

1 Introduction

This document describes how to adapt an existing method to the following circumstances:

- Changing the instrument version or instrument type in a method (*see Chapter 2, page 1*)
- Changing the language of a method (*see Chapter 3, page 6*)
- Changing components in a method (*see Chapter 4, page 8*)

Prerequisites

To adapt a method in MagIC Net, you need the following:

- Any version of MagIC Net
- An example method to be adapted.
Example methods are installed with the software. They can be found on your computer: [program path] \Metrohm\MagIC Net\examples\methods
- A list of instruments with the exact instrument version (either in a configuration or on paper)

2 Changing instrument version or instrument type

When using an example method or a method extracted from an application work, it is very common that the instrument type or the instrument version needs to be adapted. This chapter describes the following two scenarios:

- If the example method is written for the same instrument type as you use, then you only have to rename the instrument in the method. *Follow the instructions in Renaming the instrument, page 1.*
- If the example method is written for a different instrument type as you use, then you have to rename and exchange the instrument in the method. *Follow the instructions in Exchanging the instrument, page 3*

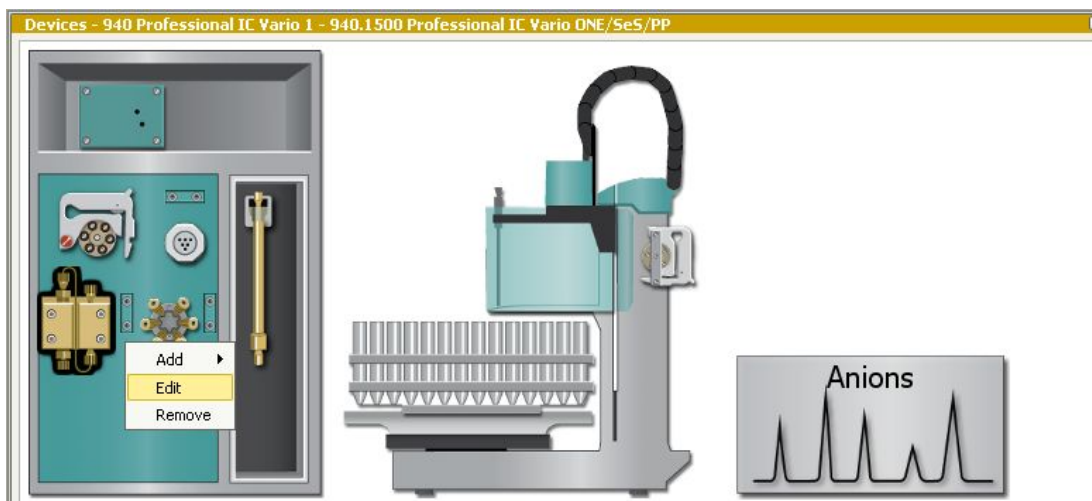
Renaming the instrument

- 1
 - Navigate to **Configuration ► Devices**
 - Find the name of your instrument in the **Device name** column of the **Devices** subwindow.
 - Note down the name of the instruments you want to use in the new method.

2 Navigate to the workspace **Method**.

Open the sample method you want to adapt.

3 In the subwindow **Devices** right-click on the instrument and click on **Edit**.



- 4
- In the window **Edit device**, enter the name of your instrument into the **Device** field.
 - Make sure that the module names correspond to the instrument. Depending on the instrument type, modules can have different names.
 - Confirm with **OK**.

The screenshot shows a dialog box titled "Edit device" with a red close button. It contains the following fields:

- Device**: A dropdown menu showing "930 Compact IC Flex 1".
- Device type**: A text field showing "940.1500 Professional IC Vario ONE/SeS/PP".
- Module designations**: A section with several input fields:
 - Pump: Pump
 - Injector: Injector
 - Peristaltic: Peristaltic
 - MSM: MSM
 - MCS: MCS
 - Degasser: Degasser
 - Thermostat: Thermostat
 - Conductivity detector 1: Conductivity detector 1

At the bottom, there are "OK" and "Cancel" buttons.

In the time program, all names linked to this instrument are changed.

