0	
					SpecialExtra4	0	
					SpecialExtra5	0	
Index offset					SpecialExtra6	0	
Total Weigł	t	Time			Edit Latest 19. maj 20	115 Clock 09:27:17	
Machine 1 0,935		3,000	Sek.		Luit Latest 13. Maj 20	13 GOCK 03.27.17	
Machine 2 0,000	Kg.	0,000	Sek.				

See page 53 for changing the regional settings in Windows XP.

Figure 20 Configuration Mould Data – Miscellaneous Tab

Amongst other things the robot number and values for the optional special fields can be set in the "Misc." tab.

### **Copying Mould Data**

To copy the date for a mould, press **<F5>** in the "Enter Mould Data" form. Whereby a message box as shown here will pop-up:

🖳 Copy mouldnumber
Copy mouldnumber <b>2</b> To 1234
OK Cancel

Figure 21 Copy Mould Data

The line at the top shows the mould number, which is copied.

In the textbox below the mould number or mould numbers to be copied to is entered, separating each mould number using a space.

If one or more mould numbers already exist a messagebox as shown here will pop-up:

Exist	Γ
101 exsist, copy anyway?	
Ja <u>N</u> ej	

Figure 22 Mould Number Exists

By clicking "Yes" the existing mould data will be overwritten.

### **Adding Comments to a Mould**

By pressing **<F2>** Windows Notepad will open making it possible to add a comment to the mould. When Notepad is closed the file will be saved using the mould number. I.e. a comment to mould number 4 will be saved as "4.txt".

The first time a user will press **<F2>** in a mould NotePad will ask if you wish to create a file. Click "Yes" and proceed.

# **Setting Mould Places**

	_				_	
Place number 2	50	%				Verview
Left		Rig	ght			
Mould number 102	ờ On	Mou	ld number	101	<b>&amp;</b>	On
Mould name rør 2		Mould name lille rør				
Robot offset X 0 mm	Y 0 mm	Rob	ot offset X	0 mn	n Y O	mm
	Release agent robot	0				
	Mould angle	0	(0-1150)			
	Demould time	0	Seconds			

#### **Figure 23 Setting Mould Places**

In this form the moulds are assigned places.

### **Functions:**

- Use the button to edit the selected mould number in "Configuration Mould Data", see page 18.
- If the mould number entered does not exist an error message will appear "Error...mould number does not exist", see page 23.
- The buttons Off / On are used to select whether a mould number is to be shot or not.
- The button 33 % / 50/50 % / 100 % indicates whether the place is considered an entire item, a two-part item with 2 mould numbers or a three-part item with 3 mould numbers.
- Use the button "Overview" to see the "Mould Place Overview", see page 24.

WinF	low N	1anual
------	-------	--------

lace number 2	33	%	Overview			
Left		Right		Midt		
Mould number 102	💝 On	Mould number 127	Cff (	Mould number	123 💝 On	
Mould name rør 2 Robot offset X 0 mm	Y 0 mm	Mould name 60/1 Robot offset X 0	60 L930 stålform 1241 g mm Y 0 mm	Mould name 42/140 L930 stàlform 1006 g		
	Release agent robot	0				
	Mould angle	0 (0-1150)				
	Demould time	0 Seconds				

Figure 24 Setting Mould Places 33%

The "Left" and "Right" moulds are shot simultaneously using mixing head 1 and 2 respectively.

If the "Mid" mould is also set to "On", this will be shot after the "Right" mould using mxing head 2.

# **Mould Number Does Not Exist**

Mouldnumber 1122 do not exist.Cho	se a new, or make this mouldnumber	
Choose		
Chose an otherone	2 (48/110 L930 stålform 553 g)	•
Make this mouldnumber		
based on mouldnumber:	2 (48/110 L930 stålform 553 g)	*

Figure 25 Mould Number Does Not Exist

If the entered mould number does not exist, the above messagebox will pop-up.

### **Functions:**

- When selecting "Chose another mould", select a mould number from the list of existing mould numbers in the combobox to the right.
- When selecting "Create this mould number", select a mould number as a template from the list of existing mould numbers in the combobox to the right.

# **Mould Place Overview**

Place	Forvalg	Туре	Mould 1	Shoot 1	On 1	Name 1	Shot	IndexOffset	System selection 1	Mould	Shoot2	On	Name 2	IndexOffset 2	-
1	0	100	110	19	V	26/90 L930 ståform 419 g	3	On	1	110	19		26/90 L930 stålform 419 g	On	1
2	0	50	102	3	V	rør 2	3	On	1	101	31	1	lille rør	On	1
3	0	100	110	19	V	26/90 L930 stålform 419 g	3	On	1	0	0	V			Γ
4	0	100	103	2		lille rør	3	On	1	0	0				
5	0	100	105	12		lille rør	3	On	1	0	0				
6	0	100	106	1			0			0	0				Π
7	0	100	106	1			0			0	0				
8	0	100	104	2		lille rør 841g	3	On	1	0	0				
9	0	100	106	1			0			0	0				Γ
10	0	100	105	12		lille rør	3	On	1	0	0				Γ
11	0	100	105	12		lille rør	3	On	1	0	0				Γ
12	0	100	149	0		168/250 L930 stålform 2831 g	3	On	1	0	0				Π
13	0	100	0	0			0			0	0				Γ
14	0	100	0	0			0			0	0				Γ
15	0	100	0	0			0			0	0				Γ
16	0	100	0	0			0			0	0				П
17	0	100	0	0			0			0	0				Π
18	0	100	0	0			0			0	0				Ē
19	0	100	0	0			0			0	0				
20	0	100	114	35	V	42/110 L930 stålform 583 g	3	On	1	0	0				
21	0	100	21	0	V		0			21	0				
22	0	100	0	0			0			0	0				

### Figure 26 Mould Place Overview

A list of all the places with corresponding mould numbers.

### **Functions:**

- The green fields indicate the moulds which are set to "On".
- By double clicking a mould number the form "Configuration Mould Data", see page 17, is activated for the selected mould number.
- When double clicking a mould place number, the window will close and WinFlow will return to the form "Configuration Mould Place", see page 21, using the selected mould place number.
- By clicking one of the column headers, the data will be sorted by this column. First in ascending order, second time in descending order.
- When one or more rows are selected (click to the far left of a row) a subsequent right click of the mouse will make it possible to select "Delete Place(s)".

	-3	ju	100	100	14
	6	0	100	106	1
	D	in Internetione	400	106	1
	Ue	lete place	(S)	106	1
•	10	0	100	105	12
		0	100	105	10

Figure 27 Delete Mould Place

# **Mould Number Overview**

	Number	Name	Article	Precount	Shoot OK	Offset	<u>^</u>
Þ	2	48/110 L930 stålf	13300048110	15000	5343	On	Ξ
	91	Manuel blandehov		15000	0	On	
	92	Manuelt blandeho		9861	0		
	93	Interval BH 1		15000		On	
	94	Interval blandehov		9861			
	101	lille rør		15000	31	On	
	102	rør 2	a223	15000	3	On	
	103	lille rør		15000	2	On	
	104	lille rør 841 g		15000	2	On	
	105	lille rør		15000	12	On	
	110	26/90 L930 stålfor	13300026090	15000	19	On	
	111	33/90   930 stålfor	13300033090	15000	0	On	-

Figure 28 Mould Number Overview

The list shows all the moulds with their corresponding name and article. If the "Pre-selection function" is enabled this will also be shown in the list.

### **Functions:**

- The green fields indicate the moulds that are in use in the place table and are active (set to "on").
- The blue fields indicate the moulds that are in use in the place table and are inactive (set to "off").
- The places that the selected mould is at will be shown in the bottom right-hand corner.
- When double clicking a mould number, the form "Configuration Mould Data" will be activated, see page 17, showing tha selected mould number.
- When one or more rows are selected (click to the far left of a row) a subsequent right click of the mouse will make it possible to select "Delete Mould(s)".

93	Interval E	Interval BH 1		15000		On	
94 Interval blandehov			9861				
101	lille ror			15000	31	On	
Delete pla	ace(s)	ā		15000	3	On	
103	lille rør			15000	2	On	

Figure 29 Delete Mould(s)

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• By clicking one of the column headers, the data will be sorted by this column. First in ascending order, second time in descending order.

### **Configuration Tolerance Levels**

Diversion				Shot time	-	
		Skudtid ur	nder	Tolerance	0,022	Second
	Error	0,00 🚖	Sek.	Compensation		
Part weight	10	1	%	Machine 1		
Flow	10	1	%	Show-compensation	0	Second
Pressure	30	1	%	Timer-compensation	0	Second
Temperature	10	1	%			
Tool	10		%	Machine 2		9
Ratio	10	1	%	Show-compensation	0	Second
				Timer-compensation	0	Second
Temperature	Degrees	r.				
Polyol	25	NC .				
lso	25					
Iso BH 2	25					
p5	25					

### Figure 30 Configuration Tolerance Levels

Configuration of various tolerance levels.

**Deviations** are used to calculate the limit values i relation to the set value. Both a min and a max limit is calculated before each shot.

Temperature (set value) for each component is set in degrees.

