

# User manual CMIS — Ver. 5

**Certus Management Information System®**



**Electrolux**  
PROFESSIONAL



# Contents

---

## Contents

1	Before you start.....	5
1.1	End user licence agreement and limited warranty.....	5
1.2	System requirements.....	5
1.3	Machines.....	6
1.3.1	Washers with Clarus Control.....	6
1.3.2	Washers with Compass Pro.....	7
1.3.3	Dryers with Selecta Control version 1 or 2.....	8
1.3.4	Dryers with Compass Pro.....	9
1.3.5	Ironers with Electronic control panel.....	9
1.3.6	Barrier Washers with Clarus TS.....	9
2	Installing CMIS.....	10
3	Overview.....	10
3.1	What is CMIS.....	10
3.2	Using the program.....	11
4	Software description and settings.....	13
4.1	Machine.....	13
4.1.1	Activate / Deactivate machine.....	14
4.1.2	Network information window.....	14
4.1.3	Machine name.....	15
4.1.4	Machine free text.....	15
4.1.5	Machine — Process Information window.....	16
4.1.6	Machine Programs (only washers and dryers).....	22
4.1.7	Machine — Service.....	24
4.1.8	Machine — Errors.....	27
4.1.9	Machine settings.....	29
4.2	Statistics.....	37
4.2.1	Run hours.....	40
4.2.2	Idle time.....	41
4.2.3	Machine usage.....	42
4.2.4	Total consumption.....	43
4.2.5	Water.....	46
4.2.6	Chemicals.....	47
4.2.7	Energy.....	48
4.2.8	Weight.....	49
4.2.9	Ironed pieces.....	50
4.2.10	Washing cycles.....	51
4.2.11	Drying cycles.....	53
4.2.12	Ironing batches.....	55
4.3	Process validation.....	57
4.4	System setup.....	61
4.4.1	Network settings — System level.....	69
4.4.2	Network settings — Network level.....	71
4.4.3	Network settings — Machine level.....	73
4.4.4	Main settings.....	79
4.4.5	Database settings.....	84
4.4.6	Health care settings.....	88
4.4.7	Set up working days.....	94
4.4.8	Customize application.....	95
4.4.9	Process viewer.....	96
4.5	Pop-up menus for service alarms.....	98
4.6	Pop-up menus for error codes.....	99
5	Trouble shooting.....	99
5.1	Communication.....	99
5.2	Process verification.....	100
5.3	Statistics.....	100
5.4	Miscellaneous.....	101

The manufacturer reserves the right to make changes to design and component specifications.



# 1 Before you start

## 1.1 End user licence agreement and limited warranty

### 1. INTRODUCTION

1.1 - This is a contract between you and Electrolux Professional AB. You must accept this license agreement in order to install and use the software.

### 2. USAGE

2.1 - You may install one copy of the software onto a hard drive or another storage device up to the Permitted number of computers.

2.2 - You may install one copy of the software on a single file server for the purpose of downloading and installing the software onto a hard disk or other storage device.

2.3 - You may make backup copy of the Software, in accordance with the provisions of the European Communities (Legal protection of Computer Programs) Regulations, 1993, provided your backup copy is not installed or used on any other computer.

2.4 - You must accept the license agreement from Embarcadero regarding the use of Interbase in order to install and use CMIS.

### 3. COPYRIGHT

3.1 - The software and any copies that you make are owned by Electrolux Professional AB and its suppliers.

3.2 - Interbase is a product of Embarcadero Technologies, Inc.

### 4. LICENSE TRANSFER

4.1 - You may not rent, lease, sublicense or lend the software without written approval from Electrolux Professional AB.

### 5. WARRANTY DISCLAIMER.

5.1 – The software is provided "AS IS and without warranty of any kind. To the maximum extent permitted by applicable law, Electrolux Professional AB and its licensors and suppliers hereby exclude and disclaim all implied or statutory warranties.

5.2 – There is no warranty that the product will be error-free or will function without interruption. You assume the entire risk for the result obtained using the product.

### 6. LIMITATION OF LIABILITY.

6.1 – In no event will Electrolux Professional AB or its suppliers be liable to any party for any direct, indirect, incidental, consequential, exemplary, special or punitive damages, including any loss of profit, revenue, business opportunity or data, arising from or relating to this license or the product, whether in contract, in tort or otherwise, even if Electrolux Professional AB knew, should have known or has been advised of the possibility of such damages.

## 1.2 System requirements

System requirements for CMIS are divided in three parts, PC, Network and Machine.

### PC

- Microsoft Windows XP (x86), Windows Vista (x86/x64), Windows 7/8/10 (x86/x64)
- Microsoft Internet Explorer 6.0 or higher
- Intel Pentium compatible, 900Mhz or better
- Recommended Free Harddisk space is 10 GB
- SVGA display 1280 x 1024 resolution
- CD-ROM drive
- 1 Free serial port (9-pole DSUB, DB9M)
- Mouse or compatible pointing device

### Network

- Maximum 30 machines connected to a single network
- Maximum length of wire in a network is 500 meters

Recommended wire: Type: Control, Instrumentation or Computer cable. Stranded wire, Tinned Copper, 4 x 0.22mm2 (= 4 x AWG24), Diam 4-5 mm.

Insulation: PVC insulation, 300V, 70°C or better. Approvals: According to local regulations.

## 1.3 Machines

### 1.3.1 Washers with Clarus Control

#### Hardware

If the machine is not equipped with the CMIS option from factory, use Machine interface, kit No 1 for all machines except FLE400FC, FLE850MP, W3400H - W31100H and W4400H - W41100H, WUD7100 - WUD7265

For W3400H to W4600H (– 980/1571) and W3850H to W41100H (– 1220/730) use Machine interface, kit No. 2.

For W4400H, W4600H (980/1572 –) and W4850H, W41100H (1220/731 –), WUD7100, WUD7145, WUD7200 and WUD7265 use Machine interface, kit No. 9.

CMIS is connected to a serial port (X7) on Clarus Control CPU board. It is important to verify that serial port is free to use. In some specific installations this serial port might have been used for larger Liquid supply systems. Verify this with the supplier of liquid supply before an installation is made. Alternative solutions are available.

#### Software

CMIS protocol is implemented in Clarus Control software as listed below:

FLE125, FLE175, FLE225, FLE400FC, FLE850MP,  
FLE335MP, EXSM230, EXSM350, W3400H,  
HS 2120, HS 2170, HS 2220, NS 2325, HS 2400

Version 3.4 and later

W375N to W3330N

W385M to W3330M

W365H to W3300H

W3600H, W3850H, W31100H

W3280X, W3350X, W3600X

EXSM665c, EXSM680c, EXSM6135c

Version 1.0 and later

W475M to W4330M

W475S to W4330S

W465H to W4300H

W4400H to W41100H

WUD7100 to WUD7265

All versions

WS/WSB3230H to WS/WSB3670H

WS/WSB4250H to WS/WSB4650H

WPB3690H to WPB31080H, B7-700, B7-900, B7-1100

Version 1.8 and later

Version number could normally be verified by reading part no and version number in top line of display of Clarus Control.

Machines with earlier versions of software than above listed need to be updated to support CMIS.

## 1.3.2 Washers with Compass Pro

### Hardware

CMIS requires a machine interface kit to be installed in the machine.

Use Machine interface, kit No 8 for all machines

CMIS is connected to the serial port (RS232) on Compass Pro CPU board.

### Software

CMIS protocol is implemented in Compass Pro software versions as listed below:

W555H,

W575N to W5330N,

W585S to W5330S,

W565H to W5300H,

W5280X, W5350X, W5600X,

W720 to W777,

SU720 to SU777,

EX718 to EX775,

EXSM765, EXSM780, EXSM7135

WUD718 to WUD775

WED720 to WED777

WLD720 to WLD777

WSD765, WSD780, WSD7135, H7-55, H7-75 to H7-300, S7-75 to S7-330, N7-75 to N7-330

Version 6.36 and later

WB5130H, WB5180H, B7-130, B7-180

Version 6.36 and later

WD5130, WD5240

WDX730, WDX755

Version 6.36 and later

WSB5180H, WSB5250H, WSB5350H,

WS5180H, WS5250H, WS5350H

Version 6.36 and later

WS/WSB5200H, WS/WSB5270H

Version 8.24 and later

WH/WHB5500H, B7-500

Version 8.22 and later

Version number can be verified by reading FW version number in Service mode under Config 1 – System – System information – CPU, on the machine.

Machines with earlier software versions than above listed need to be updated in order to fully support CMIS.

### 1.3.3 Dryers with Selecta Control version 1 or 2

#### Hardware

CMIS requires a machine interface kit to be assembled in machine.

Following installation kit should be used:

Interface machine, kit No. 3 (Selecta Control version 1)

T3190

T3250

T3290 up to machine No. –20300/26304 and –03290/539

T3300

T3350

T3530 up to machine No. –20500/21748

T3650 up to machine No. –20750/9162

T4250 up to machine No. –23250/6969

T4350 up to machine No. –23250/6969

Interface machine, kit No. 5 (Selecta Control version 2/Compass Control)

T4130

T4190

Interface machine, kit No. 6 (Selecta Control version 2/Compass Control)

T4300

Interface machine, kit No. 7 (Selecta Control version 2/Compass Control)

T3290 from machine No. 20300/26305– and 3290/540–

T3530 from machine No. 20500/21749– and 60500/xxxx

T3650 from machine No. 20750/9163– and 60750/xxxx

T3900

T31200

T4250 from machine No. 23250/6970– and 04250/xxxx–

T4290

T4350 from machine No. 23250/6970– and 04350/xxxx–

T4530

T4650

T4900/ T4900CR

T41200/ T41200CR

D7100

D7135

#### Software

Selecta Control version 1

CMIS is implemented in Selecta Control software version 3.23 or later.

Version number can be read at the label on the Process module or in the service menu parameter number 3.07.

It is possible to upgrade an older version of Selecta control to a version that supports CMIS by installing 988 9162-37

Upgrade kit Selecta 110.

Selecta Control version 2

CMIS is implemented in Selecta Control software version 4.10 or later.

Version number can be read in service menu parameter number 3.07.

It is possible to upgrade an older version of Selecta Control by installing an upgrade kit for the actual dryer type.

Please refer to spare part list for more information.



### 1.3.4 Dryers with Compass Pro

#### Hardware

CMIS requires a machine interface kit to be installed in the machine.

Use Machine interface, kit No 8 for all machines.

#### Note!

**T5300S/TD30X30P/D735S/D7300S and T5425S/TD45X45P/D750S/D7425S requires 2 sets of machine interface kit.**

CMIS is connected to the serial port (RS232) on Compass Pro CPU

#### Software

CMIS protocol is implemented in Compass Pro FW versions as listed below:

T5130, T5130C, T5130LE

T5190, T5190LE,

T5290, T5500, T5675,

T5250, T5350,

T5300S, T5425S,

TD6-7, TD6-14, TD6-20, TD6-7HP, TD6-14HP, TD6-20HP, TD35, TD67, TD83, TD30X30P, TD45X45P,

D715, D730, D745, D735, D767, D783, D735S, D750S, D715HP, D730HP, D745HP,

D7-130, D7-135, D7-190, D7-290, D7-255, D7-360, D7-550, D7-675, D7-135HP, D7-255HP, D7-360HP

Version 6.36 and later

Version number can be verified by reading FW version number in Service mode under Config 1 – System – System information – CPU, on the machine.

Machines with earlier FW versions than above listed need to be updated in order to support CMIS.

### 1.3.5 Ironers with Electronic control panel

#### Hardware

CMIS requires interface kit machine to be assembled in ironer.

Use Machine interface, kit No. 4 (Electronic Control panel) for following models:

IC33316 to IC33320

IC43316 to IC43320

IC35019 to IC35032

I7-3316 to I7-3320

I7-4819 to I7-4832

#### Software

Electronic Control panel:

CMIS is implemented in software version 5.5 and later.

Version number can be read in display during power up.

It is possible to upgrade an ironer from older software version by replacing CPU.

Contact ELS for more information.

### 1.3.6 Barrier Washers with Clarus TS

#### Hardware

If the machine is not equipped with the CMIS option from factory, use Machine interface, kit No 10.

CMIS is connected to the serial port CP1 in Clarus TS electric cabinet.

#### Software

CMIS protocol is implemented in Clarus TS software as listed below:

WP/WPB4700H to WP/WPB41100H

WH/WHB5500H

Version 2.50 and later.

Software version number can be verified by reading part no and version number in top line of display of Clarus TS display.

Machines with earlier versions of software than above listed must be updated in order to fully support CMIS.

## 2 Installing CMIS

See the installation manual for installing CMIS.

## 3 Overview

### 3.1 What is CMIS

CMIS is an easy to use easy to install Management Information System with centralized administration from one PC. CMIS is built up with a PC, a multi-drop network designed to handle up to 30 machines, and finally washing machines, tumble dryers and ironers built with latest technology from Electrolux Professional AB.

CMIS gives you all vital statistics from your washer extractors, tumble dryers and ironers. You can use the data to identify and remove any wastage, thereby minimizing costs.

Information as:

- Run time
- Idle time
- Machine usage
- Total consumption
- Water consumption
- Detergent consumption
- Energy consumption
- Load (machines with IWS or AWS\* only)
- Washing cycles
- Drying cycles
- Ironing batches
- Ironed pieces

is available.

CMIS provides process validation and proof of compliance, thereby proving you meet customers' demands.

CMIS alerts you to process errors and logs maintenance work, thereby maximizing uptime.

In short, CMIS lets you fine-tune your process for maximum profitability — while at the same time securing quality results and your professional reputation.

\* Weight of wash load only available on Clarus Control and Compass Pro Barrier washers with IWS, and Compass Pro washers with AWS (firmware version 8.14 and above).

## 3.2 Using the program

### Note!

In order to be able to view all screens shown in this manual, it is required that the network is physically set up and that machines are connected according to the installation manual.

When CMIS is started, the machine information menu is displayed.

Using this menu, there are a number of different ways of navigating in the program. The same function can be activated in several ways.

In this manual we describe one of the methods, but you may find after having worked with the program for a while that another suits you better.

For example, statistics can be activated in one of the following ways:

1. Click on the Statistics button.
2. Select required statistics in the application main menu Statistics.
3. Select Show statistics page in View.
4. Click directly on the required statistic in the Toolbar.