Time program					Time program				
Main program					Main program				
Time	Device	Module	Command		Time	Device	Module	Command	
	858 Professional Sample Processor 1	Rack	Move (Rack)			858 Professional Sample Processor 1	Rack	Move (Rack)	
	858 Professional Sample Processor 1	Tower	Lift			858 Professional Sample Processor 1	Tower	Lift	
► 0.0	940 Professional IC Vario 1					930 Compact IC Flex 1	Injector	Fill	
0.0	858 Professional Sample Processor 1	Peristaltic	On/Off		0.0	858 Professional Sample Processor 1	Peristaltic	On/Off	
3	858 Professional Sample Processor 1	Peristaltic	On/Off		3	858 Professional Sample Processor 1	Peristaltic	On/Off	
3	940 Professional IC Vario 1				3	930 Compact IC Flex 1	Injector	Inject	
3	Anions		Start data acquisition		3	Anions		Start data acquisition	
	858 Professional Sample Processor 1	Rack	Move (Rack)			858 Professional Sample Processor 1	Rack	Move (Rack)	
	858 Professional Sample Processor 1	Tower	Lift			858 Professional Sample Processor 1	Tower	Lift	
0.0	858 Professional Sample Processor 1	Peristaltic	On/Off		0.0	858 Professional Sample Processor 1	Peristaltic	On/Off	
2	858 Professional Sample Processor 1	Peristaltic	On/Off		2	858 Professional Sample Processor 1	Peristaltic	On/Off	
*					*				

- 5 Repeat steps 1 to 4 for all instruments with different names than your instruments.

Exchanging the instrument

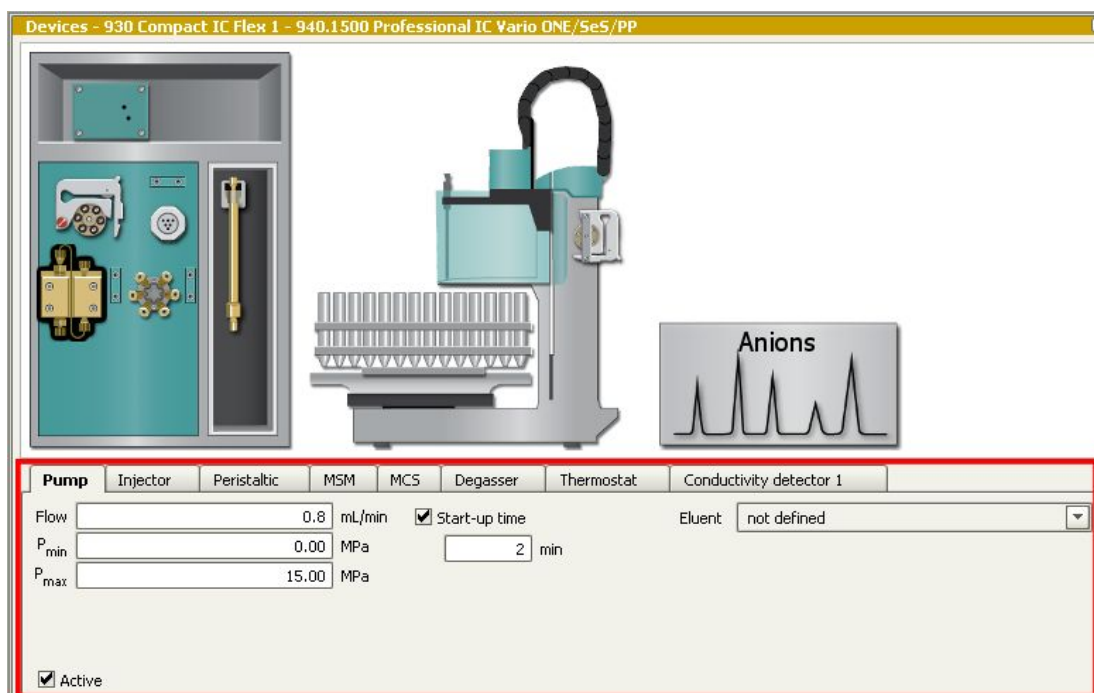
Prerequisite

- The instruments used in the method are renamed (see "Renaming the instrument", page 1).

1 Note down start parameters

All start parameter information as well as the linkage in the analysis will be deleted when the instrument is removed from the method. Therefore:

- Note down all start parameters (e.g. flow rate, oven temperature, etc.) of all instruments you need to exchange.