**Timer-compensation** is the time added (using +/-) to the desired set shot time. (The opening time of the mixing head is changed)

**Show-compensation** is added (using +/-) to the measured shot time (the is-open signal). If there is no sensor in the mixing head (can be selected in the configuration form)the actual shot weight

will be exposed to the following compensation:

Actual weight = actual weight \* (1+(show-compensation/actual shot time))

**Shot time under** provides the opportunity to select a second set of tolerance levels for short shot times. Select a shot time, and all shots under this shot time will use the sedond set of tolerance levels.

# **Configuration Density**

🖳 Enter density	
Machine 1 Polyol <u>1,16</u> Gr/mL Iso 1,23 Gr/mL	Machine 2
	Iso BH 2 1,23 Gr/mL p5 1,23 Gr/mL
	OK Cancel

**Figure 31 Configuration Density** 

If invalid values are entered a red exclammation mark will appear to the right of the field.

In the illustrated example a full stop (invalid) has been entered in stead of a comma.

Machine 1 Polyol	1,16	]]ir/mL	Machine 2
lso	1,23	Wrong format	- use , instead

Figure 32 Invalid Number Format

# F3 Log

	Date	Errortext	On	
•	15-06-2015 10:15:37	M 7.0 24V mangler		E
	15-06-2015 10:15:27	Skud for lang MK 1		
	15-06-2015 10:15:27	M 7.0 24V mangler		
	15-06-2015 10:14:51	M 7.0 24V mangler		
	15-06-2015 10:14:46	M 7.0 24V mangler		
	15-06-2015 10:14:44	Skud for lang MK 1		
	15-06-2015 10:13:06	M 7.0 24V mangler		
	15-06-2015 10:12:59	Formplads ej fundet 110		
	15-06-2015 10:12:59	M 7.0 24V mangler		
	26-05-2015 14:11:53	M 7.0 24V mangler		
	26-05-2015 14:11:45	M 7.0 24V mangler		
	26-05-2015 14:11:44	Skud for lang MK 1		
	26-05-2015 13:52:24	M 7.0 24V mangler		
	26-05-2015 13:52:17	M 7.0 24V mangler		
	26-05-2015 13:52:08	Skud for lang MK 1		
	26-05-2015 13:50:01	M 7.0 24V mangler	(m)	
	26-05-2015 13:28:47	M 7.0 24V mangler		
	26-05-2015 13:27:30	Skud for lang MK 1		
	26-05-2015 13:19:47	M 7.0 24V mangler		
	26-05-2015 13:19:44	M 7.0 24V mangler		
	26-05-2015 13:19:42	Skud for lang MK 1		
	26-05-2015 12:57:27	M 7.0.24V manuler		

### Figure 33 F3 Log

A list of the recent error messages is shown in this form.

### **Functions:**

• By clicking the column header the list will be sorted by this column. The first click will sort the data in ascending order, the second click in descending order.

# **Ctrl Log**



### Figure 34 Ctrl Log

This form shows one or more graphs of the flow, pressure and voltage of the inverter as a function of time. The vertical black line is the marker, which can be moved using the mouse to show the exact value of the flow, pressure and DAC (voltage). The values are shown just below the graph.

The horizontal lines at the top illustrate the MK Open and Pause for each mixing head.

### Option

By clicking the Option-button it is possible to change the thickness of the lines making it easier to distinguish between flow, pressure and DAC.

Pen size			
Flow	1	*	
Tryk	2	-	
DAC	3	* *	
Color			
Grid ma	ister		
Grid se	cond		

Figure 35 Ctrl Log Option

### **Backup Form**

In this form it is possible to create a backup of the database.

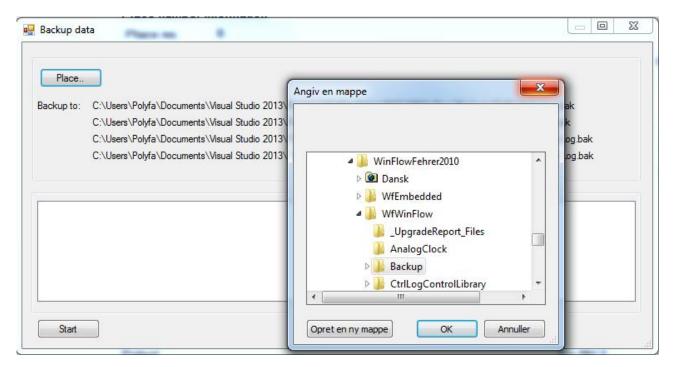


Figure 36 Backup Form

By clicking the button "Place..." it is possible to select the folder where the backup should be saved, as shown in the illustration above.

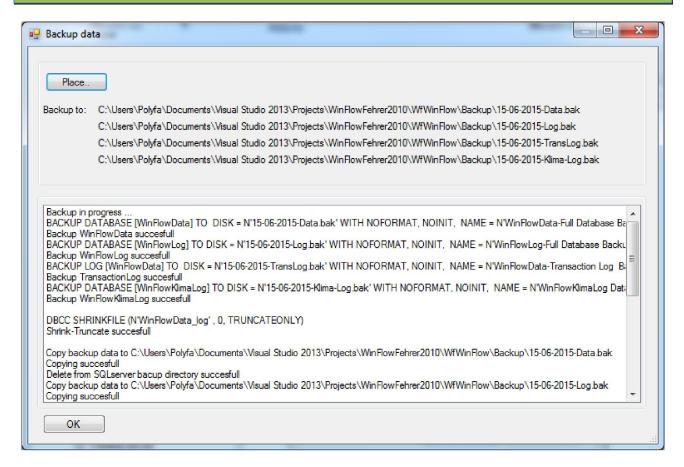
The file name will automatically be set to the day, date and the text "-Data" and "-Log" for the menu data and data collector respectively. If several backups are created daily all backups will be saved in the same file. (Can be selected later by Restore).

The folder can be on a network drive, a memory stick or another file based media.

After selecting the folder click the button "Start". After a backup the data log will be cleared, so that all shots older than 2 months will be erased.

After a while the form should look as illustrated below:

#### WinFlow Manual



**Figure 37 Backup Process** 

# Shot List

The illustrated window shows the most important information for the most recent shots.

SkudListe																
Date	Mo	Name	Shot time	Shot time	Weight	Weight	Flow Polyol A	Flow Iso A	Pressure Pol	Pressure I	Temperature Poly	Temperature Iso	Shot counter	ок	Error	*
15. juni 2015 10:15:27	102	rør 2	0,000	0,000	0,000	0,000	0,0	0,0	0	0	0,0	0,0	37	34	1	
15. juni 2015 10:14:44	102		0.000	0.000	0.000	0.000	0.0	0.0	0	0	0.0	0.0	4	3	1	
15. juni 2015 10:14:42	102	26/90 L930 stälform 419 g	0.000	0.000	0.000	0.000	0.0	0.0	0	0	0.0	0.0	3	3		
26. maj 2015 14:11:44	110	26/90 L930 stålform 419 g	10,622	10,599	2,829	2,816	108,2	158,1	195	150	25,0	25,0	33	19	~	
26. maj 2015 13:52:17	110	26/90 L930 stålform 419 g	10,622	10,599	2,829	2,816	108,2	158,1	195	150	25,0	25,0	32	19	1	
26. maj 2015 13:51:39	110	26/90 L930 stålform 419 g	10,622	10,599	2,835	2,816	108,4	158,5	195	150	25,0	25,0	31	19		-

#### Figure 38 Shot List

When WinFlow is closed the size and position of the window will be saved as well as the column width.

When WinFlow is minimized, so is this window. The short cut key <F9> will show/hide the window.

# Restore

To restore data from a backup, the program Microsoft SQL Server Management Studio is required. Note! **Remember** to close all programs, which may be connected to the database. (WinFlow, Embedded ... )

The program is started from the Windows Start menu.

Select "All Programs", "Microsoft SQL Server 2005", "SQL Server Management Studio".

🛃 Connect to Server	🛃 Connect to Server 🛛 🔀								
SQL Serve	Windows Server System								
Server type:	Database Engine 🔽								
<u>S</u> erver name:	SIMATIC\SQLEXPRESS								
Authentication:	Windows Authentication								
<u>U</u> ser name:	SIMATIC\Administrator 🗸 🗸								
Password:									
	Remember password								
<u>C</u> onnect	Cancel Help Options >>								

### Figure 39 Restore Connect to Server

Click "Connect"

🍢 Microsoft SQL Server Management Studio										
File	Edit	View	Tools	Window	Community	Help				
2 Ne	ew Que	ery 🛛 🗋	1	📸 👸	Da 📴 🗔	01				
Object Explorer										
Connect 🕶 💐 🔳 📝										
E 🐻 SIMATIC\SQLEXPRESS (SQL Server 9.0.1399 - SIMATIC										
±		Databases Security Server Ob Replication Manageme	Ne	New Database						
Đ	_		Att	ach						
±	_		Restore Databaserri							
±	🧾 М		e Re:	Restore Files and Filegroups						
			Rel	fresh						

**Figure 40 Restore** 

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### WinFlow Manual

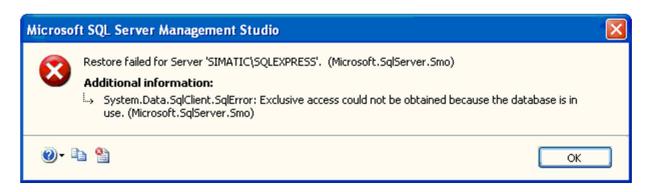
In Object Explorer right click "Database" and select "Restore Database ...".