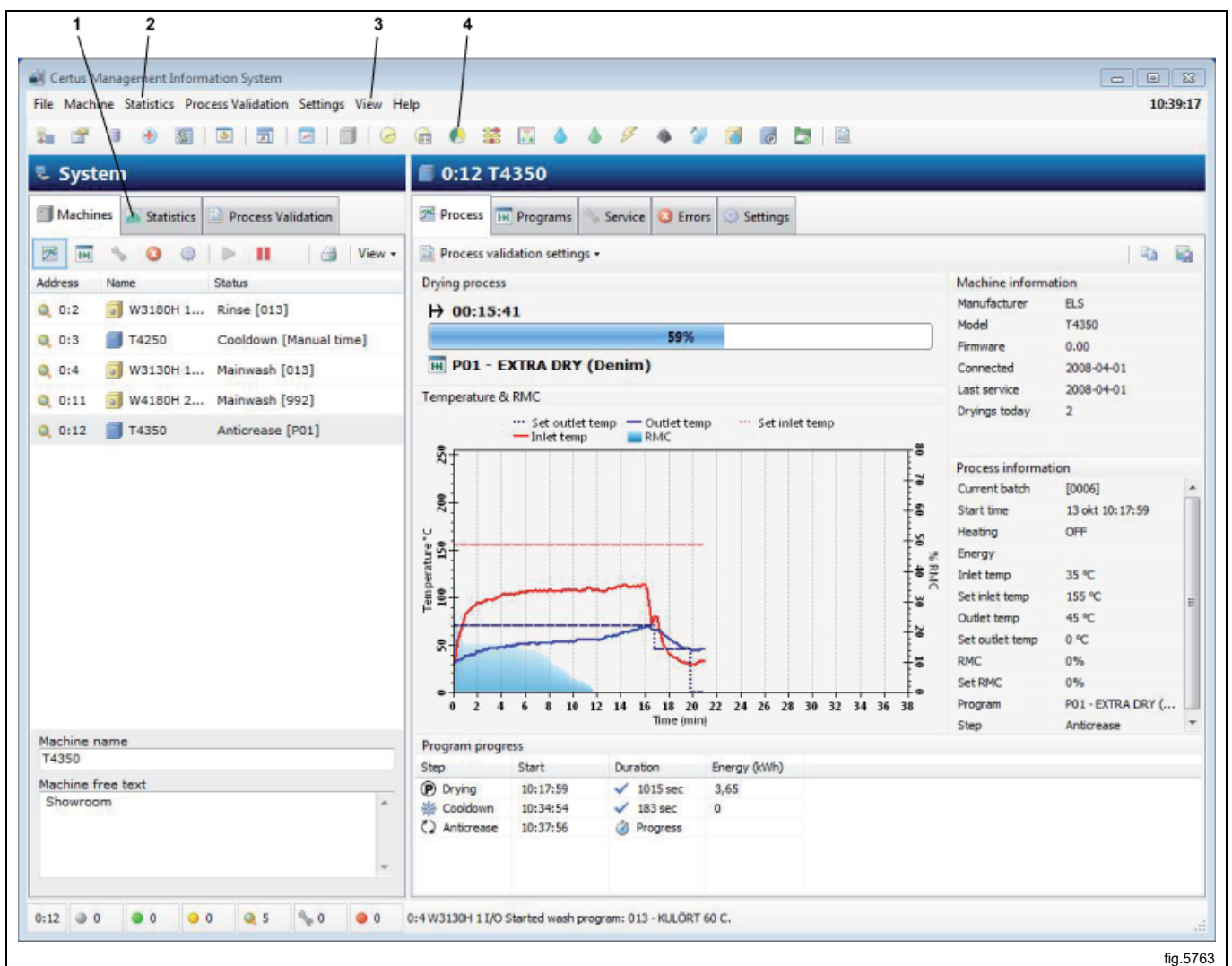


fig.5763

Using the right mouse button, there are always a number of functions which can be adapted depending on which menu you are in.

The method you choose depends on how you are used to working and what suits you best.

The following menus and functions are always shown in CMIS:

1. Short-cuts to Network settings, Main Settings, Database Settings, Health Care Settings, Working Days Settings, Customize, Full Screen, Process Viewer, View Machines.
2. Main menu **File**. Backup functions and process viewer.
3. Main menu **Machine**. Processes, programs, messages, settings and other machine related information. See also 13, 14, 15, 16 and 17.
4. Main menu **Statistics**. Run hours, consumption figures and other statistics.
5. Main menu **Process Validation**. Lets you select time interval to view validated processes within.
6. Main menu **Settings**. List of settings for network, application, database and health care.
7. Main menu **View**. Lets you select to view Machines, Statistics or Process Validation. See also 9, 10 and 11.
8. Main menu **Help**. Link to CMIS Homepage, view CMIS version.
9. Short-cuts for functions under Statistics
10. Quick button to view Machines screen.
11. Quick button to view Statistics screen.
12. Quick button to view Process Validation screen.
13. Short-cuts for functions under Process validation.

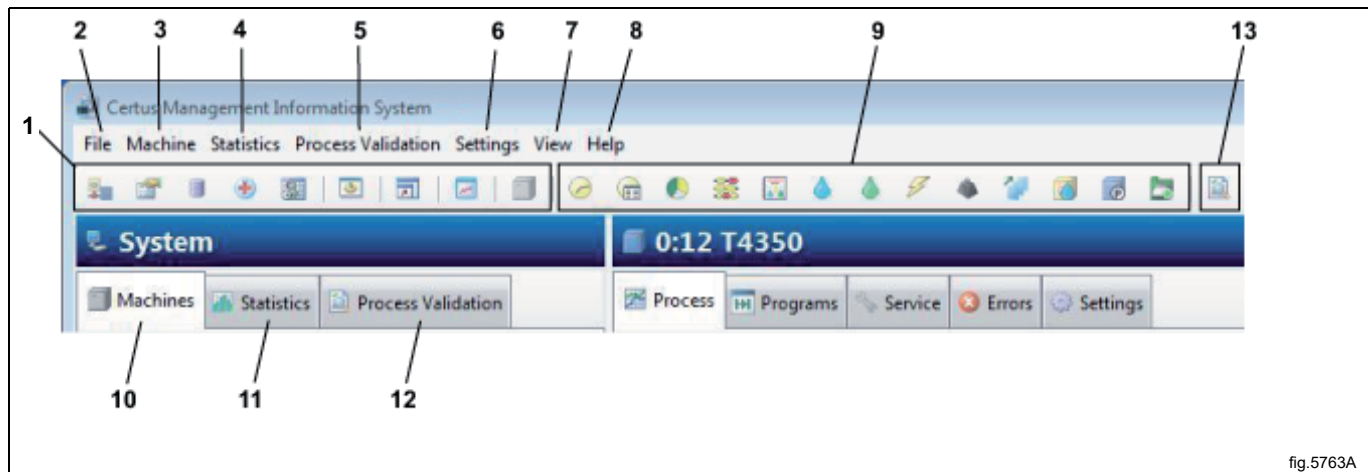


fig.5763A

Further information on each function is described in this manual.

## 4 Software description and settings

### 4.1 Machine

Machine Information could be accessed by simply pressing the Machines button in the System window or by using any of the application main menus Machine or View. The positions of the buttons and fields for Machine are displayed below.

1. Quick buttons to information view
2. Activate Machine button
3. Deactivate Machine button
4. Printer button
5. Network information window. Displays address, name and status for the machines in the network
6. Shows selected machine's name
7. Machine free text. Shows additional text for a machine

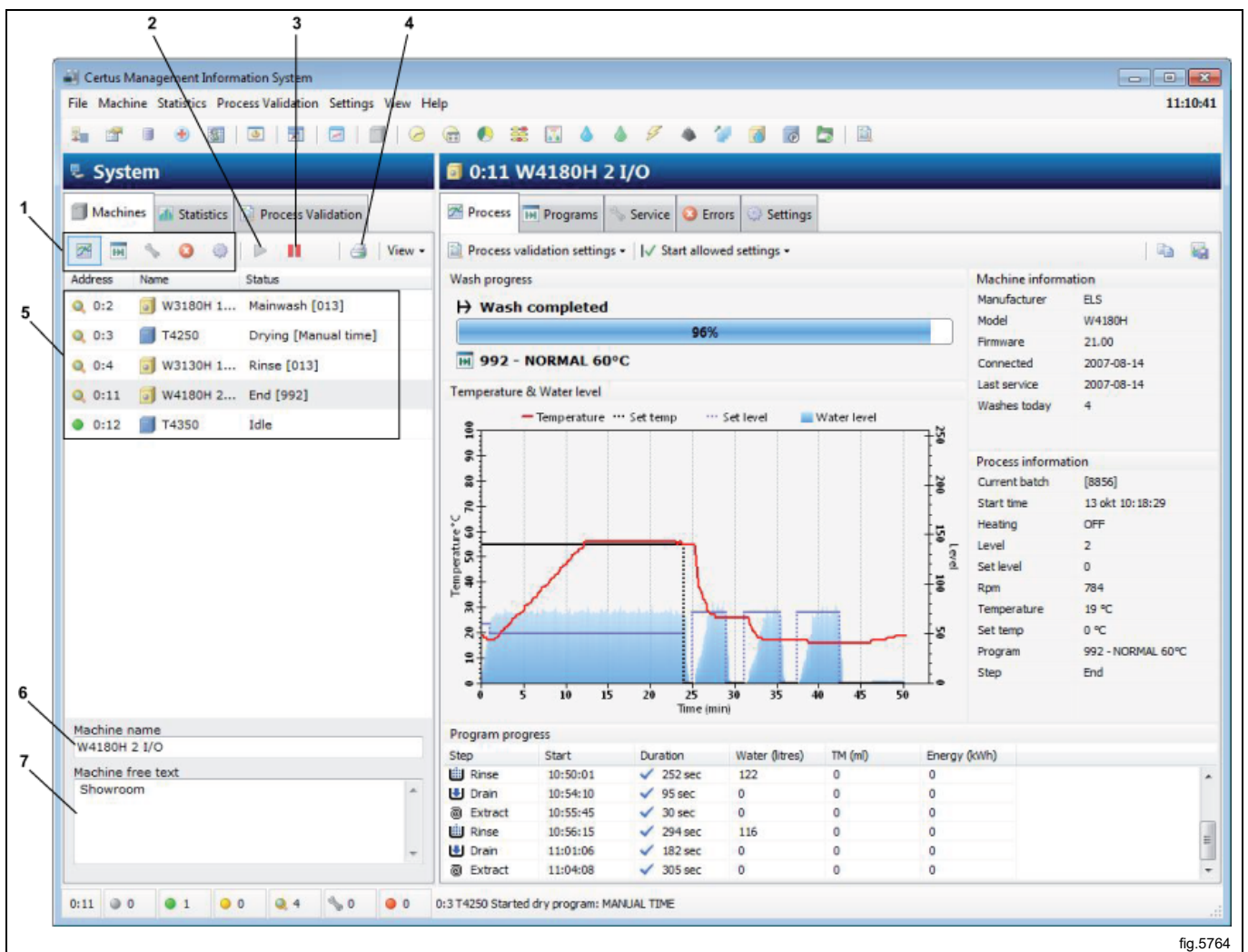





fig.5764

Certain buttons and fields are accessible in all sub-menus in Machines view.

	Printer button
	Activate machine
	Deactivate machine
	Network information window
	Machine name
	Machine free text

Quick buttons to the available views in Information window:

	Machine Process
	Programs in machine
	Service, previous and future
	Error log
	Machine settings

### 4.1.1 Activate / Deactivate machine

Activate is used to activate a machine in the network.

Deactivate is used to deactivate a machine in the network that temporary should or could not collect data. If a machine is not connected and the communication time-out's for a long period it loads the communication in the network. For best performance it is recommended to disable those machines manually by pressing Deactivate. Reason for this could be that machine is disconnected from power because of longer service or failure etc.

If CMIS for some reason is closed down and a machine has timed-out, it will automatically be disabled at start, and need to be activated manually again in order to retrieve data.

### 4.1.2 Network information window







Network information window is divided in three columns:

- Address
- Name
- Status

#### Address

The address shows all machines in Network where the first digit is the Network designation and the second digit is the machine address number. This number is set in service mode of the machine, see CMIS installation manual.

In front of the Machine address an Icon shows the status of the machine:

	Machine inactive (i.e. deactivated)
	Machine idle
	Machine in process – Normal run
	Machine in process – Process validated
	Machine in service menu
	Machine alarm/Error on machine or in network

#### Name

This field describes which type of machine each machine address in the network corresponds to. Machine name is configured from factory as the standard Model Name, but could easily be changed in the field "Machine name" at the bottom of the System window.

#### Status

Status column shows actual information about selected program, program step, error code etc for all machines in network.

### **4.1.3 Machine name**

Here you can change the name of selected machine.

### **4.1.4 Machine free text**

In this field you can enter additional information for a specific machine, useful if the customer want to make a detailed description of the machine.

## 4.1.5 Machine — Process Information window

The Process window provides actual information on the status of all active machines in the CMIS network. It uses different window layouts depending on which kind of machine is selected, washer, dryer or ironer. Below is an example from a washer.

1. Wash / drying progress. Ironing batch
2. Process information
3. Machine information
4. Temperature / water level / RMC graph
5. Program progress / Ironed pieces

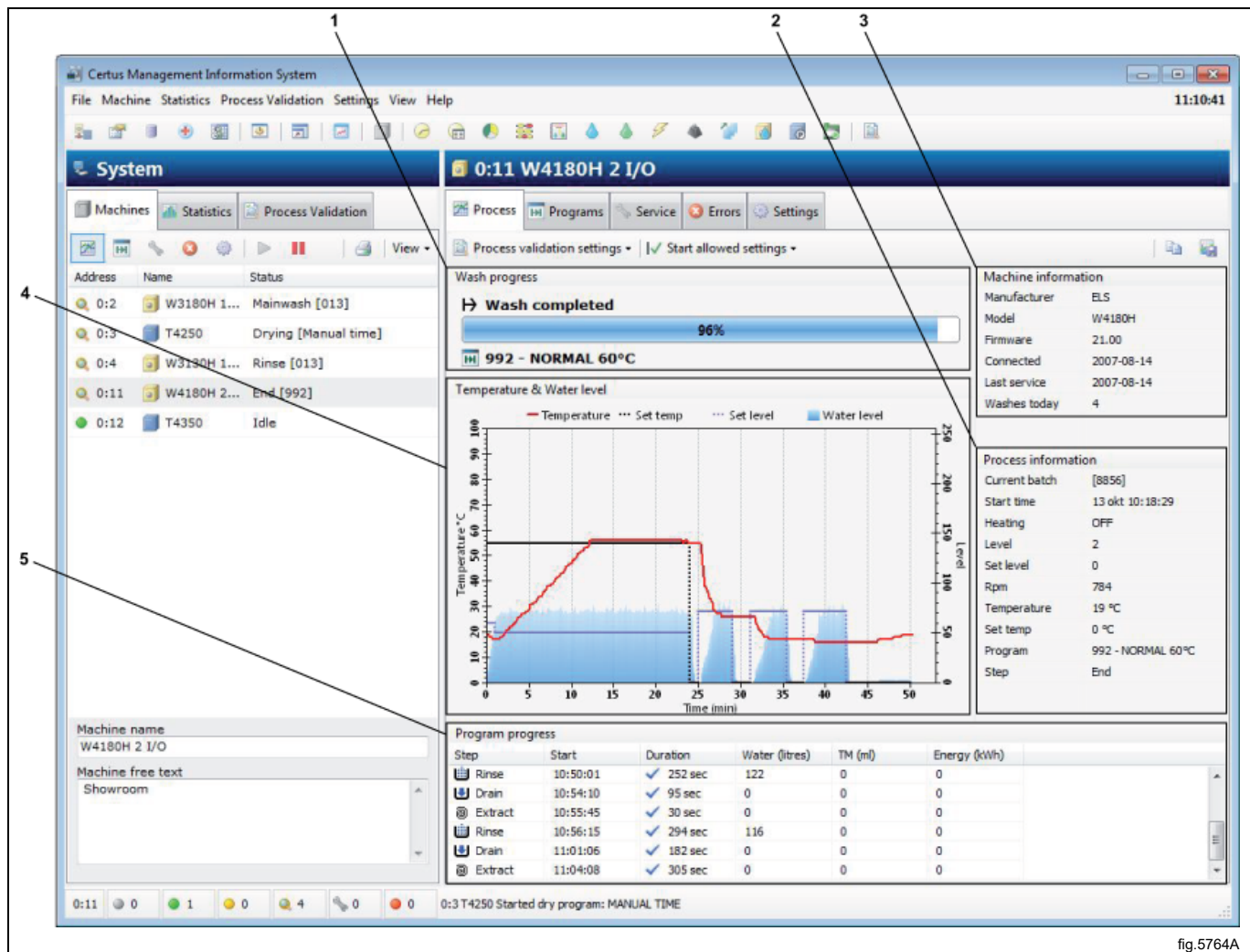


fig.5764A

A closer description of the Process window for different machine types:

### 4.1.5.1 Process Information window — Washers

#### Machine information

Gives additional information of the selected machine in the System window, such as Manufacturer, Model, Firmware version in machine, Date when connected to network, Time for last service and Number of wash cycles today.