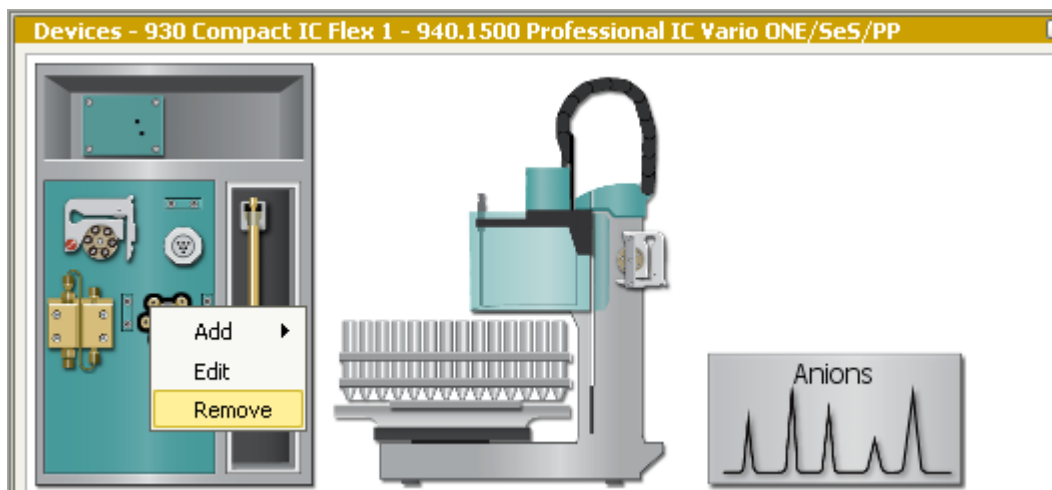
2 Export calibration curve

If the method has already been calibrated, export the calibration data:

- Navigate to **Method ▶ Chromatograms**
- Activate **Calibration curve**
- Click on **Edit ▶ Export calibration points**
- Select the analysis, define the **Export file** and click on **[OK]**

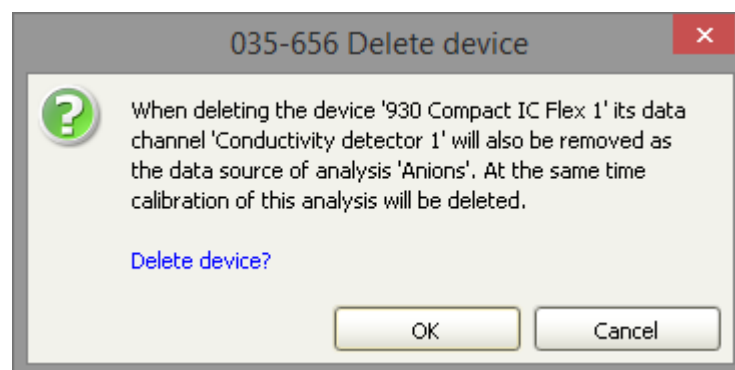
3 Remove the instrument

Delete the instrument from the method: right-click on the instrument and click **Remove**.



4 Confirm

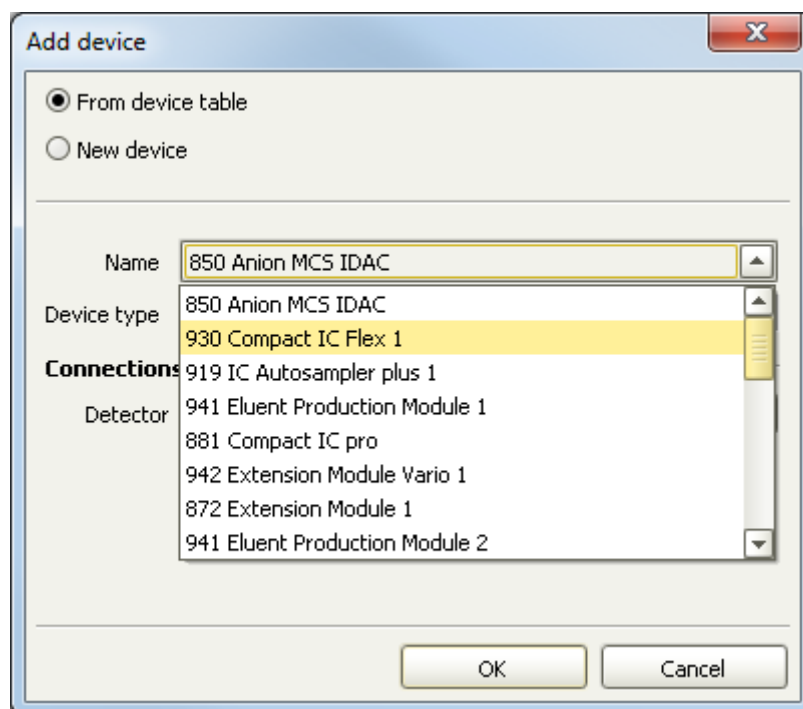
Confirm the message clicking on **[OK]**.