🥫 Restore Database - WinF	lowData							
Select a page	🔄 Script 👻 🌇 Help							
iẩ General iẩ Options	Destination for restore							
	To database:	WinFlowData						
		Most recent possible						
	Source for restore							
	Specify the source and location of backup sets to restore.							
	From database:				~			
	From <u>d</u> evice:	D:\Back\07-08-2006-Data.bak						
	Select the backup sets to restore:							
	Restore Name WinFlowData-Full Dat	abase Backup	Component Database	Type Full	Server SIMATIC\SQLEXPRESS			
Connection			Database	1 GII	SIMATICASQLEATTICSS			
Server: SIMATIC\SQLEXPRESS								
Connection: SIMATIC\Administrator								
View connection properties								
Progress								
Ready								
					>			
					OK Cancel			

#### **Figure 41 Restore Selection**

Select the database "WinFlowData" or "WinFlowLog" in the field "To database". Select "From device" and click "..." to select the backup data. Remember to tick the box in the "Restore" column.

Click "OK" and the restore proces will start.



### Figure 42 Restore Failed

If one of the WinFlow programs (WinFlow, Embedded ...) is connected to the database the above error message will appear.

Close alle the programs and try again.

Microsof	t SQL Server Management Studio 🛛 🔀
٩	The restore of database 'WinFlowData' completed successfully.
E1	ОК

### Figure 43 Restore Success

When the restore is succesful the above mesagebox will appear.

Close Microsoft SQL Server Management Studio and start WinFlow again.

# **Print Function**

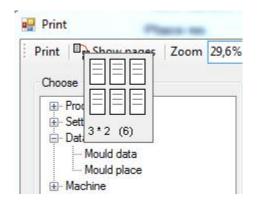
h Show pages Zoom 100 🔹										
duction ings										
-										
Mould data Mould place	Mould Data	Mould num	iber 2	9	48/110 l	.930 stå	lform 553 g		1330004811	100930
shine -										
<u>N</u>	lachine 1	Pause Shot 1	Pause	Shot 2	Pause	Shot 3	Pause Shot 4	Total	Chatushat	2
Т	ime	1,00 10,000	4,00	7,124	5,00	7,066	5,00 5,578	29,768	Shot robot	3
v	Veight	3,118		2,308		2.020	1,731	9,177	Stop carrousel	0,0
	ndex	109.5		90.0		109,5	95.0		With melamine	8,3
									Fast	0,0
E E E E E E E E E E E E E E E E E E E	olvol flow	120.0		140.0		110.0	130.0		Slow	0,1
	so flow	191.8		184,0		175,9	180,3		Tilt	0,0
	Ratio	1,599		1,314		1,599	1,387		Extra pressure	0,0
	olyol Pressure	1,399		150		150	150		Open at station	0,01
		140		150		150	150		Position2	0,21
	so Pressure	140		150		150	150		Position3	0.03
umber 2									Position4	0.03
	leaning Piston						2		Position5	0,03
s s	System	1							Position6	0.03
n n	Machine 2	Pause Shot 1	Pause	CI	-	Shot 3	Pause Shot4	Total	Speed1	0,00
sert with time > 0 sec.		ause Shot I	rause	STUTZ	rause	51013	Pause Shot 4		Speed2	0
	ïme							0,000	Speed3	0
sert mould from tabel	Veight							0,000		
h h	ndex								Speed4	0
									Speed5	0
14	so BH 2 flow								Speed6 SpecialEvtra1	0

### **Figure 44 Print Function**

All print for Winflow is activated in this form. Select the required item from the "Choose" section on the left.

# **Functions:**

- In the bottom left section the area which has to be printed is selected. If For example the item "Mould data" has been selected the text "Mould Number" is shown.
   Enter "5" to print mould number 5 only.
   Enter "3,5,19" to print mould numbers 3, 5 and 19.
   Enter "20-25" to print all mould numbers from 20 to 25.
   Enter "1-10,14" to print all mould numbers from 1 to 10, plus 14.
- Click "Show" to view the selected pages on the right
- The field "Zoom" can be used to view several pages.
- Equally the number of rows and columns can be set by clicking "View Pages" and holding down the left mouse button to select the number of pages.



## Figure 45 Print Pages

• The button "Print" will send the selected page(s) to the printer.

The profil print function is setup in Setup Profile Print. See page 39

# Setup (Ctrl S)

The settings which are machine dependent are configured in this form.

Components	1	2	3	4	5	6		
Volume counter(imp/l)	965,3	700	333,3	965,3	1000	1000		
Machine type	·	r, 2*2 kompoi				•	Delete machine2 data	
Servo	<b>V</b>	✓		1	V			
Hardware								
Winflow hardware								

#### **Figure 46 Setup Ctrl S Components**

The pulse per liter for the flow sensors are setup in the first tab.

In the field "**Machine type**" choose between a number of default configurations (number of foaming machines, components and servo systems)

"Hardware" indicates whether there is a connection from Embedded.exe to the hardware.

Туре			Komp1	Komp2	Komp3	Komp4	Komp5	Komp6
0	Fehrer	2 maskiner, 2+2 komponenter	Poly MK1	Iso MK1		Poly MK2	Iso MK2	
1	Elektrolux	1 maskine, 2 komponenter	Poly MK1	Iso MK1				
2	Danfoam	1 maskine, 2 komponenter, 2 servoer	Poly MK1	Iso MK1	Poly2 MK1			
3	?	1 maskine, 3 komponenter	Poly MK1	Iso MK1	Poly2 MK1			
4	Tyrkiet	1 maskine, 2 komponenter, 2 polyservo, 2 isoservo	Poly MK1	Iso MK1	Poly2 MK1	Iso2 MK1		
5	Sandella	1 maskine, 2 komponenter, 3 servoer	Poly MK1	Iso MK1	Poly2 MK1	Poly3 MK1		
6	Danfoam 2 maskine	2 maskiner, 2+3 komponenter, 2 servoer på maskine 2	Poly MK1	Iso MK1		Poly MK2	Iso MK2	Poly2 MK2
7	Ungarn	1 maskine, 2 komponenter, 1 skud	Poly MK1	Iso MK1				

#### Figure 47 Machine Types

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Componenter Names On/Off		Names	On/Off	System	TCP/IP				
Co	mponents	s name		Syster	ms name	Ma	askine		
1	1 Polyol		1 M	IH 1	1	Machine 1			
2	lso			2 M	IH 2	2	Machine 2		
3	Polyol B	H 2		3		3	Machine 3		
4	Iso BH	2							
5	p5								
6	p6								

# Figure 48 Setup Ctrl Names

The component names and system names can be changed in this tab.

Stop carrousel With melamine Mould	Precounter prevent shoot	Switch in MK2
	Index 100 offset         mould temp         mould temp         Index 100 - 2 lso         mould temp         Index 100 - 3 lso	<ul> <li>Enable 3 MK</li> <li>33% mould</li> <li>50% places</li> <li>Allways 50%</li> <li>Right mould shoot first</li> </ul>
Extra fields     Robot     Check min/max     Setup	offset Mould number from PLC Place equal Mould Suse robots	Temperature in Moulddata  Dynamisk mould text
DAC c DAC corre	ctio -0,75 🗼 Secon	Show mS. (Shoottime)

# Figure 49 Setup Ctrl S on/off

"Intellisense" means that as soon as a place number is started to be entered a list of suggestions will appear as shown below:

E Setting Mould	places		
Place		_	
Place number		1	
		1	
		10	
Mould p	lace	11	
Mould p	ace	12	
		13	
		14	
Mould number	11	15	29
		16	
Mould name	26	17	tålform <mark>419</mark> g
		18	
			Access of Press

#### **Figure 50 Intellisense**

"**Dynamic place text**" means that the text, as shown in Figure 4 (the whole mould), is replaced by an optional text, which can be selected in "Edit texts" in the tab "System". Note! It is only the first 50 places, 1-50, that has this property.

### "Mould number from PLC"

"Always use robots" is only enabled when 2 machines are selected. This setting ensures that the robot fields are hidden when the first shot is not active.

If "Sensor MK3" is not ticked, the calculated actual weight is compensated by the selected showcompensation time (converted into weight) from the tolerance levels form, see page 28.

### "DAC correction"

When this function is active WinFlow will note the percentage deviation between the lookup value in the servo calibration and the servo regulated value, just before the mixinghead opens. This deviation is used in the subsequent 3 parts of the shot. If a value has been selected in the "**DAC correction**" field this will be the time that the next DAC value is set (require time minus this value). The time "**Delay alarm enable**" (System tab)is used to deactivate thealarm enable signal at every transition in the course of a shot.

Calculation in mould data	Constant flow 👻	Edit F3	Edit Profilprint Edit MachineLog
Chose Language	English (en) 🔻	Edit F4	Syncronize mould places
Show only dialog if er Delay alarm enable		Servo regulation during shot 1 Servo regulation during shot 2 Limit for SetDac (%) 35,0	How avarage     32 ▼       Ctrl+O sampling intv.     100 ★       Log average data in Ctrl+O     □
Shot time limit MH1 Shot limit MH2	500 🔹 mS 500 🚖 mS	Stop shot at: Measure error A-error	Measure enable under recirc:
Amount of Days in Log	51	B-error	Interrupted with error Measure enable under shoot:
Show <are sure="" you=""></are>	at exit	D-error	Ignored     Interrupted without error
Automatic backup		-	Interrupted with error
	2/06/2015 10:11 🗐▼ kup Keep 2 🚔		Mainloop sleep time 2 💭 ms

Figure 51 Setup Ctrl S System

"Amount of Days in Log" is used for backup. After a successful backup all data older than the selected number of days will be deleted.