#### Process information

Gives additional information about an existing process for the selected machine.

Some information is only available when machine is running.



**Current Batch**

Batch ID could be configured to be entered manually on the washing machine (at start of a wash) or created automatically by the washing machine.

A manually entered Batch ID is displayed as a four digit number ex 1234.

An automatically created Batch ID is always displayed as a four digit number with square hatches ex [3224].

For configuration of Batch ID see System setup/Run settings.

**Start time**

Shows start time of current wash cycle.

**Heating**

Shows whether machine is heating or not.

**Level**

Shows actual level in Scale units.

**Set level**

Shows programmed level in Scale units for current wash module.

**Rpm**

Shows actual drum speed in Rpm.

**Temperature**

Shows actual temperature.

**Set temp**

Shows programmed temp for current wash module.

**Program**

Shows actual wash program number and name.

**Step**

Shows current program step.

**Wash progress**

Shows:

- Actual run time for selected wash
- Wash progress bar showing percentage of estimated program run time
- Program number and name

**Temperature & Water level**

Shows a graph of current wash cycle including values for Set temperature, Actual temperature, Set level and actual level for selected machine/program.

**Program progress**

Shows additional information about existing program

Start time of program step

Duration of program step

Consumption data during each program step. Data is calculated from values set in Machines – Settings.

**Zoom the graph**

Zoom in by selecting a point in the graph with left mouse button and drag down to the right of the area you want to zoom.

This could be done repeated times.

Zoom out by selecting a point in the graph with left mouse button and drag up to the left. This will revert the graph to full zoom.

**4.1.5.2 Process Information window — Dryers****Machine information**

Gives additional information of the selected machine in the System window, such as Manufacturer, Model, Firmware version in machine, Date when connected to network, Time for last service and Number of drying cycles today.

**Process information**

Gives additional information about an existing process for a specific machine.

Some information is only available when machine is running.

**Current Batch**

Shows current batch number.

For dryers, batch ID is always created automatically by machine.

**Start time**

Shows start time of current drying cycle.

**Heating**

Shows whether machine is heating or not.

**Energy**

Shows current energy consumption.

**Inlet temp**

Shows actual inlet temp.

**Set inlet temp**

Shows programmed inlet temp for current drying cycle.

**Outlet temp**

Shows actual outlet temperature.

**Set outlet temp**

Shows programmed outlet temp for current drying cycle.

**RMC**

Shows actual RMC value (Residual Moisture Content) for current drying cycle. (Only dryers with RMC system, if an RMC controlled program is run)

**Set RMC**

Shows programmed RMC value for current drying step.

**Program**

Shows actual drying program number and name.

**Step**

Shows current program step.

**Drying progress**

Shows:

- Actual run time for selected wash/drying
- Wash/Drying progress
- Program number and name

**Temperature & RMC**

Shows a graph of current drying cycle including Set Inlet / actual inlet temperature, Set Outlet / actual outlet temperature.

Set RMC / actual RMC is shown if dryer is equipped with RMC meter and program is an RMC program.

**Program progress**

Shows additional information about existing program

Start time of program step

Duration of program step

Consumption data during each program step. Data is calculated from values set in Machines – Settings.

**Zoom the graph**

Zoom in by selecting a point in the graph with left mouse button and drag down to the right of the area you want to zoom.

This could be done repeated times.

Zoom out by selecting a point in the graph with left mouse button and drag up to the left. This will revert the graph to full zoom.

**4.1.5.3 Process Information window — Ironers****Machine information**

Gives additional information of the selected machine in the System window, such as Manufacturer, Model, Firmware version in machine, Date when connected to network, Time for last service and total number of pieces ironed today.

**Process information**

Gives additional information about an existing process for a specific machine.

Some information is only available when machine is running.

**Current Batch**

Shows current batch number.

For ironers batch ID is always created automatically by machine.

**Run mode**

Shows current run mode, auto or manual.

**Start time**

Shows start time of current batch.

**Energy**

Shows energy consumption for current batch.

**Heating**

Shows whether machine is heating or not.

**Piece counter**

Piece counter for current batch.

**Set temp**

Shows programmed temp for current batch.

**Left temp**

Shows actual temp on left hand side of cylinder.

**Middle temp**

Shows actual temp on middle of cylinder.

**Right temp**

Shows actual temp on right hand side of cylinder.

**Cylinder speed**

Shows actual cylinder speed for current batch.

**RMC out**

Indicates if current RMC out (Residual Moisture Content) is above or below set limit.

**Step**

Indicates if ironer is running.

**Ironing batch**

Shows:

- Actual run time for selected ironing batch
- Status (heating/running/ready/cooling down)
- Number of pieces processed in current batch

**Temperature & RMC**

Shows a graph of current ironing batch including:

- Set temperature
- Actual temperature on left / right and centre of cylinder.
- Accepted RMC level \*
- Average RMC out for each ironed piece \*

**Ironed pieces**

Shows additional information about processed pieces:

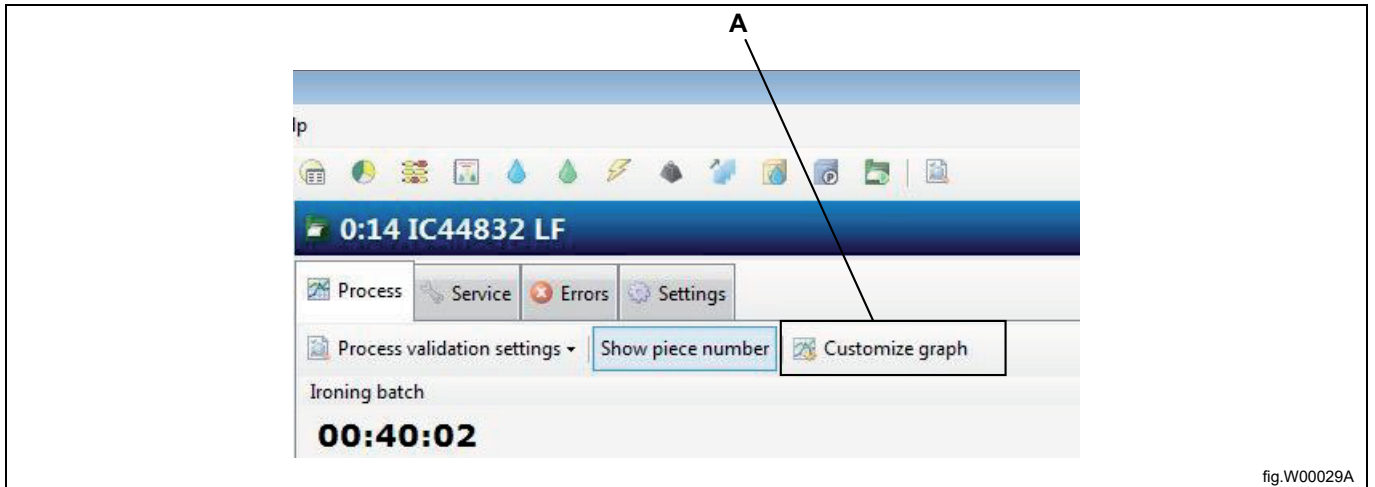
- Piece number
- Time when start processing
- Ironing time for sheet
- Average RMC value for current sheet \*
- Length of each ironed piece, calculated in ironer

**Note!**

\* When Health care settings for ironers is activated, accepted RMC level will be shown in graph. Sheets with RMC exceeding this level will be coloured red = Not accepted.

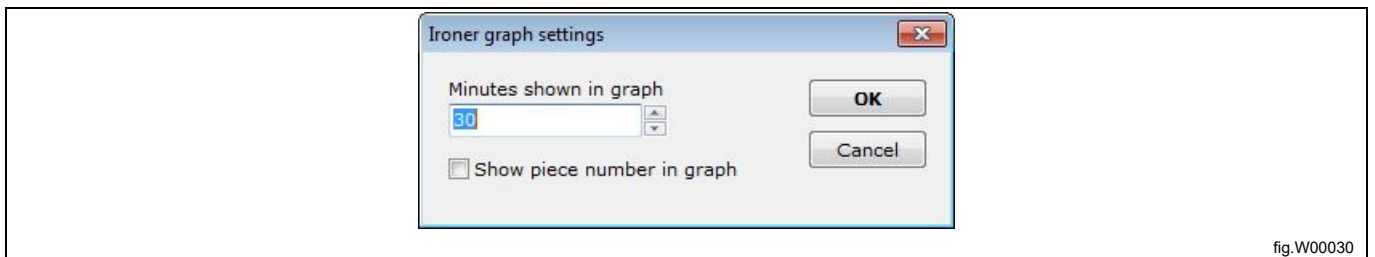
## Customize graph

For ironers it is possible to customize the graph by clicking the “Customize graph button” (A).



From the Customize graph window you can:

- Set up how many minutes that should be displayed in graph (default 30 minutes).
- Decide whether piece number should be displayed in graph or not.



## Zoom the graph

Zoom in by selecting a point in the graph with left mouse button and drag down to the right of the area you want to zoom.

This could be done repeated times.

Zoom out by selecting a point in the graph with left mouse button and drag up to the left. This will revert the graph to full zoom.

### 4.1.6 Machine Programs (only washers and dryers)

The Programs window provides information about which programs are available in each machine in the network. Here you can:

- Retrieve or update the program library for a machine.
- Reset program information.
- See a list of currently available programs.
- See Program information.

1. Fetch program library
2. Reset program information
3. Field displaying the machines programs
4. Program information

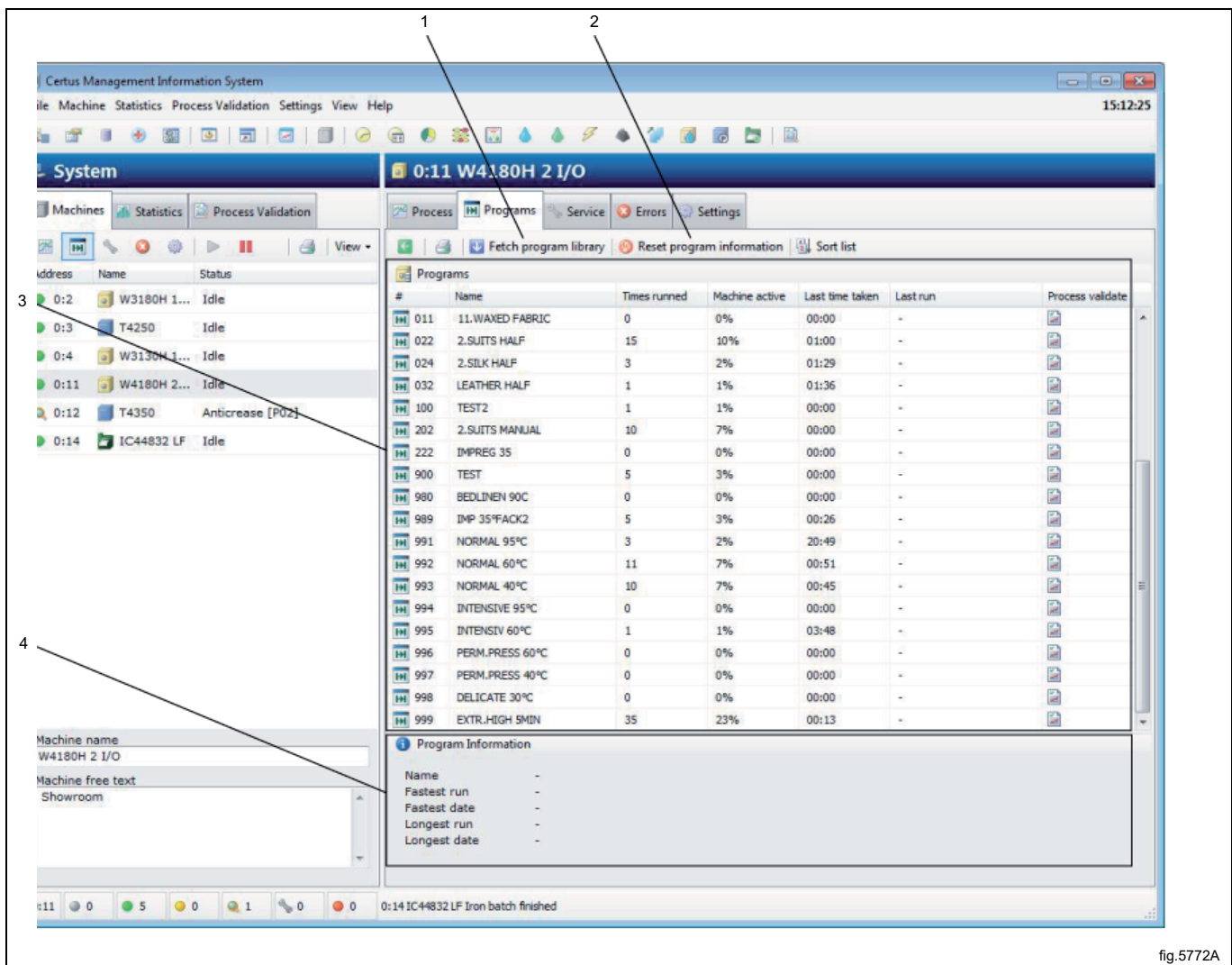


fig.5772A

#### 4.1.6.1 Fetch program library

Fetch program library is a function for updating the program library in CMIS for a specific machine. This could be necessary if the machine was not in the idle position when it was configured or if the machine has been supplemented with additional programs.

To retrieve or update the program library for a machine:

1. Make sure the machine from which the program library is to be retrieved is idle position, showing the main menu.
2. Select Machines view in Systems window.
3. Select the desired machine.
4. Select Programs view.
5. Click on Fetch program library.

## **4.1.6.2 Reset program information**

Pressing this button will clear all collected program data like number of programs run, program run times and last run, for selected machine.

## **4.1.6.3 Field displaying the selected machine programs**

Displayed here are the programs in the selected machine.

## **4.1.6.4 Program information**

Program information is a field containing more detailed information about a selected program.