5 Add new instrument

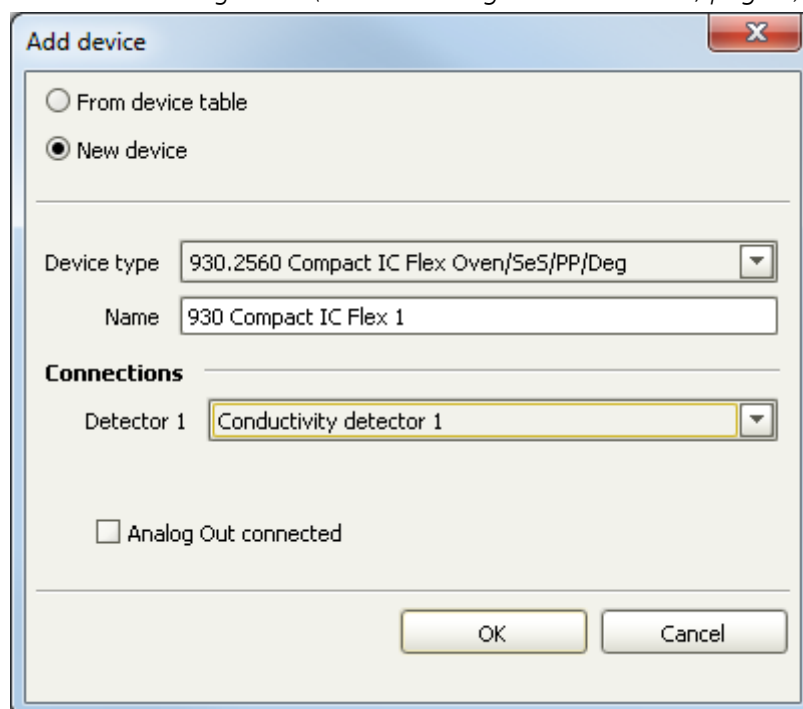
Either from configuration:

- Click on **Edit ► Add device ► From device table**



Or add new instrument:

- Click on **Edit ► Add device ► New device**
- Select the required **Device type**.
Enter the **Name** given in (see "Renaming the instrument", page 1).

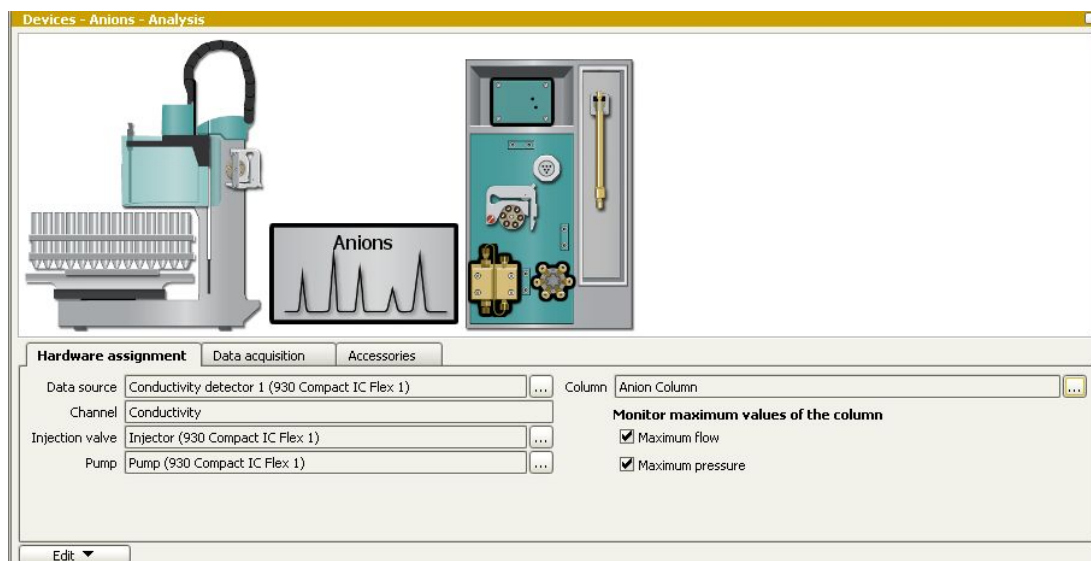


6 Enter start parameters

Enter all start parameters according to your notes from step 1.