"Limit for SetDac (%)" indicates the variance between to subsequent shots, forcing a new calculated DAC value. If the variance is less than the entered value a continued adjustment towards the new flow value is made.

"Ctrl+O sampling intv." indicates the number of milliseconds between each sampling of values.

"Log average data in Ctrl+O" by ticking this box, the collected data will be averaged (levelled) resulting in a more even curve pattern.

"Automatic backup" by ticking this box a backup will be made periodically. The fields "Next auto backup" and "Then every" indicates how often.

"Measure enable during shot:" determines what happens when the measure enable signal lapses. E.g. "Measure enable during shot: Ignored" if this is selected the measure enable will be ignore once the shot is started. By selecting one of the other options the lapse of the measure enable will interrupt the shot with or without an error message.

**"Synchronize Mould Places"** by clicking this button all the active place numbers are sent to the PLC with the information that they are all updated.

By clicking the button "**Edit texts**" below the field to select language, the following message box will appear:

	idText	ltem	da	en	sv	de	es	tr	no	pl	hu
•	1011	Afhaerd	Afhærdtid	Demould time	Härdtid	Demould time	Demould time	Demould time	Afhærdtid	Demould time	Demould time
	3006	Apply	Anvend	Use	Verkställ	Use	Use	Use	Anvend	Use	Alkalmaz
	5200	Backup Plac	Placering	Place	Placering	Place	Place	Place	Placering	Place	Mentes helye
	5199	Backup Start	Start	Start	Start	Start	Start	Start	Start	Start	Indítás
	5426	BackupTitle	Backup data	Backup data	Backup data	Backup data	Backup data			Backup data	Backup adat
	5202	BackupTo	Backup til :	Backup to:	BackUp till:	Backup to:	Backup to:	Backup to:	Backup til :	Backup to:	Backup to:
	5139	Cancel	Annuller	Cancel	Avbryt	Cancel	Cancel	Cancel	Annuller	Cancel	Törlés
	5291	Choose	Vælg	Choose	Välj	Choose	Choose	Choose	Vælg	Choose	Választás
	5392	Choose Mould Label	Vælg formnummer	Choose mould	Vælg formnummer	Choose mould	Choose mould			Choose mould	Program válasz
	5391	ChooseMouldTitle	Vælg formnummer	Choose mould	Vælg formnummer	Choose mould	Choose mould			Choose mould	Ptogram választ
	5002	ClearLast	Seneste nulstilling	Latest Reset	Senast nollställt	Latest Reset	Latest Reset	Latest Reset	Seneste nulstilling	Latest Reset	Legutolsó törlés
	1900	ClearMenu	Nulstil forbrug me	Clear consumptio	Nollställ förbrukni	Clear consumptio	Clear consumptio	Clear consumptio	Nulstil forbrug me	Clear consumptio	Anyagfelhaszná
	1901	ClearShootCounter	Nulstil skudtäller	Clear shot counter	Nollställ skotträkn	Clear shot counter	Clear shot counter	Clear shot counter	Nulstil skudtäller	Clear shot counter	Belövés számlá
	5398	ClearSingles	Enkelte tællere	Seperated count	Enkelte tællere	Seperated count	Seperated count			Seperated count	Programok szár
	1902	ClearUsed	Nulstil forbrug	Clear Consumption	Nollställ förbrukning	Clear Consumption	Clear Consumption	Clear Consumption	Nulstil forbrug	Clear Consumption	Anyagfelhaszná

#### **Figure 52 Edit Texts**

In this box it is possible to change the texts in the WinFlow program, thus making it possible to translate/adjust texts while the system is in production.

Remember to click the little disk icon to save changes made.

By clicking the column header the list will be sorted by this column. The first click will sort the data in ascending order, the second click in descending order.

To export one of the languages, click one of the fields for the required language, then click "**Export xx**", where xx indicates the language.

Similarly it is possible to import a language using the button "Import xx".

Embedded Computername	Polyfa-71	
Database Connection String	Data Source=POLYFA-71:Initial Catalog=WinRowData:Integrated Security=True:Pooling=False	
Path to databasebackup	C:\Program Files\Microsoft SQL Server\MSSQL10_50.MSSQLSERVER\MSSQL\Backup	Browse
Help text F1	C:\Users\Polyfa\Documents\Visual Studio 2013\Projects\WinFlowFehrer2010\Dansk\	
Path to CtrlLog files	C:\Users\Polyfa\Documents\Visual Studio 2013\Projects\WinFlowFehrer2010\WfEmbedded\Embe	Browse
BayC@P function		
BayC@P path	YA	Browse
Preset to ->	0 Now 0	
Order function		19. · · ·
Order path	CA	Gennemse

Figure 53 Setup Ctrl S Tcp/IP

"Embedded Computername" enter the name of the PC on which the program "Embedded" is running.

"Database Connection String" indicates the string allowing access to the SQL Server.

"**Path to Database Backup**" indicates the default location on the harddisk where the SQL Server saves backups to.

"Help Text F1" indicates the path the help texts.

"**Path to Ctrl Log files**" indicates the path to the files saved after each shot. The default path is a sub folder to location of the Embedded.exe.

"BayC@P function" sends data toan external server after each shot.

"Order function" updates a file after each shot with the mould number and shot count information.

# **Setup Profile Print (in Ctrl S)**

Select "Edit Profile Print..." in the "System" tab in the Ctrl S form to configure the Profile Print function.

Choos	e		Select	ed		
Field		<u>_</u>	Field			
Skud	No	=	Plads			
Mk			Form	No		
Syste			>> Dato			Jp
Børflo Børflo			Børtic	4		- 4
Børflo			< Er tid		Do	own
Børflo	w4		Børv	ægt		
Børflo	1910		Ervæ	egt		
Børflo			1			
ErFlo	WI	<b></b>				
Count	90	÷ 🗸	Every shoot	Total	Т	ext
K-I-					1	
Noion	nebredde 20	mm				
-====	InFlowLog					
- Drop F EXI SELE	in Flow Log Table template STS ( ECT * FROM sys.tr JOIN sys.scl	ables				
- Drop F EXI SELE	in Flow Log Table template STS ( ECT * FROM sys.ta	ables			Prin	
- Drop F EXI SELE	in Flow Log Table template STS ( ECT * FROM sys.ta JOIN sys.sci w Data	ables hemas Form No	Dato	Ю.	Prin Bør tid	t
- Drop F EXI SELE	in Flow Log Table template STS ( ECT * FROM sys.tr JOIN sys.scl w Data afresh	ables hemas	Dato 26 May 15	<mark>Ю.</mark> 14:11:44		
- Drop F EXI SELE	in Flow Log Table template STS ( ECT * FROM sys.ta JOIN sys.scl w Data sfresh Plads No	ables hemas Form No		2.570.77 (55.00.87)	Børtid	t
- Drop F EXI SELE	in Flow Log Table template STS ( ECT * FROM sys.ta JOIN sys.sci w Data efresh Plads No	ables hemas Form No 110	26 May 15	14:11:44	Bør tid 10,599	t
- Drop F EXI SELE	in Flow Log Table template STS ( ECT * FROM sys.ta JOIN sys.sci w Data efresh Plads No 1 1	Form No 110 110	26 May 15 26 May 15	14:11:44 13:52:17	Bør tid 10,599 10,599	t
- Drop F EXI SELE	in Flow Log Table template STS ( ECT * FROM sys.ta JOIN sys.sci w Data sfresh Plads No 1 1 1 1	ables hemas Form No 110 110 110	26 May 15 26 May 15 26 May 15	14:11:44 13:52:17 13:51:39	Bør tid 10,599 10,599 10,599	t
- Drop F EXI SELE	in Flow Log Table template STS ( ECT * FROM sys.tr JOIN sys.scl w Data efresh Plads No 1 1 1 1 1	ables           hemas           Form No           110           110           110           110           110           110	26 May 15 26 May 15 26 May 15 26 May 15 26 May 15	14:11:44 13:52:17 13:51:39 13:51:22	Bør tid 10,599 10,599 10,599 10,599	t

**Figure 54 Configuration Profile Print** 

Data is collected containing information related to each shot that is shot.

In this form it is possible to select various values from all the data that is saved.

All the data fields that are saved in the log are shown in the "**Choose**" list. By selecting one of the data fields and clicking ">>" it is moved to the "**Selected**" list.

The order of the selected fields, can be changed by selecting a field and clicking the **"Up"** or **"Down"**button.

The field **"Count"** indicates the number of rows in the print out. Note! It is always the recent shots that are shown.

The fields **"Every Shot"** and **"Total"** indicate whether it is only the total value of a series of shots or the individual shots in a series.

**"Preview SQL"** displays the automatically generated T-SQL query used in the print form to extract data from the database. It is not possible to manually edit the T-SQL.

"**Preview Data**" displays the desired data in a table form. Click "**Refresh**" after each changein the configuration of the Profile Print.

# **Changing Texts / Headers**

By clicking the **"Text...**" button s box appears making it possible to change the names of the fields (data). The column **"Name"** is amongst other things used for the header in the Profile Print printout.