### 4.1.7 Machine — Service

The Service window provides information about all the alarms that have been issued for the machine. Service alarms are grouped for each machine and are displayed when a machine is selected. Under Machine service, you can see whether the service has been carried out, as well as when and by whom.

To define your own service alarms, see Machine - Settings / Custom service.

In Machine service it is possible to:

- Acknowledge service alarms and print service reports.
- Remove old service alarms (= purge).
- Check service in the service alarm field.
- Quickly inspect information about service alarms in the Service Performed field.

1. Printer
2. Service machine
3. Purge
4. Field for service alarms
5. Field for more detailed text about service alarms

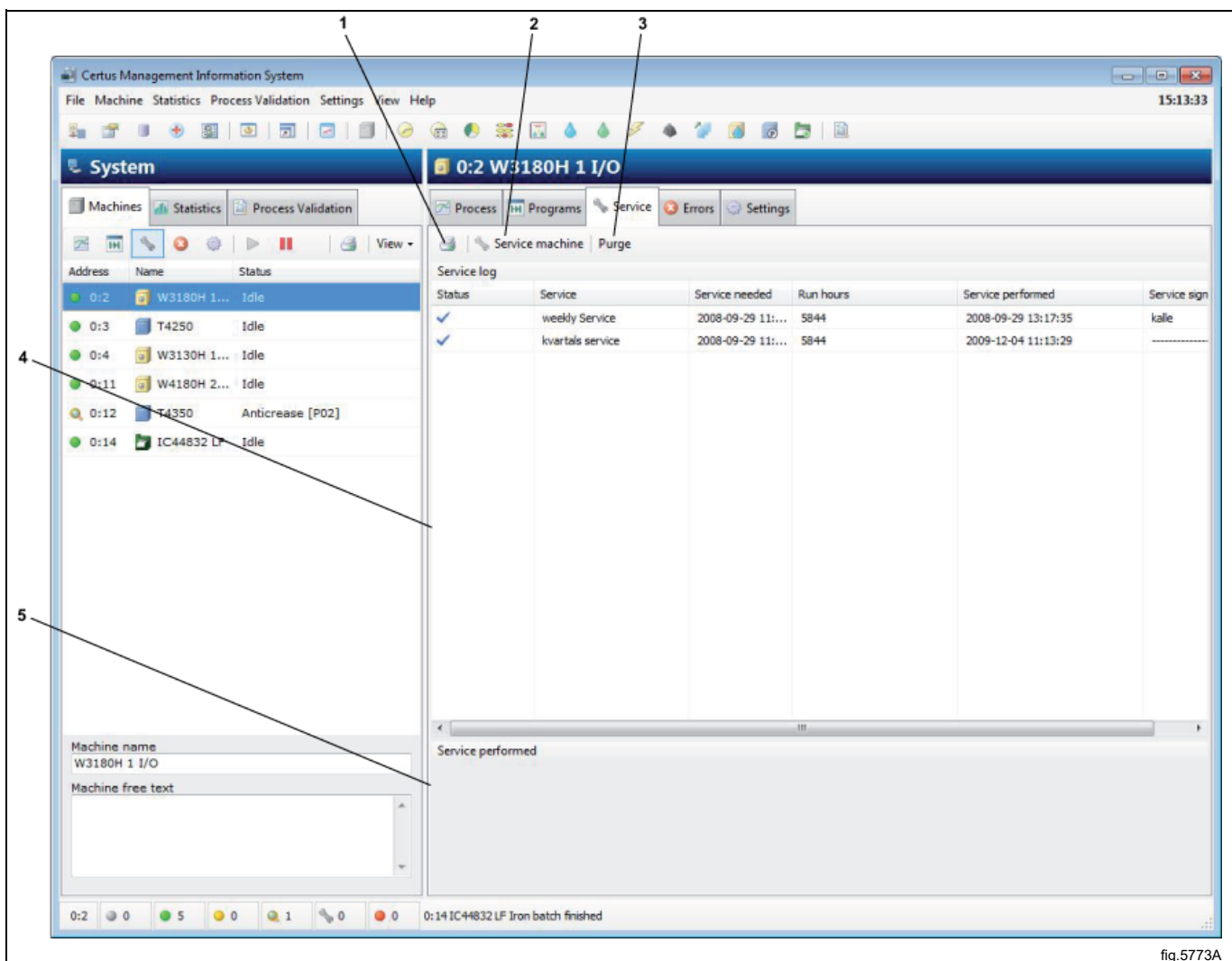




fig.5773A



### 4.1.7.1 Field for service alarms

Status

	Indicates service not yet acknowledged.
	Indicates acknowledged service.

Service needed — Time for service alarm.

Run hours — The machine's operating time in hours.

Service performed — Time when the service was acknowledged.

Service sign — Signature of person carrying out service.

### 4.1.7.2 Purge

Purge clears the database in accordance with the settings in System Setup / Database settings. Service alarms older than the settings in Passive database are completely deleted.

To remove old service alarms:

1. Select Machines view in Systems window
2. Select desired machine
3. Select Service view
4. Click on Purge

### 4.1.7.3 Service machine

Service machine is used to acknowledge a service alarm and print a service report for the alarm. In addition, it is possible to enter text about the service carried out.

To acknowledge service alarms and print service reports:

1. Select Machines view in Systems window
2. Select the relevant machine
3. Select Service view
4. Check the service notification shown and carry out any necessary service work on the machine.
5. Click on Service machine and acknowledge service alarms with your name or signature. Click on Printer if you require a service report to be printed.

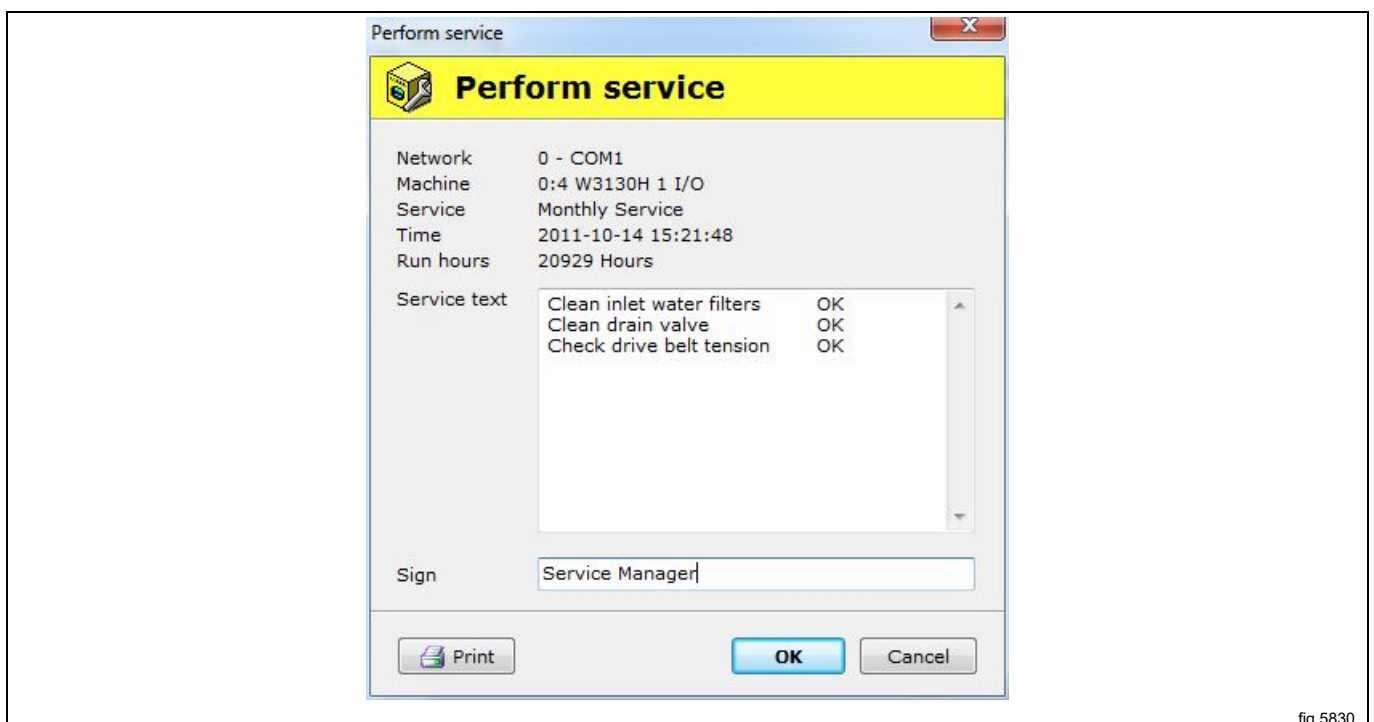


fig.5830

**4.1.7.4 Service performed**

In the Service performed field it is possible to quickly inspect the selected service alarm.

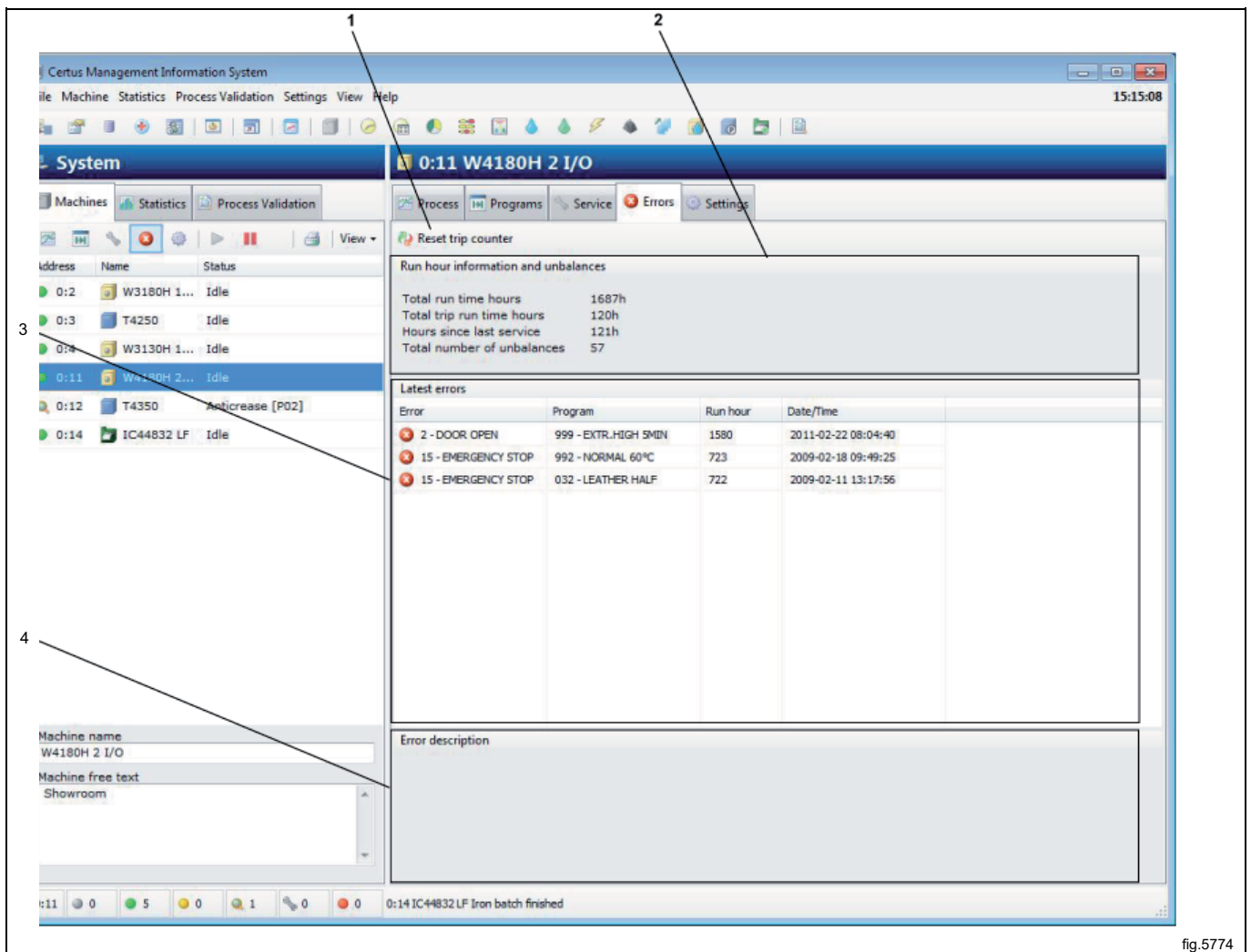
### 4.1.8 Machine — Errors

Machine errors view provides information about the most recent error codes for each machine in the network. Error codes are grouped for each machine and displayed when the relevant machine is selected.

In Machine error it is possible to:

- Reset the trip counter to operating time (Reset trip counter).
- View operating times and number of unbalances (only washers).
- View the most recent error codes faults for each machine.
- Read a more detailed description of the error, including information on recommended remedial action.

1. Reset trip counter for operating time
2. Operating time and unbalance counter
3. Field for the most recent error messages for each machine
4. Error description with recommended action



#### Reset trip counter for operating time

This is a function for resetting the trip counter for operating time. This can be done e.g. when a service is being carried out.

To reset the trip counter:

1. Select Machines view in Systems window
2. Select desired machine
3. Select Errors view
4. Click on Reset trip counter

**Operating time and unbalance counter****Total run time hours**

Shows total operating time for the selected machine in the network.

**Total trip run time hours**

Shows the trip counter for operating time.

**Hours since last service**

Shows time since last service.

Reset automatically when a service is carried out, see Machine / Machine service. Can also be reset manually on washer extractor's.

**Total number of unbalances**

Displays the number of unbalances (only washers).

**Latest errors**

Displays the machine's most recent error messages.

To check the error messages for a machine:

1. Click on Machine
2. Click on Machine error
3. Select desired machine
4. Select an error message in the Latest errors box. In the Error description box, a brief description of the error now appears with a recommended remedial action.

**Error description**

When an error message is selected, a brief description of the error and a recommended remedial action are displayed here.

---

### 4.1.9 Machine settings

Machine Settings view provides the possibility to customize service events or adjust consumption settings.

- Custom service – Define individual service alarms for machines in the network.
- Water – Calibrating water flow (l/min) for each water valve/machine. Used for calculating statistics (only washers).
- Powder – Calibrating water flow for flushing down powder detergent. Used for calculating statistics (only washers).
- Liquid – Calibrating flow for dispensing liquid detergent. Used for calculating statistics (only washers).
- Energy – Calibrating heating output (kW). Used for calculating statistics.

CMIS is supplied with pre-set values from the factory which are common for each machine type. These can be calibrated locally depending on water flow and the accuracy requirements in the statistics.

By pressing Restore Factory Settings, any manually edited values will be reset to factory settings for the selected machine and selected function.

#### 4.1.9.1 Custom service

Via the Custom service menu it is possible to define individual service alarms for one or more machines in the network. Using the buttons it is easy to change service alarms for a machine.

Note that a defined service alarm only applies to the machine for which it is created. If you want to use the same service alarm for several machines, it is best to use the Save and Retrieve functions via the button menu.