7 Link hardware with analysis

- Select the analysis.
- In the tab **Hardware assignment** correctly link the analysis and the hardware.



8 Import calibration points


If you have exported calibration points *in step 2 of "Exchanging the instrument"*, now you can import them:

- Navigate to **Method ► Chromatograms**
- Activate **Calibration curve**
- Click on **Edit ► Import calibration points**
- Select the analysis, define the **Import file** and click on **[OK]**

9 Check the method

In the toolbar, click on  to perform a method check.

10 Save the method

In the toolbar, click on .

3 Changing the language of a method

MagIC Net is translated into many languages in order to facilitate daily work for international customers. However, when opening an example method, all information is not automatically translated. Only commands and parameters appear in the language MagIC Net is running on. Module names are user specific, and thus cannot be translated automatically. Module names must therefore be translated manually.

See following example: translation from German to English

Zeitprogramm						
Hauptprogramm						
Zeit	Gerät	Modul	Befehl	Parameter	Kommentar	Nr.
	850 Professional Sample Processor 1	Rack	Drehen (Clock)	Probe position		1
	850 Professional Sample Processor 1	Turn	Lift	Arbeitsposition		2
0.0	930 Compact IC Flex 1	Injector	Füllen			3
0.0	850 Professional Sample Processor 1	Peristaltik	Ein/Aus	Ein, Geschwindigkeit=3	Sample transfer	5
3	850 Professional Sample Processor 1	Peristaltik	Ein/Aus	Aus		6
3	930 Compact IC Flex 1	Injector	Entleeren			7
3	Anions		Start Datenaufnahme			8
	850 Professional Sample Processor 1	Rack	Drehen (Clock)	Spezialbedner 1	Move to special position for...	9
	850 Professional Sample Processor 1	Turn	Lift	Arbeitsposition		10
0.0	850 Professional Sample Processor 1	Peristaltik	Ein/Aus	Ein, Geschwindigkeit=3	Rinsing	11
2	850 Professional Sample Processor 1	Peristaltik	Ein/Aus	Aus		12

Time program						
Main program						
Time	Device	Module	Command	Parameter	Comment	No.
	850 Professional Sample Processor 1	Rack	Move (Clock)		Sample position	1
	850 Professional Sample Processor 1	Turn	Lift		Work position	2
0.0	930 Compact IC Flex 1	Injector	Fill			3
0.0	850 Professional Sample Processor 1	Peristaltik	On/Off	On, Rate=3	Sample transfer	5
3	850 Professional Sample Processor 1	Peristaltik	On/Off	Off		6
3	930 Compact IC Flex 1	Injector	Inject			7
3	Anions		Start data acquisition			8
	850 Professional Sample Processor 1	Rack	Move (Clock)	Special beaker 1	Move to special position for...	9
	850 Professional Sample Processor 1	Turn	Lift		Work position	10
0.0	850 Professional Sample Processor 1	Peristaltik	On/Off	On, Rate=3	Rinsing	11
2	850 Professional Sample Processor 1	Peristaltik	On/Off	Off		12

Commands and Parameters are translated automatically.