Beware of making changes to the "**Sql**" column as this requires thorough knowledge of Microsoft SQL server T-SQL programming. (If necessary read the page about SQL, see page 54)

	id	Name	Sql	Selected	-
•	1	Plads No	Plads	1	=
	2	Form No	Form	2	
	3	Skud No	Skud	0	
	4	Mk	Mk	0	
	5	Dato	CONVERT(char(15), Dato, 6)	3	
	6	Ю.	CONVERT(char(20), Dato, 8)	4	
	7	System	SystemValg	0	
	9	Børflow 1	CAST(bFlow1 AS Decimal(8, 1))	0	
	10	Børflow2	CAST(bFlow2 AS Decimal(8, 1))	0	
	11	Børflow3	CAST(bFlow3 AS Decimal(8, 1))	0	
	12	Børflow4	CAST(bFlow4 AS Decimal(8, 1))	0	
	13	Børflow5	CAST(bFlow5 AS Decimal(8, 1))	0	

### Figure 55 Profile Text

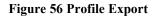
Most lines in the column "Sql" are commands formatting the printout.

E.g. "CAST(bFlow1 AS Decimal(8,1))" means convert bFlow1 (field in the database) to a decimal number with a total of 8 numbers and 1 number after the decimalseparator.

# **Profile Export Function**

Select "Profile Export" in the "Functions/Misc" Menu.

Date						Fields		
from date	17.	februar	2015	•		Plads No	5	^
To date	15.		2015			Skud No		=
10 4410	122	juni	2015			IV Dato		
	V N	low				🔽 Ю.		1
						System		
Mouldplace						Børflow1		
All						Børflow3		
Span	From 1		-	2		Børflow4		
🕑 span	From	Ŷ	To	2	A	Børflow5		
Mouldnumber						Børflow6		
						ErFlow2		
Al						ErFlow3		
🔘 Span	From 1	A. 	То	2		ErFlow4		
	L			-		ErFlow5		
Sum						BørTryk1		
Individual s	hot					BørTryk2		*
Sum						Marker alle		Fjem alle
Generate								
Filename								
C:\Users\Polyfa` \WinFlowFehrer?	\Documents 2010\WfWi	s\Visual nFlow\V	Studio 2 /inFlow	2013\ \bin\[	Projects )ebug\tes	st\tewt.csv	Bro	wse



Select date, place and mould number area, as well as which of the logged data fields to include in the result. Click the **"Browse..."** button to select the location to save the result to. When all selections have been made click the **"Generate"** button and WinFlow will create a file containing the result. This file, which is a semicolon separated datafile, can be open using a variety of programs. By clicking the button **"Show in Excel"** Excel will be started (if it is on the PC) and open the generated file.

🔟 🔛 = (° =  =											
Filer Startside Indsæt Sidelayout Formler Data Gennemse Vis L											
	<b>Å</b>	Calibri	Ŧ	11 × A*	_A <sup>▼</sup> ≡ :	= 😑 🗞		Ombryd tekst			
	Sæt nd ∗ 🝼	F K	<u>u</u> -   <u>   </u>	- 🐴 - 🛓	<u>↓</u> = ₹		▶ F	let og centre	er 👻		
Udk	lipsholder ច	i	Skrifttype		- Gi	Jt	ustering		- Fai		
A1 👻 🤄 🌆 Plads No											
	А	В	С	D	E	F	G	Н			
1	Plads No	Form No	Skud No	Mk	Dato	KI.	Børflow1	Børflow2	ErFI		
2	2	2	1	1	02 Oct 13	14:52:44	110,1	99,1			
3	2	2	1	2	02 Oct 13	14:48:12	110,1	99,1			
4	2	2	1	1	02 Oct 13	14:48:12	110,1	99,1			
5	2	2	1	2	02 Oct 13	14:05:08	110,1	99,1			
6	2	2	1	1	02 Oct 13	14:04:58	110,1	99,1			
7	2	2	1	2	02 Oct 13	13:59:52	110.1	99.1			

Figure 57 Result of Profile Export

See page 47, Setup Profile Print (in Ctrl S), for a description of the two tick boxes "Every Shot" and "Total.

# **Climate Export**

🖶 IndstilKlimaExpor	t prosent									
Date										
from date	17. februar	2015 👻								
To date	15. juni	2015 👻								
Generate	V Now									
Filename										
C:\Users\Polyfa\D	C:\Users\Polyfa\Desktop\fh.csv									
Generate			Show in Excel							

### Figure 58 Climate Export

From this form it is possible to export data from the climate log.

# Embedded

Embedded WinFlow				
General PLC I/O Skud WinLC RTX				
lp address 192.168.1.13	Transactions (TCP/IP)	91.076 (Avg. 9,1	/Sec.)	
Connected 1	Transactions (Hardware)	1.546.981 (Avg. 154,2	/Sec.)	
	User time	2,79 hours		
Firmware 2,4	Server time	2,79 hours		
Boot count 27				
	State	VenterPaaStrobe	SOH	0
Error input			Checksum	0
	Status	66,0,64, (0)	Get position Overrun	0
Database version 1.56			Framing	0
	PLC alivetime	34 mS (18865)	Break	0
Download			-	

Figure 59 Embedded Main Form

Embedded.exe is the program handling the entire shot proces.

Information in the "General" tab:

"Ip address" indicates the IP address of the PC where the Embedded.exe is run. The address can be used when connections to other PCs are required.

"Connected" indicates the number of WinFlow programs, which are connected to the Embedded.exe.

"Firmware" indicates the current version of the WinFlow hardware.

"Boot count" indicates the number of times the WinFlow hardware has been booted.

"Database version" Indicates the current version of the WinFlow database.

By clicking the **"Download"** button the software version in the Embedded folder will be sent to the WinFlow hardware. During the transfer the button will turn red.

If the button is pink it means that there was no communication with the hardware when the Embedded.exe program was started. At start up of Embedded the program will check if the latest version is running on the WinFlow hardware, if not, the button will turn pink and continue using the "older" version.

"Transactions (Hardware)" Indicates the number of transactions to/from the WinFlow program, as well as an average in seconds in parenthesis.

If the text is pink it means that a communication failure has occurred at start-up of Embedded.exe.

"User time" indicates the number of hours the users has been connected to Embedded.exe.

"Server time" indicates the number of hours Embedded.exe has been running.

"State" is a description of the current state the Embedded.exe is in.

"Status" indicates the errors registered by WinFlow in the wires from the WinFlow hardware.

- 1. Number of errors (typical the incorrect number of bytes received) at "GetShotInfo".
- 2. Number of errors (typical the incorrect number of bytes received) at "SetShot".
- 3. Number of errors (typical the incorrect number of bytes received) at "GetMiscData".

(4.) Number of Checksum errors in the wires from the WinFlow hardware.

"PLC alivetime" indicates the number of milliseconds used to exchange a byte to/from the PLC. The highest number of milliseconds is indicated in parenthesis.

"SOH ..." indicates the number of errors registered by the WinFlow hardware in the wires from WinFlow. The same applies to "Checksum", "Get position", "Overrun", "Framing" and "Break".

# Language Settings in Windows XP

Click Start / Control Panel



Figure 60 XP Control Panel

Double click the icon Regional and Language Setting.

ernationale indstillin	ger Sprog Avanceret
Standarder og form	ater
Denne indstilling p valutaer, datoer og	åvirker, hvordan nogle programmer formaterer tal, j klokkeslæt.
⊻ælg et element, o vælge dine egne f	der skal svare til præferencen, eller kli <del>k på Tilpas for at</del> ormater:
Dansk	Tilpas
Eksempler	
Tal:	123.456.789,00
Valuta:	kr 123.456.789,00
Klokkeslæt:	09:50:03
Kort datoformat:	12-10-2007
Langt datoformat:	12. oktober 2007
Placering	
	nuværende glacering for at hjælpe tjenester med at vsninger, f.eks. nyheder og vejr:
Danmark	×

Figure 61 XP Language

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Click the button "Customize..."

Tal       Valuta       Klokkeslæt       Dato         Eksempel       Positivt:       123.456.789,00       Negativt:       ·123.456.789,00         Decimaltegn:       .       .       ·123.456.789,00         Antal cjfre efter decimal:       2       ·         Ciffergruppeseparator:       .       ·         Antal cifre i gruppe:       123.456.789       ·         Antal cifre i gruppe:       123.456.789       ·         Symbol for negative tal:       -       ·         Eormat for negative tal:       -       ·         Visning af foranstillet nul:       0,7       ·         Listeseparator:       ;       ·       ·         Målesystem:       Metrisk       ·	? >
Positivt:       123.456.789,00       Negativt:       -123.456.789,00         Decimaltegn:            Antal cifre efter decimal:       2           Differgruppeseparator:             Antal cifre i gruppe:       123.456.789            Antal cifre i gruppe:       123.456.789             Symbol for negative tal:       -	
Antal cifre efter decimal:       2 <u>C</u> iffergruppeseparator:       .         Antal cifre i gruppe:       123.456.789         Symbol for negative tal:       .         Format for negative tal:       .         Visning af foranstillet nul:       0,7         Listeseparator:       ;	
Ciffergruppeseparator:       .         Antal cifre i gruppe:       123.456.789         Symbol for negative tal:       .         Format for negative tal:       .         Visning af foranstillet nul:       0,7         Listeseparator:       ;	
Antal cifre i gruppe:       123.456.789         Symbol for negative tal:       -         Eormat for negative tal:       -1,1         Visning af foranstillet nul:       0,7         Listeseparator:       ;	
Symbol for negative tal:       -       •         Eormat for negative tal:       -1,1       •         Visning af foranstillet nul:       0,7       •         Listeseparator:       ;       •	
Eormat for negative tal:       -1,1         Visning af foranstillet nul:       0,7         Listeseparator:       ;	
Visning af foranstillet nul:     0,7       Listeseparator:     ;	
Listeseparator:	
Målesystem: Metrisk.	