1. Retrieve service alarm from hard drive
2. Save service alarm onto hard drive
3. Create new service alarm
4. Modify existing service alarm
5. Delete service alarm
6. Print service alarm
7. Restore factory settings

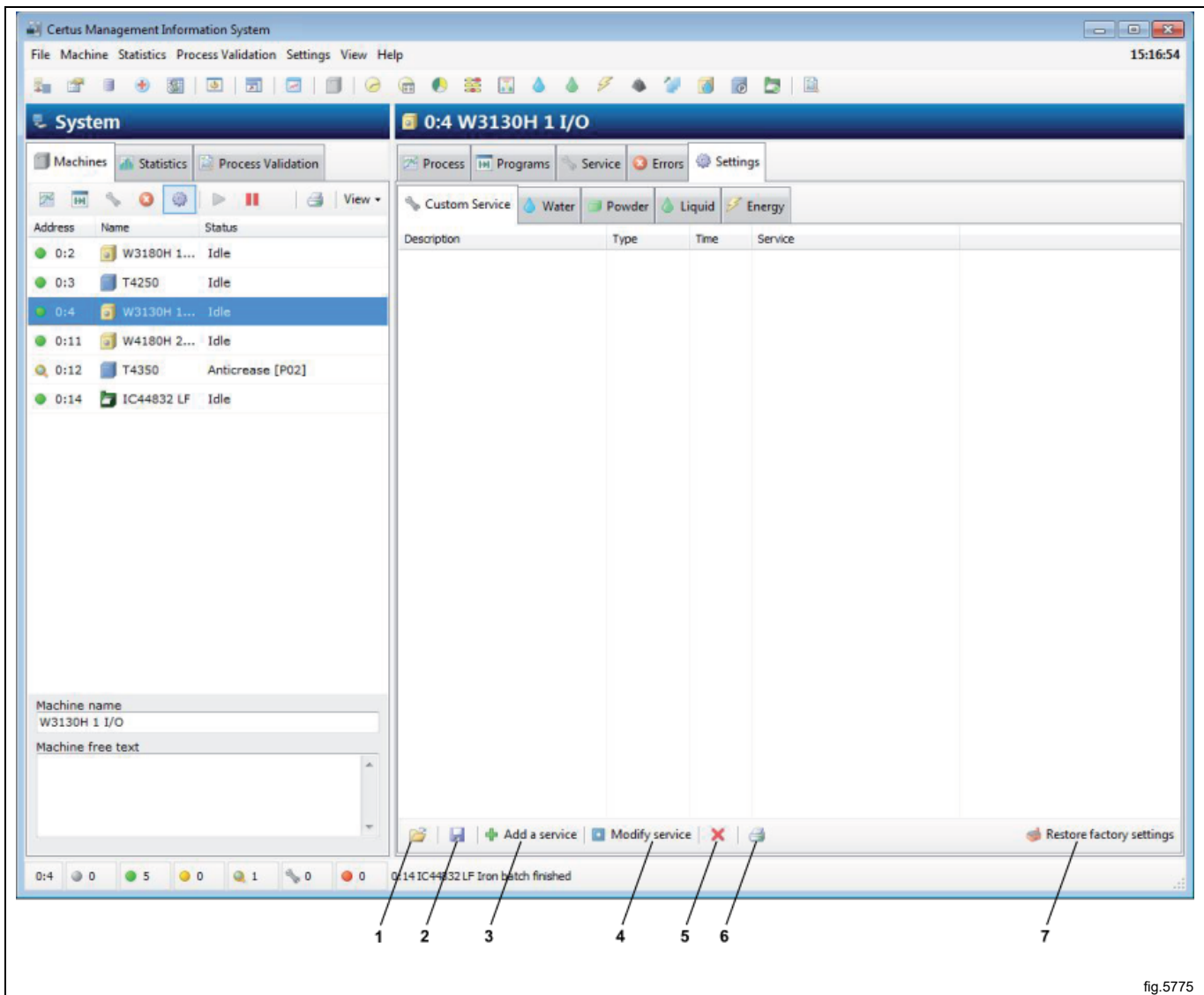
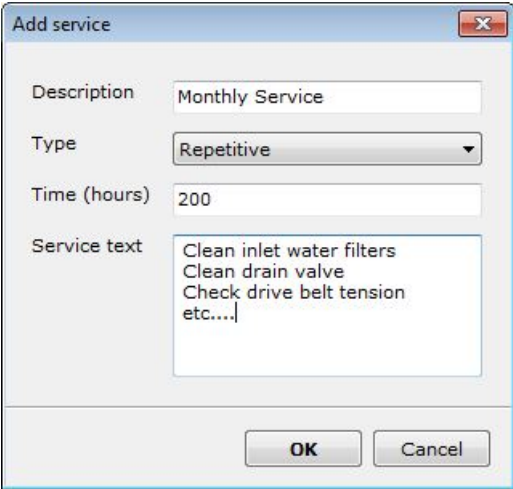


fig.5775

**Add a service alarm**

To add a new service alarm:

1. Click on Machine
2. Click on Settings
3. Click on Custom service
4. Select desired machine
5. Click on Add a service
6. Fill in or select the following:



The screenshot shows a dialog box titled "Add service". It contains the following fields and values:

- Description: Monthly Service
- Type: Repetitive
- Time (hours): 200
- Service text: Clean inlet water filters, Clean drain valve, Check drive belt tension, etc....

At the bottom of the dialog are "OK" and "Cancel" buttons.

fig.5776

- Description gives the name of the service alarm, e.g. Monthly service.
  - Type shows if the service alarm is to be issued once (Once) or repeated (Repetitive).
  - Time (hours) indicates after how many operating hours the service alarm should appear. In the case of repeated service alarms, Time is the interval at which the alarm should be repeated.
  - Service text gives a more detailed description of what the service should include and which elements should be implemented.
7. Save with OK.

### To modify an existing service alarm

To modify an existing service alarm:

1. Click on Machine
2. Click on Settings
3. Click on Custom service
4. Select desired machine
5. First select the service to be changed and then click on Modify service
6. Fill in or select the following:

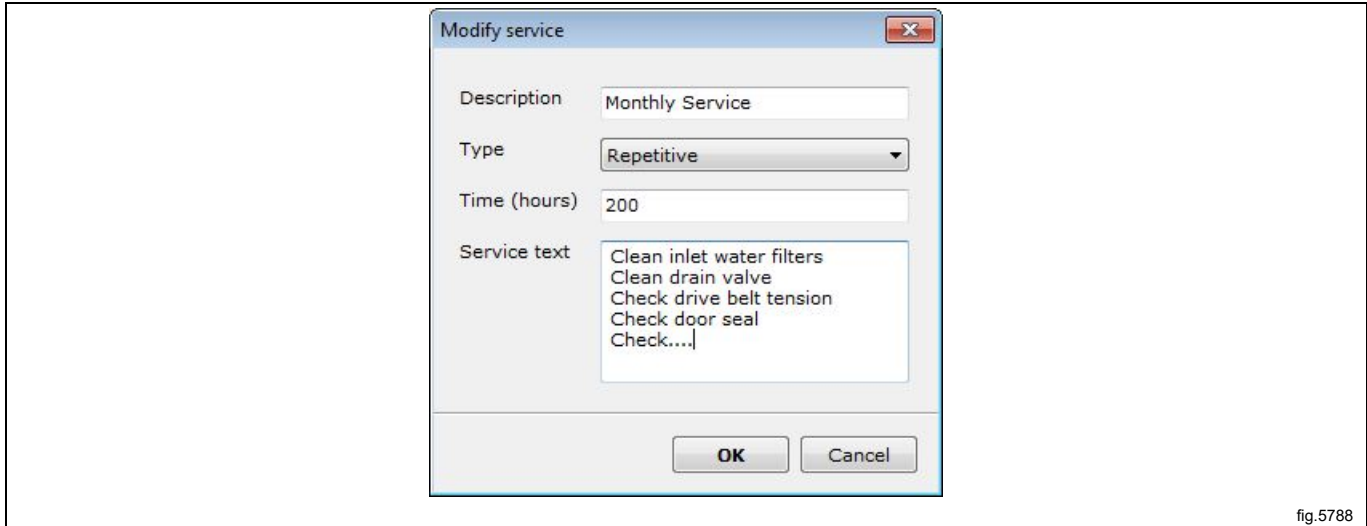



fig.5788

- Description gives the name of the alarm, e.g. Monthly service.
  - Type shows if the service alarm is to be issued once (Once) or repeated (Repetitive).
  - Time (hours) indicates after how many operating hours the service alarm should be displayed. In the case of repeated service alarms, Time is the interval at which the alarm should be repeated.
  - Service text gives a more detailed description of what the service should include and which element should be implemented.
7. Save with OK


### Delete service alarm

To delete old service alarms:

1. Click on Machine
2. Click on Settings
3. Click on Custom service
4. Select desired machine
5. Click on the service alarm to be deleted
6. Click on Delete service  or press the DEL key.

### Save service alarm on a hard drive


To save service alarms onto a hard drive:

1. Click on Machine
2. Click on Settings
3. Click on Custom service
4. Select desired machine
5. Click on Save service file . All service alarms for the selected machine will now be saved in a file.
6. Select a suitable place on a hard drive and name the file in File name. Click OK.



### Retrieve service alarm saved on a hard drive

To retrieve service alarm saved on a hard drive:

1. Click on Machine
2. Click on Settings
3. Click on Custom service
4. Select desired machine
5. Click on Open service file .
6. Select desired service alarm on hard drive and click on OK. The service alarms in chosen file will be added in the chosen machine.

### 4.1.9.2 Water

As the machines' water consumption is generally set at the factory, it may be necessary, via Water menu, to calibrate the values according to the prevailing water pressure in order to achieve the best possible statistics and cost calculations. The values that can be adjusted are to be found under the Water menu (only used in washers).

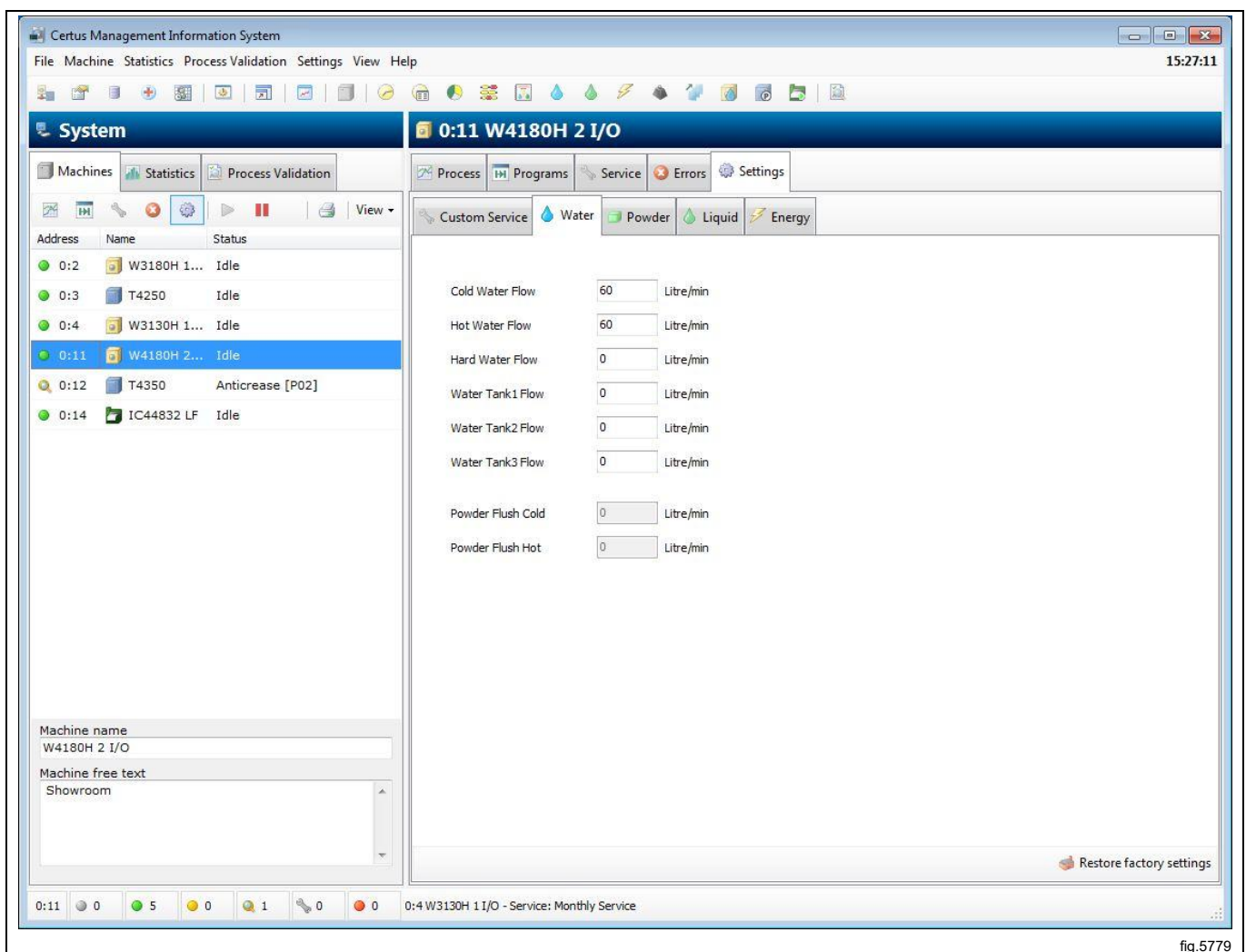


fig.5779

### To calibrate the values for Water consumption:

1. Click on Machine
2. Click on Settings
3. Click on Water
4. Select desired machine
5. Adjust the value for each inlet valve.

## Restore factory settings

Function for restoring the factory settings.

### 4.1.9.3 Powder

As the machines' water consumption is generally set at the factory, it may be necessary, via Powder menu, to calibrate the values according to the prevailing water pressure in order to achieve the best possible statistics and cost calculations. The values that can be adjusted are to be found under the Powder menu (only used in washers).