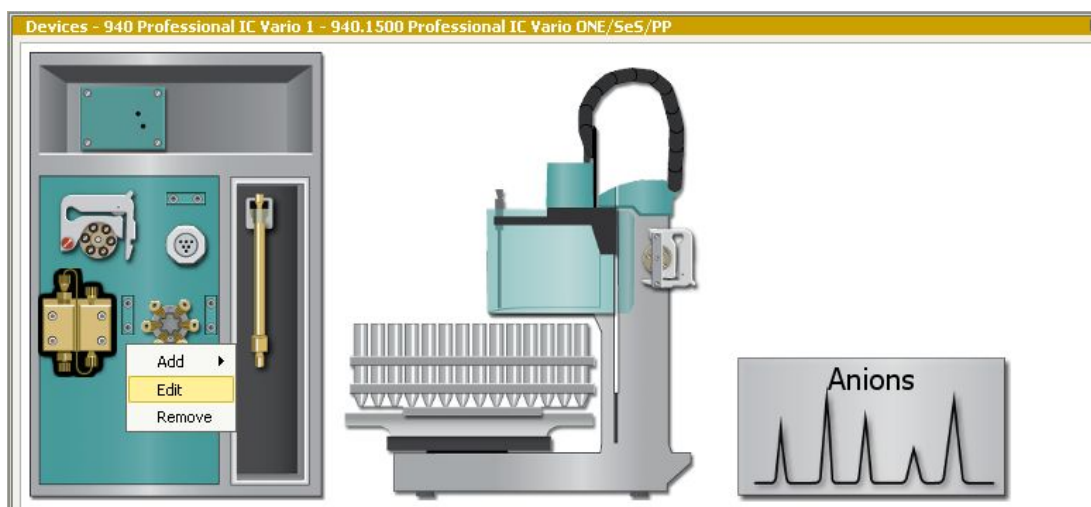
Zeitprogramm						
Hauptprogramm						
Zeit	Gerät	Modul	Befehl	Parameter	Kommentar	Nr.
	850 Professional Sample Processor 1	Rack	Drehen (Clock)	Probe position		1
	850 Professional Sample Processor 1	Turn	Lift	Arbeitsposition		2
0.0	930 Compact IC Flex 1	Injector	Füllen			3
0.0	850 Professional Sample Processor 1	Peristaltik	Ein/Aus	Ein, Geschwindigkeit=3	Sample transfer	5
3	850 Professional Sample Processor 1	Peristaltik	Ein/Aus	Aus		6
3	930 Compact IC Flex 1	Injector	Entleeren			7
3	Anions		Start Datenaufnahme			8
	850 Professional Sample Processor 1	Rack	Drehen (Clock)	Spezialbedner 1	Move to special position for...	9
	850 Professional Sample Processor 1	Turn	Lift	Arbeitsposition		10
0.0	850 Professional Sample Processor 1	Peristaltik	Ein/Aus	Ein, Geschwindigkeit=3	Rinsing	11
2	850 Professional Sample Processor 1	Peristaltik	Ein/Aus	Aus		12

Time program						
Main program						
Time	Device	Module	Command	Parameter	Comment	No.
	850 Professional Sample Processor 1	Rack	Move (Clock)		Sample position	1
	850 Professional Sample Processor 1	Turn	Lift		Work position	2
0.0	930 Compact IC Flex 1	Injector	Fill			3
0.0	850 Professional Sample Processor 1	Peristaltik	On/Off	On, Rate=3	Sample transfer	5
3	850 Professional Sample Processor 1	Peristaltik	On/Off	Off		6
3	930 Compact IC Flex 1	Injector	Inject			7
3	Anions		Start data acquisition			8
	850 Professional Sample Processor 1	Rack	Move (Clock)	Special beaker 1	Move to special position for...	9
	850 Professional Sample Processor 1	Turn	Lift		Work position	10
0.0	850 Professional Sample Processor 1	Peristaltik	On/Off	On, Rate=3	Rinsing	11
2	850 Professional Sample Processor 1	Peristaltik	On/Off	Off		12

Module names require manual translation.

Translating module names

- 1 In the subwindow **Devices** right-click on the instrument and click on **Edit**.



- 2 Type in the module names into the respective input field.

Edit device
Device: 940 Professional IC Vario 1
Device type: 940.1500 Professional IC Vario ONE/SeS/PP

Module designations
Pump: Pumpe
Injector: Injektor
Peristaltic: Peristaltik
MSM: MSM
MCS: MCS
Degasser: Degasser
Thermostat: Thermostat

OK Cancel

Edit device
Device: 940 Professional IC Vario 1
Device type: 940.1500 Professional IC Vario ONE/SeS/PP

Module designations
Pump: Pump
Injector: Injector
Peristaltic: Peristaltic
MSM: MSM
MCS: MCS
Degasser: Degasser
Thermostat: Thermostate

OK Cancel

- Click on **[OK]**

In the subwindow Time program, the module names are replaced.

Time program							
Main program							
	Time	Device	Module	Command	Parameter	Comment	No.
		858	Tower	Move (Rack)	Sample position		1
		858	Tower	Lift	Work position		2
	0.0	940	Injector	Fill			3
	0.0	940	MSM	Step			4
*							

4 Changing components in a method

When using an example method or a method extracted from an application work, it is very common that the names of components have to be adapted or translated.