### Figure 62 XP Customize

Enter the desired decimal symbol.

Remember to also update the Digit grouping symbol, so that the two are not alike.

# **SQL Queries**

Start Microsoft SQL Server Management Studio Express via the Start menu in Windows.

Click Connect when the Connect to Server message box appears.

Right click the database WinFlowLog and select New Query.

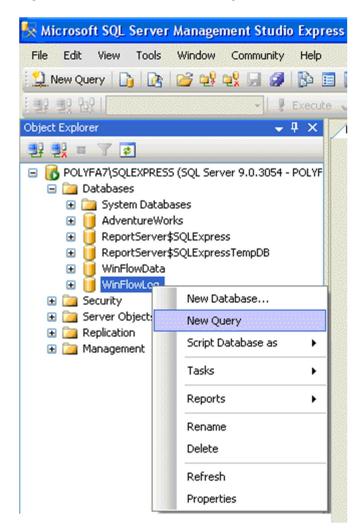


Figure 63 SQL New Query

Mark, copy and paste the below SQL query to the blank section on the right hand side.

SELECT Plads AS FormPlads,

CONVERT(char(15), Dato, 6) AS Dato, CONVERT(char(20), Dato, 8) AS 'kl.', CAST(bVaegt AS Decimal(5, 2)) AS 'Bør vaegt', CAST(eVaegt AS Decimal(5, 3)) AS 'Er Vægt', CAST(eFlow1 AS Decimal(5, 1)) AS 'Er Polyol',

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CAST(bFlow1 AS Decimal(5, 1)) AS 'Bør Polyol', CAST(eFlow2 AS Decimal(5, 1)) AS 'Er Iso', CAST(bFlow2 AS Decimal(5, 1)) AS 'Bør Iso', CAST(eTid AS Decimal(5, 3)) AS 'Er Tid', CAST(bTid AS Decimal(5, 3)) AS 'Bør Tid' FROM DataLog

WHERE (Dato > '20070728') AND (Plads > 2) ORDER BY id DESC

t Studio Express
ow Community Help
🔹 🕴 Execute 🗸 🔲 🎇 🔏 🖓 📲 🖷 🦉 🍘 🏹 🗐 🖺 🚔 🚎 🚎
<pre>POLYFAT\SQLEXQLQuery3.sql* POLYFA7\SQLEXQLQuery2.sql* POLYFA7\SQLEXQLQuery1 SELECT Plads AS FormPlads,     CONVERT(char(15), Dato, 6) AS Dato,     CONVERT(char(20), Dato, 8) AS 'kl.',     CAST(bVaegt AS Decimal(5, 2)) AS 'Bør vaegt',     CAST(eVaegt AS Decimal(5, 3)) AS 'Er Vægt',     CAST(eFlow1 AS Decimal(5, 1)) AS 'Er Polyol',     CAST(bFlow1 AS Decimal(5, 1)) AS 'Bør Polyol',     CAST(eFlow2 AS Decimal(5, 1)) AS 'Bør Polyol',     CAST(bFlow2 AS Decimal(5, 1)) AS 'Er Iso',     CAST(bFlow2 AS Decimal(5, 1)) AS 'Bør Iso',     CAST(eTid AS Decimal(5, 3)) AS 'Er Tid',     CAST(bTid AS Decimal(5, 3)) AS 'Bør Tid' FROM DataLog WHERE (Dato &gt; '20070728') AND (Plads &gt; 2) ORDER BY id DESC</pre>

Figure 64 SQL Query

Click the button Execute

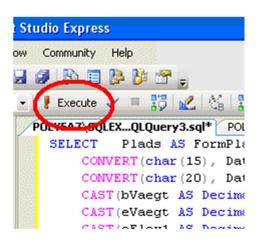


Figure 65 SQL Execute

The result of the query is displayed the bottom part of the window.

The WHERE clause in the illustrated example below shows a query selecting shots after July 28, 2007 and place number higher than 2.

CAST(BFIOWI AS DECIMAI(S, I)) AS 'Er Polyor', CAST(bFlow1 AS Decimal(S, 1)) AS 'Bør Polyol', CAST(eFlow2 AS Decimal(S, 1)) AS 'Er Iso', CAST(bFlow2 AS Decimal(S, 1)) AS 'Bør Iso', CAST(bFlow2 AS Decimal(S, 3)) AS 'Bør Tid', CAST(bTid AS Decimal(S, 3)) AS 'Bør Tid' FROM DataLog WHERE (Dato > '20070728') AND (Plads > 2) ORDER BY id DESC											
<	-							M			
III F	Results 🛅 I	Messages									
	FormPlads	Dato	kl.	Bør vaegt	Er Vægt	Er Polyol	Bør Polyol	Erlso	Børlso	Er Tid	Bør Tid
1	15	16 Aug 07	08:08:09	0.00	0.000	155.2	155.5	196.5	194.4	0.000	0.000
2	15	16 Aug 07	08:08:09	1.31	0.888	155.2	155.5	196.5	194.4	0.000	3.758
3	50	16 Aug 07	08:06:57	0.00	0.000	156.1	155.5	196.7	194.4	0.000	0.000
4	50	16 Aug 07	08:06:57	0.88	0.888	156.1	155.5	196.7	194.4	2.525	2.515
5	50	16 Aug 07	08:06:57	0.88	0.885	156.1	155.5	196.7	194.4	2.515	2.515
6	29	16 Aug 07	08:06:03	2.50	2.524	155.8	155.5	196.1	194.4	7.160	7.150
7	29	16 Aug 07	08:06:03	2.50	2.521	155.8	155.5	196.1	194.4	7.155	7.150
8	65	16 Aug 07	08:05:04	2.43	2.454	155.6	155.5	196.2	194.4	6.955	6.945
9	65	16 Aug 07	08:05:04	2.43	2.454	155.6	155.5	196.2	194.4	6.953	6.945
10	15	16 Aug 07	08:04:05	0.00	0.000	156.0	155.5	196.4	194.4	0.000	0.000
	10	10 4 07		1 01	1 007	150.0	100.0	100.4		0.000	

#### Figure 66 SQL Result

It is possible to mark alle the rows and copy the data to Microsoft Excel for further processing or to select menu item "Save Results As ..."

# Structure

The system consists of a curcuit handling shot times and flow measurements. This circuit is connected to a PC controlling the shot process. This PC also handles the communication to the ProfiBus System.

A Microsoft SQL Server 2005 database is used to store all the system data.

The WinFlow system is divided into 5 main components ( 3 software components + 1 hardware component + 1 PLC system).

- The database (SQL Server 2005) contains all the settings, texts, mould data, data collections, logs and other production data. The SQL Server can be placed in a central location and connected to the other softwar units via a network, or placed on the same PC.
- The Hardware measures the flow from the flow sensors, controls and measures shot times. The hardware is connected to the PC on which the program Embedded.exe is installed.
- The program Embedded.exe is the program, which handles the shot process in realtime, right from when the strobe arrives to when the shot is completed. Communication with the PLC is also handled by this program. The Profibus connection has to be on the PC where the Embedded.exe program is installed.
- WinFlow is the program that the user uses to operate and monitor the system. WinFlow must be able to communicate with the SQL Server, but can do without the Embedded.exe program (and thereby the hardware) and thus functions as a disconnected (office)-version, where changes to e.g. mould data and other settings can be made.
- The PLC system handles monitoring of safety, controlling of the levels of the tanks, transmitting of data to the robots, vision system, mould place handling....

Below is an illustration of an SQL query, providing a few pieces of information about the production on a given day.