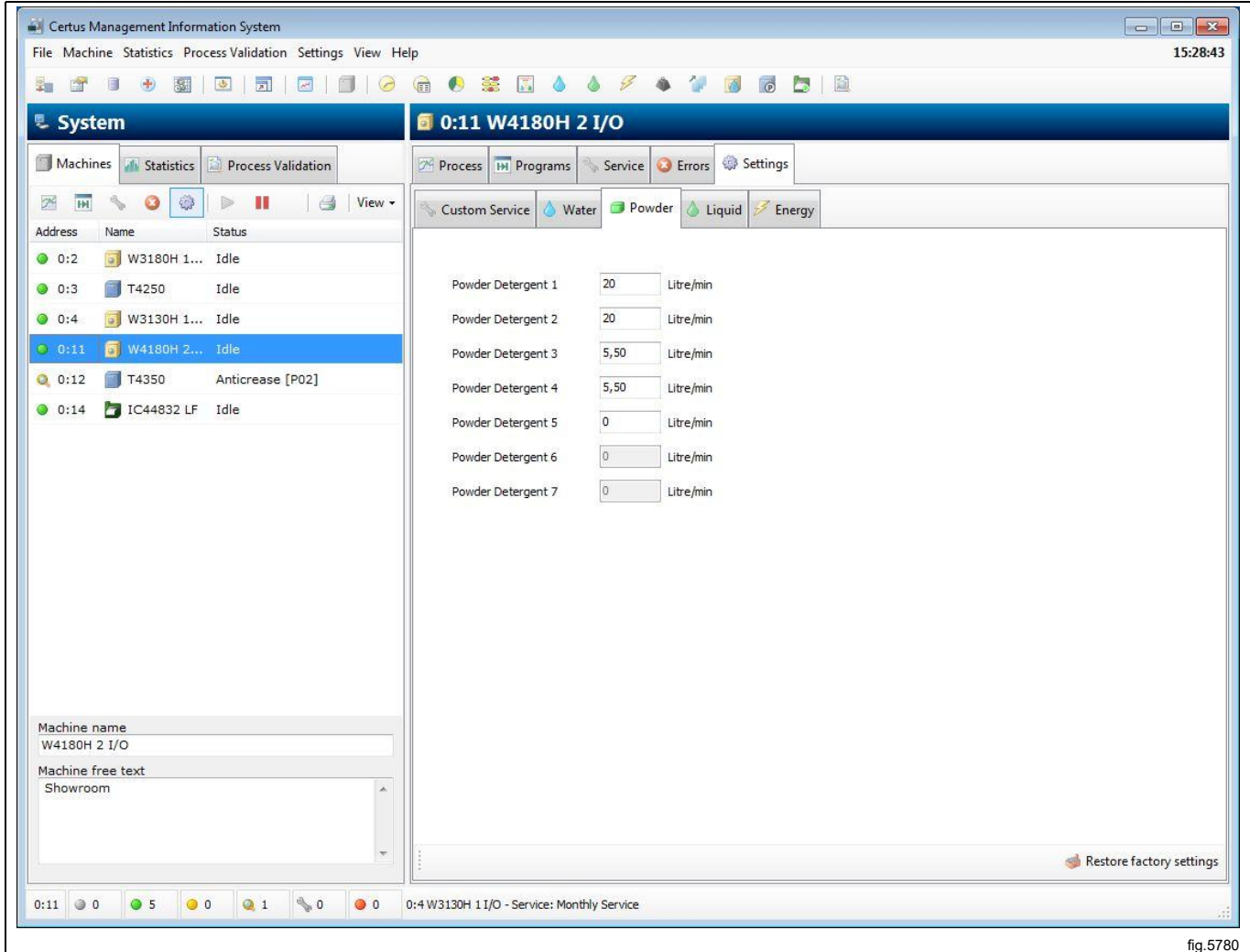


fig.5780

### To check or change the values for Powder detergent:

1. Click on Machine
2. Click on Settings
3. Click on Powder
4. Select desired machine
5. Adjust the value for each inlet valve.

## Restore factory settings

Function for restoring the factory settings.

#### 4.1.9.4 Liquid

As the machines' consumption is generally set at the factory, it may be necessary, via Liquid menu, to calibrate the values according to the prevailing consumption. Check with your detergent supplier which values apply to the relevant machine/dispensing compartment and for each machine. Consumption data calculated from these values are used for statistics and cost calculations. The values that can be adjusted are to be found under the Liquid menu (only used in washers).

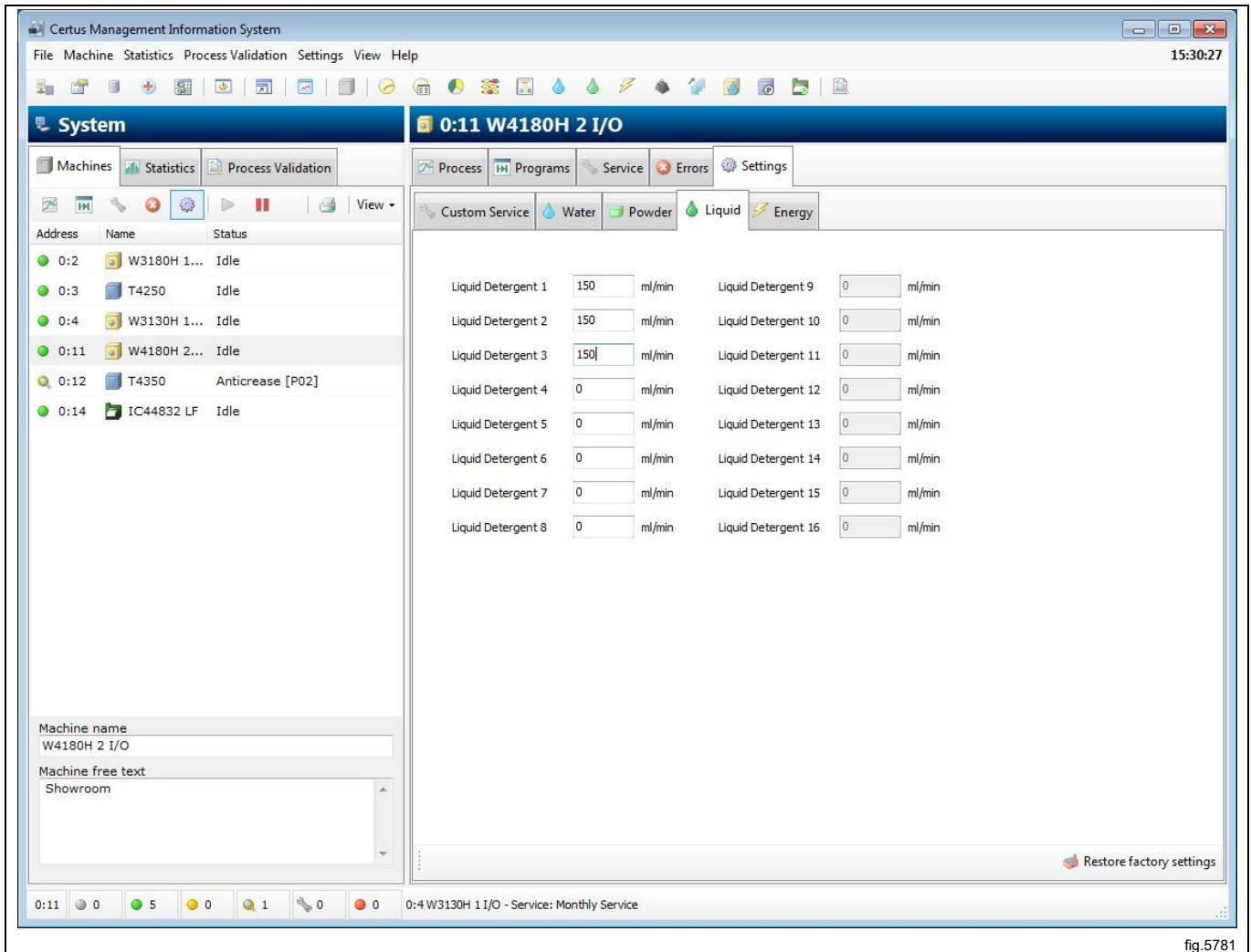


fig.5781

To check or change the values for Liquid detergent:

1. Click on Machine
2. Click on Settings
3. Click on Liquid
4. Select desired machine
5. State current values for each dispensing valve.

#### Restore factory settings

Function for restoring the factory settings.

### 4.1.9.5 Energy

As the machines' energy consumption is generally set at the factory, it may be necessary, via Energy menu, to calibrate the values according to the prevailing consumption. Under the Energy menu, it is possible to make changes if the machine has a different Heating output than the pre-set value. The specified value is what applies to electrically heated machines. Washing machine supplied with gas or steam heating usually have a heating output set at 0 kW. (Note: Dryers have specific heating constants depending on heating alternative). Consumption data calculated from these values are used for statistics and cost calculations.

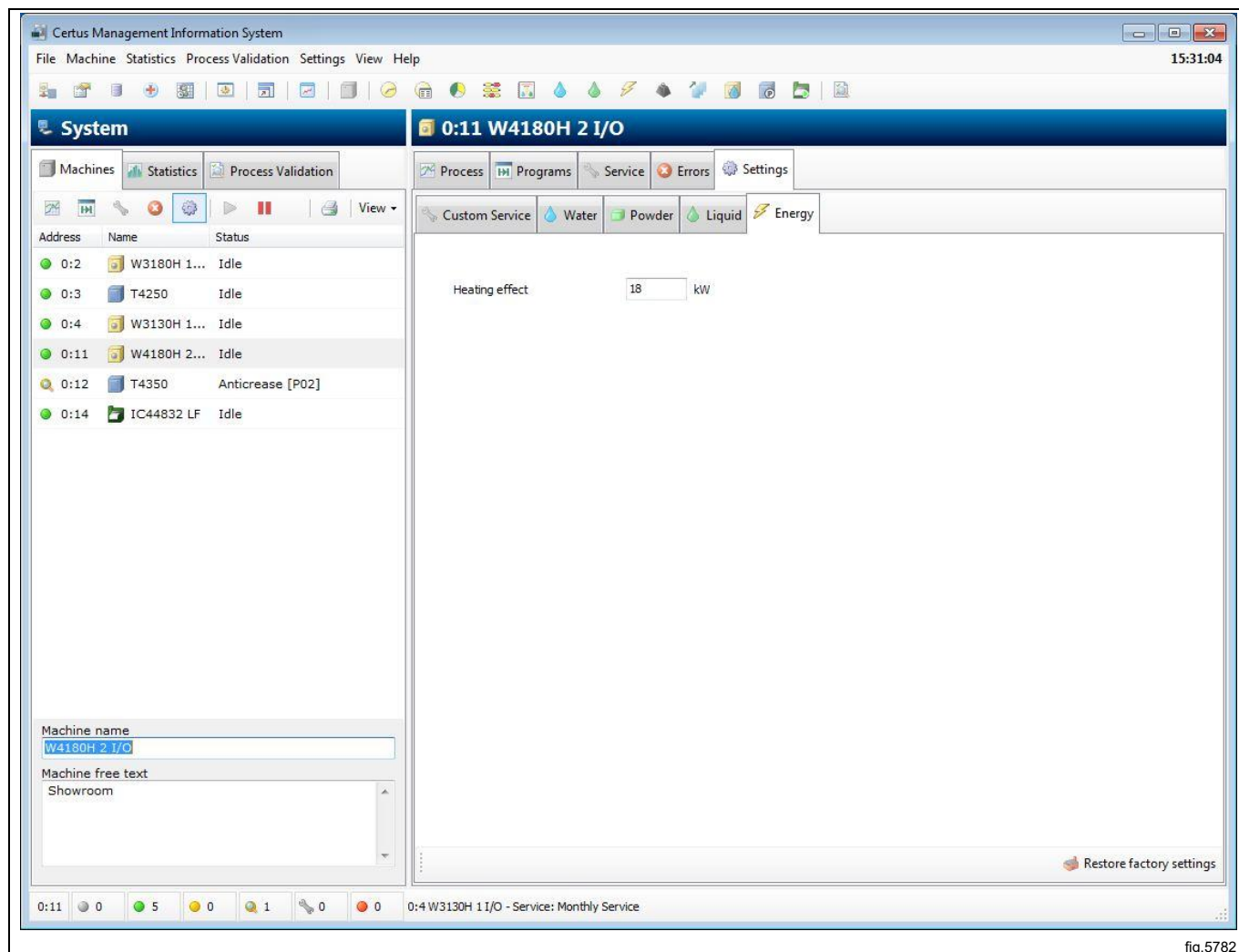


fig.5782

To check or change the values for Energy consumption:

1. Click on Machine
2. Click on Settings
3. Click on Energy
4. Select desired machine
5. State current value for Heating effect.














#### Restore factory settings

Function for restoring the factory settings.

## 4.2 Statistics

Statistics could be accessed by simply pressing the Statistics button in the System window or by using any of the application main menus Statistics or View.

Statistics are separated in 12 different sub menus built up as a tree structure:

	Run hours, shown by machine
	Run hours, shown by program
	Idle time
	Machine usage
	Total consumption
	Water
	Chemicals
	Energy
	Weight
	Ironed pieces
	Washing cycles
	Drying cycles
	Ironed batches

Each menu tree could be expanded by simply clicking the + or – in front of the menu name or using the menu on right mouse button.

Statistics in each menu/submenu could be shown either in a graph or in a table, and it could be shown in a specific interval. Data could be exported to an Excel-file or printed.

1. Show statistics in interval
2. Show statistics as graph
3. Show statistics as table
4. Export to Excel
5. Print

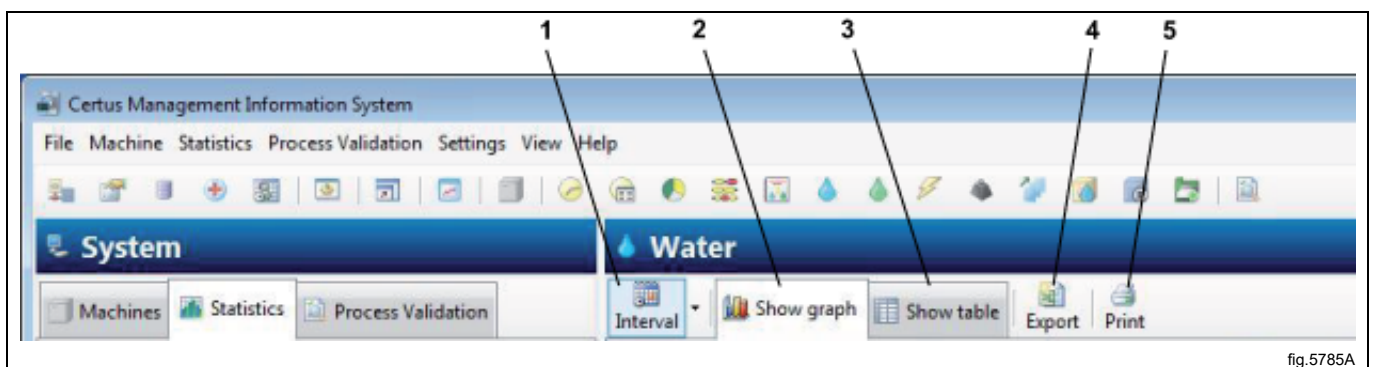


fig.5785A

## Interval

Statistics could be viewed totally (from installation date) or in an specific interval.

If interval button is inactivated, total statistics will be shown.

By activating the interval button, a selection menu will appear.

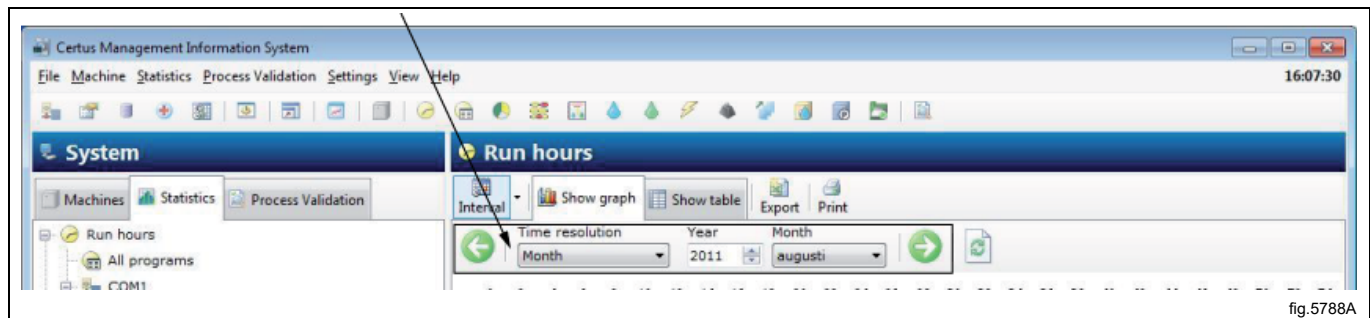


fig.5788A

In this menu, statistics could be shown for:

- a day
- a week
- a month
- a year or
- a Customized interval

It is also possible to view Next  and Previous  interval by pressing corresponding button.