Names of components appear in various locations in the software. Therefore it is important to know, where the adaptations or translations are adopted automatically, and where you have to apply them manually. This is especially important with complex methods which include user-defined variables and/or calculation commands in the time program.

Changing component name

- 1 Navigate to **Method ► Evaluation- Components**.
- 2 In the **Component table**, double-click on the component.
The **Component** window appears.
- 3 Type in the new component name and confirm with **[OK]**.

Component table					Component table				
Identification					Identification				
	Name	Time [min]	Window [%]	Reference		Name	Time [min]	Window [%]	Reference
▶ 1	Nitrito				1	Nitrite	4.248	5.0	none
2	Nitrato				2	Nitrate	5.610	5.0	none
*					*				

Automatic changes

The change of the component name is automatically applied to all linked names in the method, e.g.:

- Subwindow **Evaluation ► Standards**
- Subwindow **Evaluation ► Calibration ► Calibration curves**
- Subwindow **Evaluation ► Results ► User-defined results**
The names of the variables used in the formula are adapted automatically. However, you must change the names in the field **Result name** manually (see "Manual changes", page 9).
- Subwindow **Evaluation ► Results ► Monitoring**

Result name			Limit
1	RS.Anions.Nitrito.AREA		
▶ 2	RS.Anions.Nitrato.AREA		
*			
Result name			Limit
1	RS.Anions.Nitrite.AREA		
▶ 2	RS.Anions.Nitrate.AREA		
*			

Lower limit	0.0	($\mu\text{S}/\text{cm}$) \times min
Upper limit	= 'RS.Anions.Standard 50.Nitrato.AREA'	($\mu\text{S}/\text{cm}$) \times min

Lower limit	0.0	($\mu\text{S}/\text{cm}$) \times min
Upper limit	= 'RS.Anions.Standard 50.Nitrate.AREA'	($\mu\text{S}/\text{cm}$) \times min

Manual changes

Manual changes are required in two areas:

1. Subwindow **Evaluation ▶ Results ▶ User-defined results**
2. Variables in the time program.

Changing text strings manually

1 Text strings in user-defined results

In the **Evaluation ▶ Results ▶ User-defined results**, translate all manually entered text strings.

In the following figure, all text marked red need to be translated manually. Green texts are automatically translated.

Define result

Result type
Single result

Result name
Concentracion de nitrito valable?

Properties
Formula
= Case('RS.Nitrito e Nitrato.Nitrito.AREA' < 'RS.Nitrito e Nitrato.Standard 1.Nitrito.AREA' OR 'RS.Nitrito e Nitrato.Nitrito.AREA' > 'RS.Nitrito e Nitrato.Standard 5.Nitrito.AREA'; "resultado de nitrito fuera de la calibración"; "correcto")

Unit

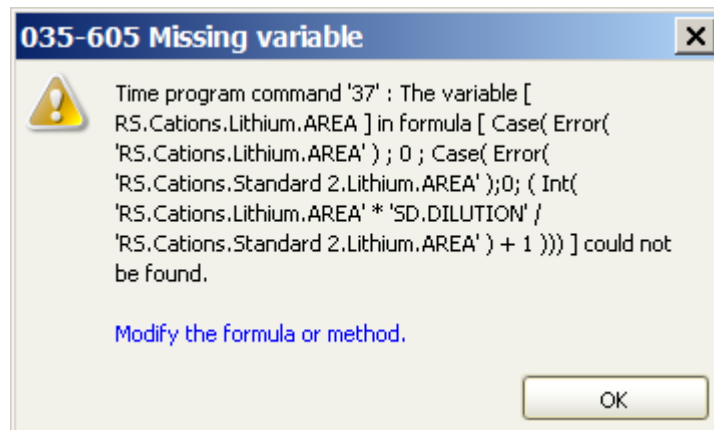
Decimal places
0

Description

1 of 1
OK
Close

2 Variables in the time program

- In the toolbar, click on  to perform a method check.




MagIC Net identifies the faulty time program command.

- In the subwindow **Time program** click on **[Edit]** then Go to....
- In the Go to window, type in the number of the faulty time program command.
- Click on **[Edit]**.
- Edit the text string in the **Name** field.

3 Check the method

- In the toolbar, click on  to perform a method check.

4 Save the method

- In the toolbar, click on .