	🏛 DataLog								
	bForhold	<u> </u>		$\rightarrow$			4		
	eForhold					📰 Formdata (\	Wi		
	bIndex				T I I I I I I I I I I I I I I I I I I I				
	Fejl				ł	RobotNumm			
	Special1					PauseType PauseTid			
	Special2					RensNaal			
	Special3					SystemValg			
					[	SidstRetteNa			
	Special6				[	SidstRetteTi			
	DTidTotal					FormTil			
	eTidTotal	1			ļ	PictureFile			
	bVaegtTota					idSpecial			
	eVaegtTota	Σ			ļ	Artikkel Bonus			
	Samlet	<b>™(:=</b>				DobbeltSkud			
	1				Jr.				
			1 - 11			La ca t			
-	Column Samlet	Alias	Table	Output	Sort Type	Sort Order	Group By Group By	Filter	Or
-			DataLog		According			= 1	
	Form		DataLog		Ascending	1	Group By	= 1	
	Form Navn		DataLog Formdata (		Ascending	1	Group By Group By		
	Form Navn Dato		DataLog Formdata ( DataLog	_	Ascending	1	Group By Group By Where	> '19-04-2006'	
	Form Navn Dato Dato		DataLog Formdata ( DataLog DataLog		Ascending	1	Group By Group By Where Where		
	Form Navn Dato	Totalv	DataLog Formdata ( DataLog		Ascending	1	Group By Group By Where	> '19-04-2006'	
	Form Navn Dato Dato	Totalv	DataLog Formdata ( DataLog DataLog		Ascending	1	Group By Group By Where Where	> '19-04-2006'	
	Form Navn Dato Dato eVaegtTotal		DataLog Formdata ( DataLog DataLog DataLog				Group By Group By Where Where Sum	> '19-04-2006' < '20-04-2006'	
/IN(	Form Navn Dato Dato eVaegtTotal T COUNT(DataLog DataLog INNER WinFlowData E (DataLog.Dato 2 P BY DataLog.Samlet	.id) AS Antal, .JOIN .dbo.Formdat. > CONVERT(D/ , DataLog.For	DataLog Formdata ( DataLog DataLog DataLog.Form, W a ON DataLog.For ATETIME, '2006-0	VinFlowData m = WinFlc	a.dbo.Formdata bwData.dbo.For :00', 102)) AND	.Navn, SUM(DataLo	Group By Group By Where Sum	> '19-04-2006' < '20-04-2006'	:00', 1
M ERE OUP IN(	Form Navn Dato Dato eVaegtTotal T COUNT(DataLog DataLog INNER WinFlowData E (DataLog.Dato > P W DataLog.Samlet G (DataLog.Samlet G (DataLog.Form	.id) AS Antal, JOIN .dbo.Formdat. > CONVERT(D/ , DataLog.For et = 1)	DataLog Formdata ( DataLog DataLog DataLog.Form, W a ON DataLog.For ATETIME, '2006-0 m, WinFlowData.	VinFlowData m = WinFlc	a.dbo.Formdata pwData.dbo.For :00', 102)) AND ata.Navn	.Navn, SUM(DataLo	Group By Group By Where Sum	> '19-04-2006' < '20-04-2006' Totalvægt	:00', 1
M RE UP	Form Navn Dato Dato eVaegtTotal T COUNT(DataLog DataLog INNER WinFlowData E (DataLog.Samlet G (DataLog.Samlet BY DataLog.Form Antal	id) AS Antal, JOIN .dbo.Formdat. > CONVERT(D/ , DataLog.For et = 1) Form	DataLog Formdata ( DataLog DataLog DataLog.Form, W a ON DataLog.Form, W a ON DataLog.Form, WinFlowData.	VinFlowData rm = WinFlo 04-19 00:00 dbo.Formda	a.dbo.Formdata pwData.dbo.For :00', 102)) AND ata.Navn   Totalvægt	.Navn, SUM(DataLo mdata.Nummer (DataLog.Dato < C	Group By Group By Where Sum	> '19-04-2006' < '20-04-2006' Totalvægt	:00', 1
ere Dup IN(	Form Navn Dato Dato eVaegtTotal T COUNT(DataLog DataLog INNER WinFlowData E (DataLog.Samlet G (DataLog.Samlet B V DataLog.Samlet B V DataLog.Form Antal 2256	id) AS Antal, JOIN .dbo.Formdat. > CONVERT(D/ > DataLog.For et = 1) Form 13	DataLog Formdata ( DataLog DataLog DataLog.Form, W a ON DataLog.For M, WinFlowData.	VinFlowData m = WinFlo 14-19 00:00 dbo.Formda	a.dbo.Formdata bwData.dbo.For :00', 102)) AND ata.Navn Totalvægt 1489,069815	.Navn, SUM(DataLo mdata.Nummer (DataLog.Dato < ( 1014362	Group By Group By Where Sum	> '19-04-2006' < '20-04-2006' Totalvægt	:00', 1
om Ere Dup 'In(	Form Navn Dato Dato eVaegtTotal T COUNT(DataLog DataLog INNER WinFlowData E (DataLog.Samlet G (DataLog.Samlet BY DataLog.Form Antal	id) AS Antal, JOIN .dbo.Formdat. > CONVERT(D/ , DataLog.For et = 1) Form	DataLog Formdata ( DataLog DataLog DataLog.Form, W a ON DataLog.For ATETIME, '2006-0 m, WinFlowData. Navn Form 13 Nu også	VinFlowData m = WinFlo 14-19 00:00 dbo.Formda	a.dbo.Formdata pwData.dbo.For :00', 102)) AND ata.Navn   Totalvægt	.Navn, SUM(DataLo mdata.Nummer (DataLog.Dato < ( 1014362	Group By Group By Where Sum	> '19-04-2006' < '20-04-2006' Totalvægt	:00', 1

#### Figure 67 Database Relation

This example is from **Microsoft Visual Studio .NET 2005**, but could equally be generated in **SQL Server 2005 Express Edition with Advanced Services** SP1, which can be downloadet for free: <u>http://msdn.microsoft.com/vstudio/express/sql/download/default.aspx</u>

# WinFlow in the Office

Create a new folder on your office PC.

Copy the following 4 files to the folder (The files can be found in "shared folders"/Winflow/Winflow on the production PC)

- CtrlLogLibrary.dll
- MainLibrary.dll
- WinFlow.exe
- WinFlow.exe.config

In the folder you have to open WinFlow.exe.config e.g. using NotePad.exe

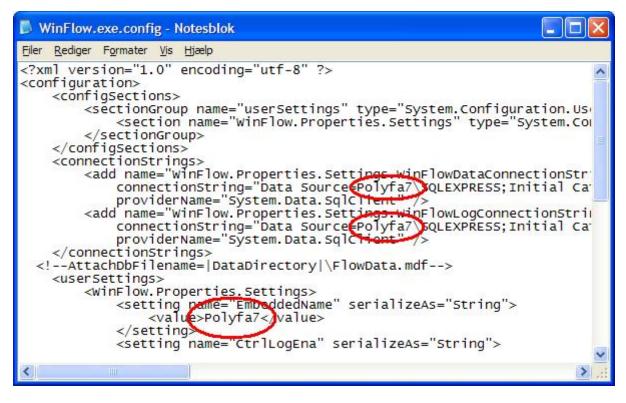


Figure 68 WinFlow Configuration

The 3 red circles in figure 69 indicate where in the file you have to make som changes.

Write the Computer name of the Winflow you wish to monitor.

Now you can start WinFlow in this folder and look at the production/change place/mould data/print...

If you experience that WinFlow shuts down once you start another WinFlow, go to the menu "Setip" and tick the box "Show <are you sure> at exit".

Componenter Names On/Lff System T/P/IP	
Calculation in mould data Constant flow	Edit F3 Edit F4 Editer F5
Show only dialog if error         Delay alarm enable       2000 🚔 mS	<ul> <li>Servo regulat</li> <li>Servo regulat</li> <li>Limit for SetDac</li> </ul>
Shot time limit MH1     500 Image mS       Shot limit MH2     500 Image mS	Stop shot at: Measure error  A-error
Amount of Days in Log 51 →	B-error C-error D-error
✓ Automatic backup         Next auto backup       22/06/2015       10:11       □         ✓ Automatic delete backup       Keep       2       ✓	Then eve newest
ОК	

## Figure 69 WinFlow <are you sure>

Start WinFlow (at the office) again and the below messagebox will appear:



Figure 70 WinFlow Is Started

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Click "OK"

Afterwhich the below messagebox will appear:

I	Finish	
	WinFlow exit? Are you sure?	
	Ja <u>N</u> ej	

Figure 71 WinFlow Exit

Click "No"

In WinFlow you will be able to see which PC you communicated with at the top of the frontpage:

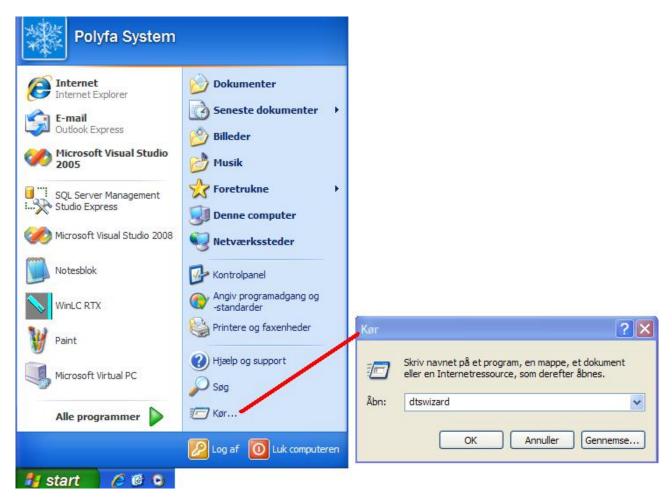
•	WinF	low - F	Polyfa-71	>			
	Files	Edit	Functions	He	lp		
					Place number	information	
					Place no.	0	
					Mould no.	0	
					Mould name		
					Machine 1		

Figure 72 WinFlow Name

# **Export Guide for WinFlow and WinRobot**

A program which can export data from the Microsoft SQL Server is installed on the WinFlow and WinRobot PCs.

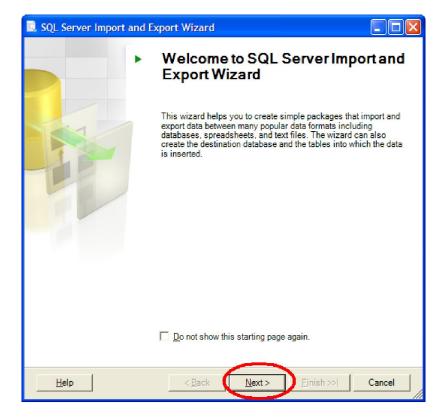
The program is called dtswizard and is started as shown in the below illustration.