A predefined interval menu is also available by clicking on the right hand side of the interval button.

Note that data is available only for the time defined under System/Database settings.

## Customize statistics

In some cases it might be useful to hide main menus that are not interesting for the customer. It is possible to configure what menus should be enabled or not in the Customize application menu. This could be accessed from the System menu/ Customize application.

For more information, see System setup/Customize application.

### Statistics for one machine/all machines in a network

To check statistics for all machines/one machine:

1. Click on Statistics.

2. Select the required type of statistic by clicking on the relevant icon.

Click on desired icon to see statistics for: All networks (A), All machines in a network (B) or a Single machine (C).

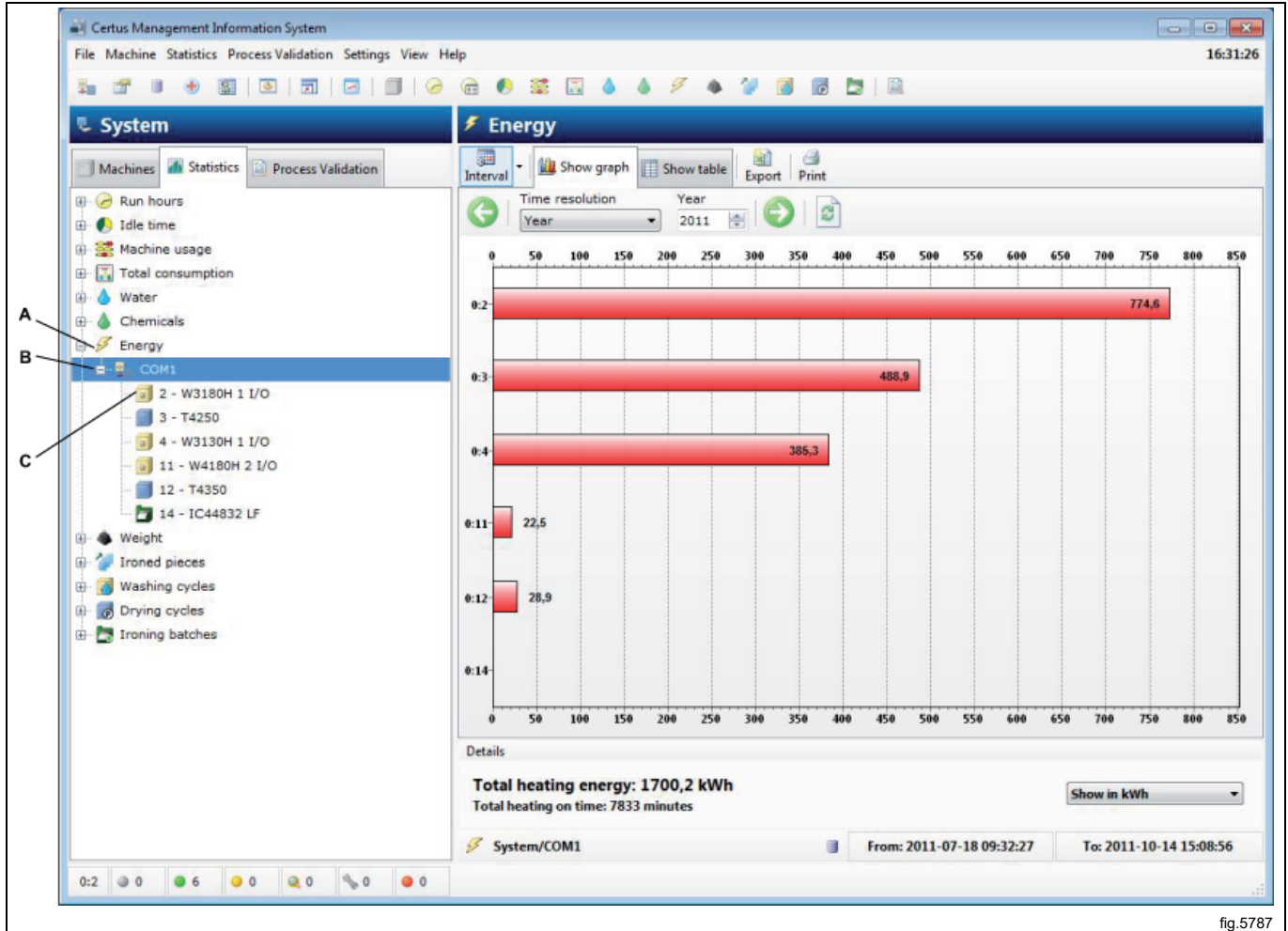


fig.5787

3. Select whether the statistics are to be displayed for all machines or one machine. By simply clicking the + or – by the menu name, or by using the menu that appears when you right-click with the mouse, each menu tree can be expanded. Click on a network name to view statistics for an entire network or on a machine name for statistics for one machine.

4. Select whether the statistics are to be displayed for a particular interval.

5. Select how the statistics should be displayed. There are two options:

- Show graph
- Show table

View information about each sub-group in statistics under the following headings.

## 4.2.1 Run hours

Run hours is the time measured when a machine is in process.

Run hours could be displayed Totally for entire network, for all programs or for a specific machine.

Run hours for ironers is displayed as Auto/Manual mode only, since programs don't exist.

Note: When the system is configured together with machines that already has been running, CMIS retrieves existing Run hour data from the machine. However CMIS has no possibility to relate this data to a specific program which means those Run hours will be labelled 'Unspecified'.

Click on desired icon to see statistics for: All networks (A), All machines in a network (B) or a Single machine (C).

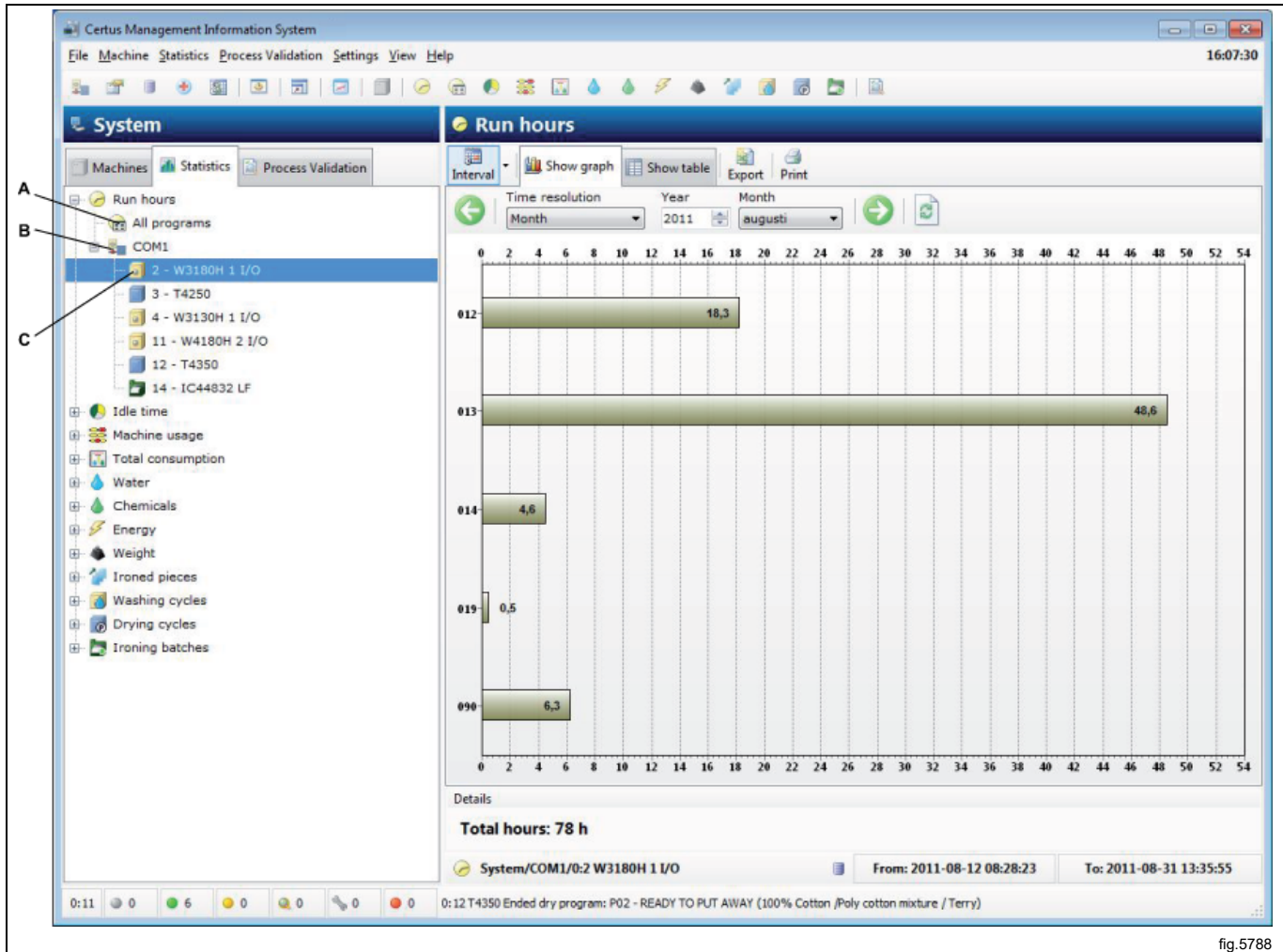


fig.5788



### 4.2.2 Idle time

Idle time could be displayed for all machines in network or for a single machine.

Idle time is measured as the time when the machine is in idle position i.e. available for use, but not running. Idle time is related to Run hours and Other (Service etc) on the same graph to give correct relations.

For ironers: Other time is when ironer is not running i.e. Heating up, Ready, Cooling down error or Service mode.

Statistics could be displayed in hours or as a percentage value.

Idle time is hidden as default. See system setup/customize application on how to make this menu visible.

Click on desired icon to see statistics for: All networks (A), All machines in a network (B) or a Single machine (C).

1. Display statistics in hours or percentage

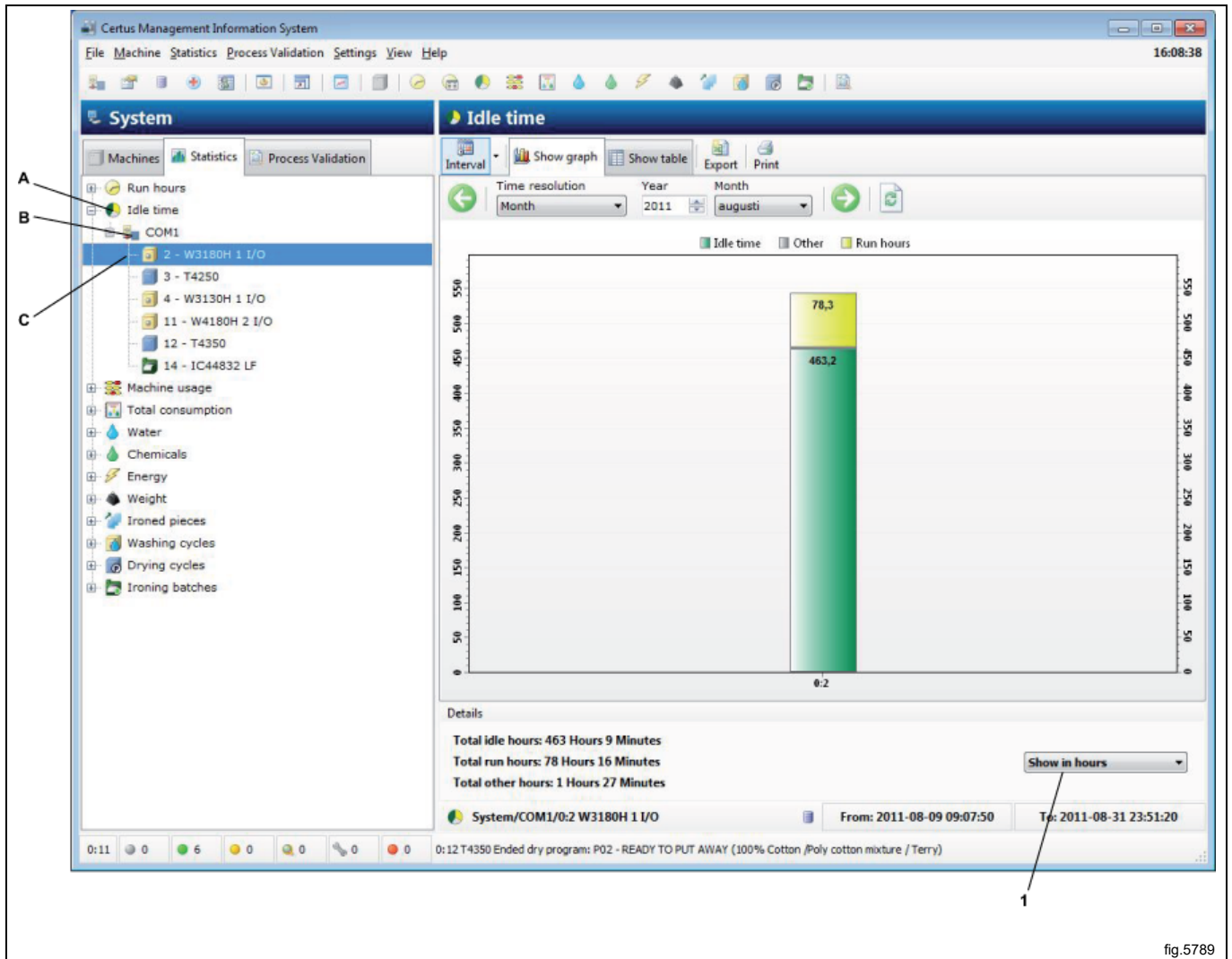


fig.5789

### 4.2.3 Machine usage

Machine usage visualizes how efficient all machines in a network actually are used. The information is useful when attempting to organize the operations in a efficient way. The information also allows an easy compare or documentation of production key data on daily, weekly or monthly basis.

In a specific interval it is possible to review data such as:

- Available working hours
- Available machine hours
- Actual machine duty hours
- Machine overtime
- Machine utilization rate (%)

In graph it is also possible to review:

- Working time versus Non working time
- Machine operation time versus time waiting for operator or the machine
- Wasted time caused by Error alarms, service etc.

In each process some information like program number, error code number etc. are shown. Whether this information is in short form or full form depends how much the graph is zoomed up.

Zooming up is done by selecting a window (with left mouse button) from upper left corner to lower right corner, in graph. Zooming down is done opposite way or by pressing update button.

More detailed information about a process is also available by clicking on a process in the graph.

Machine usage could be displayed for all machines in a network or for a single machine.