**Figure 73 Export Guide** 

The program can export to different formats, in the illustrated example below the program exports to Microsoft Excel.

The program starts of by showing a welcome message.



### Figure 74 Export Guide 2

Click "Next >"

🛄 SQL Server Impo	rt and Export Wizard	
Choose a Data Select the source	Source from which to copy data.	
<u>D</u> ata source:	SQL Native Client	•
<u>S</u> erver name:	POLYFA7\SQLEXPRESS	•
Authentication — Use <u>W</u> indows .	Authentication	
C Use SQL Serve	er Authentication	
<u>U</u> ser name:		
<u>P</u> assword:		
Da <u>t</u> abase:	WinFlowLog	
		(
<u>H</u> elp	< <u>B</u> ack <u>N</u> ext > <u>Finish &gt;&gt; </u>	Cancel

Figure 75 Export Guide 3

Page 63 of 71

Select "WinFlowLog" from the Database list.

Click "Next >"

Choose a Destination Specify where to copy data to.			
Destination: X Microsof	t Excel		
Excel file path: LogFil.xls Excel version:			Bro <u>w</u> se
Microsoft Excel 97-2005		•	
I FIRST row has column names			

Figure 76 Export Guide 4

In the Destination field select "Microsoft Excel"

Type a name for the Excel file. Remember to include the file extension ".xls".

SQL Server Import and Export Wizard	
Specify Table Copy or Query Specify whether to copy one or more tables and views or to copy the results of a query from the data source.	
C <u>C</u> opy data from one or more tables or views	
Use this option to copy all the data from the existing tables or views in the source da	atabase.
• Write a query to specify the data to transfer	
Use this option to write an SQL query to manipulate or to restrict the source data for operation.	the copy
Help < Back Next > Finish >>	Cancel

Figure 77 Export Guide 5

Select "Write a query ..."

Click "Next >"

SQL Server Import and Export	rt Wizard			
Provide a Source Query Type the SQL statement that will	select data from	the source dat	abase.	
SQL statement: SELECT TOP (1000)* FROM DataLog ORDER BY Dato DESC				<u>~</u>
		B	arse	B <u>r</u> owse
Help	< Back	<u>N</u> ext >	<u> </u>	Cancel

Figure 78 Export Guide 6

Enter an SQL query in this form, defining what has to be exported to Excel.

The illustrated example "TOP (1000) \*" means the first 1000 records from the DataLog table i.e. the first 1000 shots.

Each row in Excel represents a shot. Remember that Excel can only handle 65.535 rows.

In the illustrated example the data is sorted by the date column "Dato" in descending order i.e. newest first.

SQL Server Import and Export Wizard	
Select Source Tables and Views Choose one or more tables and views to copy.	
Tables and views:	
Source	Destination
✓ d <sup>2</sup> [Query]	1 Query
✓ Optimize for many tables	
Run in a transaction	
	Edit Mappings Preview
Help < Back	Next> Finish >>  Cancel

## Figure 79 Export Guide 7

Click "Next >"

SQ	L Server Import and Export Wiza	rd	
he	e execution was successful		
0	Success	12 Total 12 Success	0 Error 0 Warning
)eta	ails:	1	
	Action	Status	Message
0	Initializing Data Flow Task	Success	
0	Initializing Connections	Success	
0	Setting SQL Command	Success	
0	Setting Source Connection	Success	
Ø	Setting Destination Connection	Success	
Ø	Validating	Success	
0	Prepare for Execute	Success	
Ø	Pre-execute	Success	
0	Executing	Success	
0	Copying to "Query"	Success	1000 rows transferr
0	Post-execute	Success	
0	Cleanup	Success	
	Fil <u>t</u> er ▼	<u>S</u> top	<u>R</u> eport
			Close

Figure 80 Export Guide 8

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Click "Close".

The Excel file is now ready to be opened.

Find and double click on the Excel file.

N 🖻	Microsoft Excel - LogFil2.xls							
:B)	<u>Filer</u> <u>R</u> edi	ger ⊻is <u>I</u>	ndsæt Forr	na <u>t</u> er <mark>Funk</mark>	<mark>tioner</mark> Data	a Vind <u>u</u> e	Hjælp	
	) 💕 🖬 🛛	2 8 8	💁 🗳 🕯	1 X 🖬	🔁 <del>-</del> 🝼	۳ - C	🤮 Σ - 🛔	
:	222	1 🔁 🖄 🛛	3 75 🛛 🕉		🍽 Besvar me	d <u>æ</u> ndringer.	Afslut gennems	
Teg								
	A1	<b>▼</b> ;	🗟 'id			1	1	
	A	В	С	D	E	F	G	
1	id	Plads	Form	Skud	Mk	Dato 🔪	ŚystemVa bFl	
2	739372	1	3	6	-1	########	1	
3	739371	1	6	1	1	########	1	
4	739370	1	3	3	1	########	1	
5	739369	1	3	2	1	########	1	
6	739368	1	3	1	1	########	1	
7	739367	6	3	6	-1	########	1	

Figure 81 Export Guide Excel 1

Make the "Dato" column a little wider by pulling the column shown by the red ring. The date is shown without a timestamp.

Use the following guide to include the time in the date column.

			G			
	Dato	*	<u>K</u> lip Fl			
1	0		Kopier			
1		2	Sæt ind			
			Indsæt spe <u>c</u> iel			
$\frac{1}{4}$			Indotte spo <u>c</u> ionn			
+			Indsæt –			
1	I					
1	1		Sle <u>t</u>			
1	1		Ryd indhold			
1	1	-				
1	6	<b>P</b>	Eormater celler			
	1	-	Kolonnobro <u>d</u> de			
1	1		Skjul			
1	1					
1	1		⊻is			
-1	1	6-04	-2008 1			

Figure 82 Export Guide Excel 2

Mark the column "Dato" and right click the column.

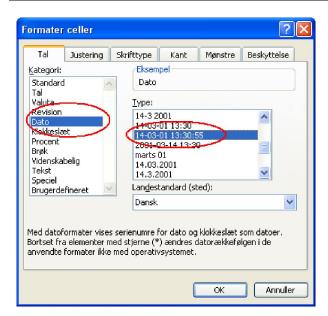


Figure 83 Export Guide Excel 3

Find and select "Date" under "Category:" and select desired date/time format.

💌 м	Microsoft Excel - LogFil2.xls						
:2)	<u>Filer</u> <u>R</u> edig	ger <u>V</u> is <u>I</u> i	ndsæt Forr	mater Funk	tioner <u>D</u> ata	a Vind <u>u</u> e <u>H</u> jælp	
	) 💕 🖬 🛛	3 8 8	💁   🍣 🕯	1 X D	🔁 <del>-</del> 🛷	🗳 - (° -   🤮 Σ -	
:	11 12	<b>S</b>	3 TS 🛛 🕄		r¢ Besvar me	d <u>æ</u> ndringer A <u>f</u> slut ger	
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	A1	<b>▼</b> )	🚱 'id				
	A	В	С	D	E	F	
1	id	Plads	Form	Skud	Mk	Dato 🦯 🦯	
2	739372	f		~			
	100016	I	3	6	-1	05-05-08(1:22:44)	
3	739372	1		<u></u> б 1	-1 1	05-05-08(11:22:44) 05-05-08(11:22:43)	
3		1	-	6 1 3	-1 1 1		
<u> </u>	739371	1 1 1	6	1	-1 1 1	05-05-08 11:22:43	

Figure 84 Export Guide Excel 4

This format includes the time in the "Dato" column.

# **F4 PLC Communication**

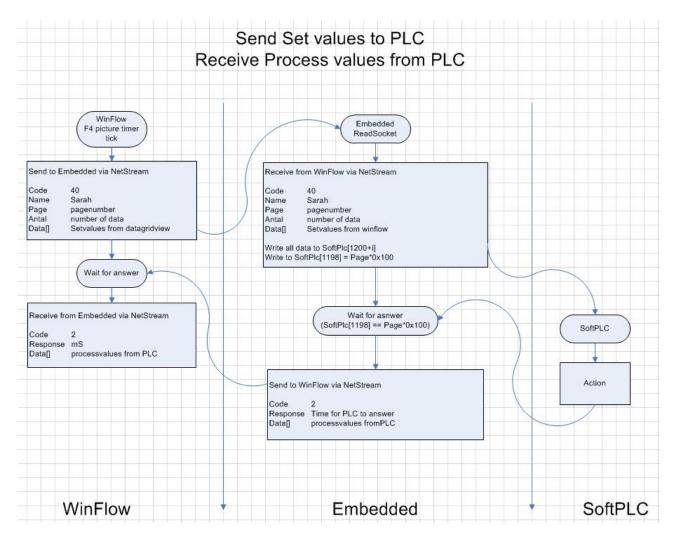


Figure 85 Communication F4

# **Installation of Winflow on Windows 7**

Install the "Web Platform Installer 3.0" from Microsoft.

Select the following:

- Vælg SQL Server Express 2008 R2.
- Vælg SQL Server 2008 R2 Management Studio Express
- Vælg SQL Server 2008 R2 Management Object

Install these.

Install WinFlow.

Restore the database.