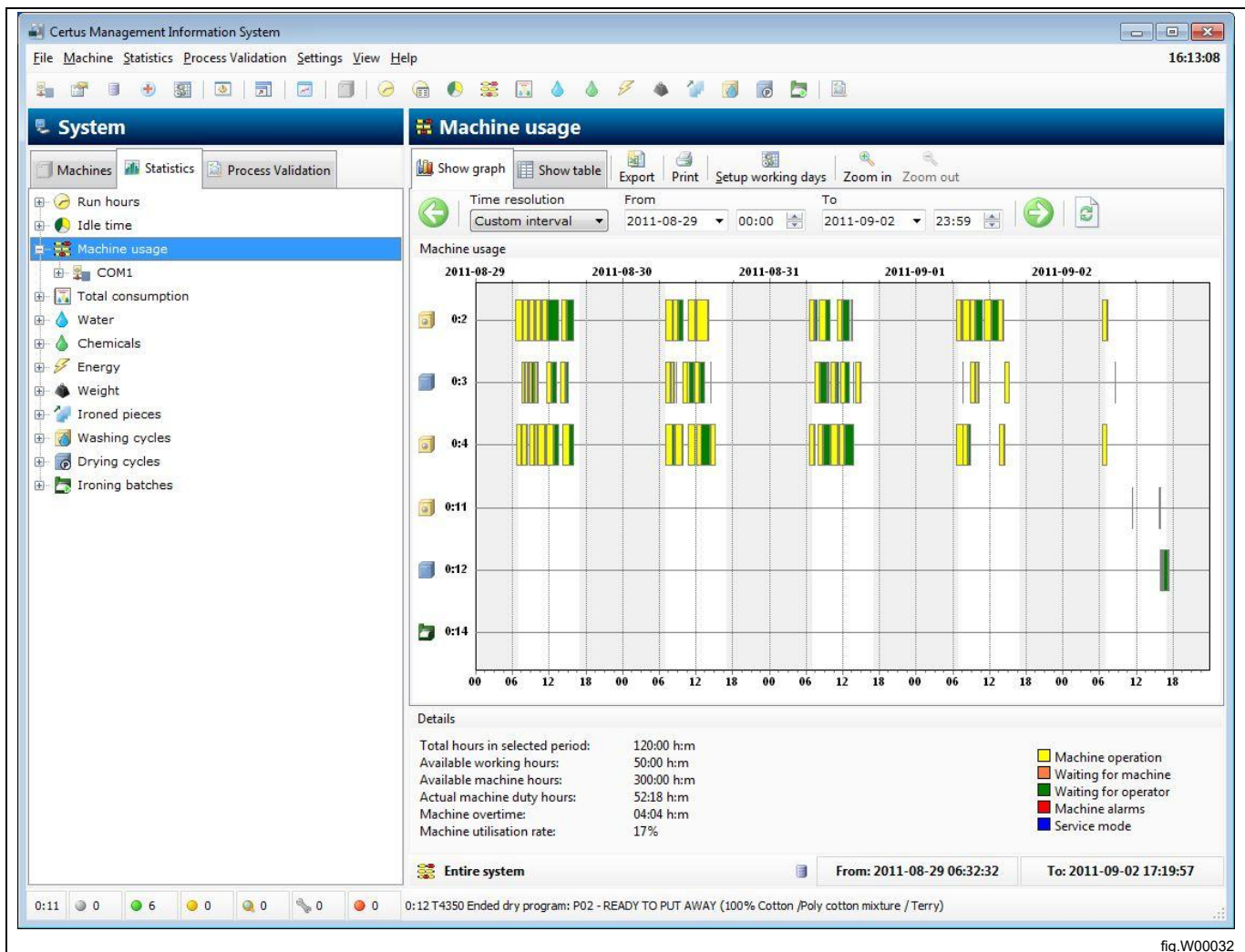


fig.W00032

#### **4.2.4 Total consumption**

Total consumption makes it possible to easily summarize and review the consumption data for all machines in a network, for a single machine or for one or several programs (programs only on washers and dryers) in a specific interval.

Total consumption makes it possible for an easy consumption follow up on daily, weekly or monthly basis, but also as a follow up after fine tuning the process.

Total consumption is split in two menus, one Consumption report menu for normal users and one menu for advanced users.

Both menus also offer the facility to easily calculate the cost for selected data.

#### 4.2.4.1 Consumption report

Consumption report menu shows a summary of consumption data for the machines in selected interval. At the top of the menu it is possible to decide what processes should be shown. By deactivating the icon for washers / dryers / ironers, all data for these machines could easily be excluded.

Calculate cost is done in two steps:

- Select Default template to be used (contains all formulas and local prices for cost calculation)
- Press Calculate cost-button

Please note that all constant values for consumption parameters need to be set correctly before calculation total consumption.

A constant value set to "0" will result in zero for actual consumption parameter (please refer to operating manual "Software description and settings / Machine / Machine settings" – for more information in setting constant values).

1. Shown processes
2. Shown processes
3. Template for Cost calculation
4. Calculate cost

The screenshot displays the 'Total consumption' report for Week 35 - 2011. The report is organized into three sections: Washers, Dryers, and Ironers. Each section provides a comparison between the 'Current period' and the 'Previous period' across various metrics such as number of machines, run hours, idle time, energy consumption, and water consumption.

	Current period	Previous period
<b>Washers</b>		
Number of washers:	3	3
Number of washing cycles:	42	44
Run hours:	55 Hours 26 Minutes	57 Hours 4 Minutes
Idle time:	98 Hours 24 Minutes	95 Hours 48 Minutes
Overtime:	0 Hours 3 Minutes	0 Hours 2 Minutes
Energy consumption:	136,7 kWh	149,9 kWh
Water consumption:	13,7 m <sup>3</sup>	14,7 m <sup>3</sup>
Liquid detergent consumption:	0,0 liters	0 liters
Weight (only with IWS):	0 Kg	0 Kg
<b>Dryers</b>		
Number of dryers:	2	1
Number of drying cycles:	30	23
Run hours:	21 Hours 1 Minutes	17 Hours 43 Minutes
Idle time:	79 Hours 8 Minutes	32 Hours 55 Minutes
Overtime:	0 Hours 0 Minutes	0 Hours 0 Minutes
Energy consumption:	82,8 kWh	69,9 kWh
<b>Ironers</b>		
Number of ironers:	0	0
Number of ironing batches:	0	0
Run hours:	0 Hours 0 Minutes	0 Hours 0 Minutes
Idle time:	0 Hours 0 Minutes	0 Hours 0 Minutes
Overtime:	0 Hours 0 Minutes	0 Hours 0 Minutes
Energy consumption:	0 kWh	0 kWh
Total number of pieces:	0	0

At the bottom of the report, the 'Cost calculation' section shows the 'Cost calculation template' set to 'Default ELS Template' and a 'Calculate cost' button. The report covers the period from 2011-08-29 06:32:32 to 2011-09-02 17:19:57.

#### 4.2.4.2 Advanced

Advanced menu is intended for more advanced users who need more flexibility for cost calculations. Advanced menu does not have any preview of consumption data, but is designed to make it possible for the user to select those processes he wants for the cost calculation.

This selection is fully flexible and could be done for all available processes down to a single specific process.

Similar to Consumption report it is possible to decide what processes should be shown by activating/deactivating the icon for washers/dryers/ironers. Same possibility also exists in tree view, where all checked processes will be included in the cost calculations.

Calculate cost is done in two steps:

- Select Default template to be used (contains all formulas and local prices for cost calculation)
- Press Calculate cost-button

Please note that all constant values for consumption parameters need to be set correctly before calculation total consumption.

A constant value set to "0" will result in zero for actual consumption parameter (please refer to operating manual "Software description and settings / Machine / Machine settings" – for more information in setting constant values).

1. Advanced menu
2. Shown processes
3. Selection of processes
4. Template for Cost calculation
5. Calculate cost

The screenshot displays the 'Advanced' cost calculation interface. The main table shows consumption data for various machines and processes. The 'Cost calculation' section at the bottom is configured with the 'Default ELS Template' and a time range from 2011-08-25 06:35:51 to 2011-11-22 13:58:36.

Machine	OK	PV	Program/Mode	Started	Duration	Energy
Washing cycles					1140:38:46	2281,5 kWh
0:4 W3130H 1 I/O	310				336:26:59	787,5 kWh
0:2 W3180H 1 I/O	268				349:59:37	1459,8 kWh
0:11 W4180H 2 I/O	27				454:12:10	34,2 kWh
Drying cycles					178:27:14	729,0 kWh
0:12 T4350	10				08:46:17	43,5 kWh
[0020]	Successfully completed		P01 EXTRA DRY...	2011-11-18 10:42:36	00:32:14	3,5 kWh
[0021]	Successfully completed		P01 EXTRA DRY...	2011-11-18 11:38:24	01:19:26	3,4 kWh
[0021]	Successfully completed		P01 EXTRA DRY...	2011-10-04 11:12:08	00:09:37	1,0 kWh
[0001]	Successfully completed		MANUAL TIME	2011-10-10 10:40:14	00:49:11	8,5 kWh
[0002]	Successfully completed		MANUAL TIME	2011-10-10 11:44:38	01:20:41	5,2 kWh
[0015]	Successfully completed		P01 EXTRA DRY...	2011-09-02 16:04:30	01:04:21	5,2 kWh
[0018]	Not completed		P02 READY TO ...	2011-09-02 17:19:02	00:00:55	0 kWh
[0017]	Completed, but door was opened		MANUAL TIME	2011-11-04 10:57:36	01:38:51	10,4 kWh
[0018]	Successfully completed		MANUAL TIME	2011-11-04 12:38:28	00:30:14	2,6 kWh
[0022]	Successfully completed		P01 EXTRA DRY...	2011-11-18 13:32:45	01:20:47	3,8 kWh
0:3 T4250	368				169:40:57	685,5 kWh
Ironing batches					435:21:04	274,4 kWh
0:14 IC44832 LF	44				435:21:04	274,4 kWh

fig.W00034

## 4.2.5 Water

Statistics for Water consumption could be displayed for all machines in network, for a single machine or for a specific program for a specific machine (only washing machines).

Water consumption in CMIS is measured as the time each water valve inlet is opened. Water consumption in time is then calculated by using a factory made constant table.

The constants in the constant table are valid for a normal installation with normal water pressure (approx. 300 kPa). If a higher precision is required it is necessary to calibrate the water flow and adjust the constant table. For more information about this see Machine settings/Water consumption.

Statistics for Water consumption could be displayed in minutes or Litres.

Water consumption is hidden as default. See System setup/customize application on how to make this menu visible.

Click on desired icon to see statistics for:

1. All networks
2. All machines in a network
3. Single machine
4. Specific program
5. Display statistics in minutes or litres

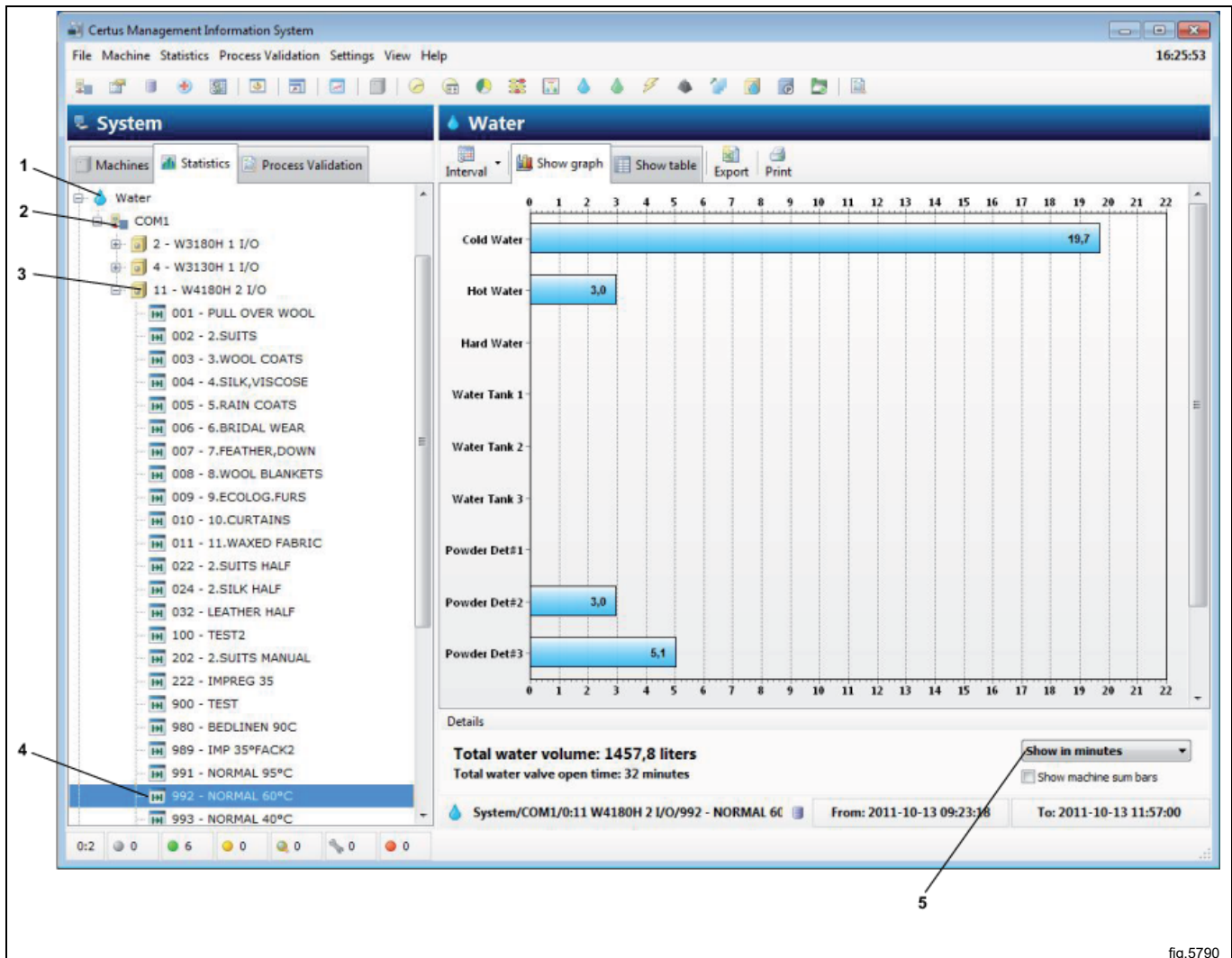


fig.5790

## 4.2.6 Chemicals

Statistics for Chemical consumption could be displayed for all machines in network, for a single machine or for a specific program for a specific machine (only washing machines).

Chemical consumption in CMIS is measured as the time each chemical valve inlet is opened and the Chemical Consumption in millilitres is then calculated by using a constant table.

Please note that all factory values for the Chemical Constant table normally is set to Zero since those values are local and depend on each installation.

To have Chemical consumption in millilitres it is necessary to fit valid values to the Liquid detergent constant table. For more information about this see Machine settings/Liquid detergent.

Statistics for Chemical consumption could be displayed in minutes or Millilitre. Chemicals is hidden as default. See System setup/customize application on how to make this menu visible.

Click on desired icon to see statistics for:

1. All networks
2. All machines in a network
3. Single machine
4. Specific program
5. Display statistics in minutes or litres

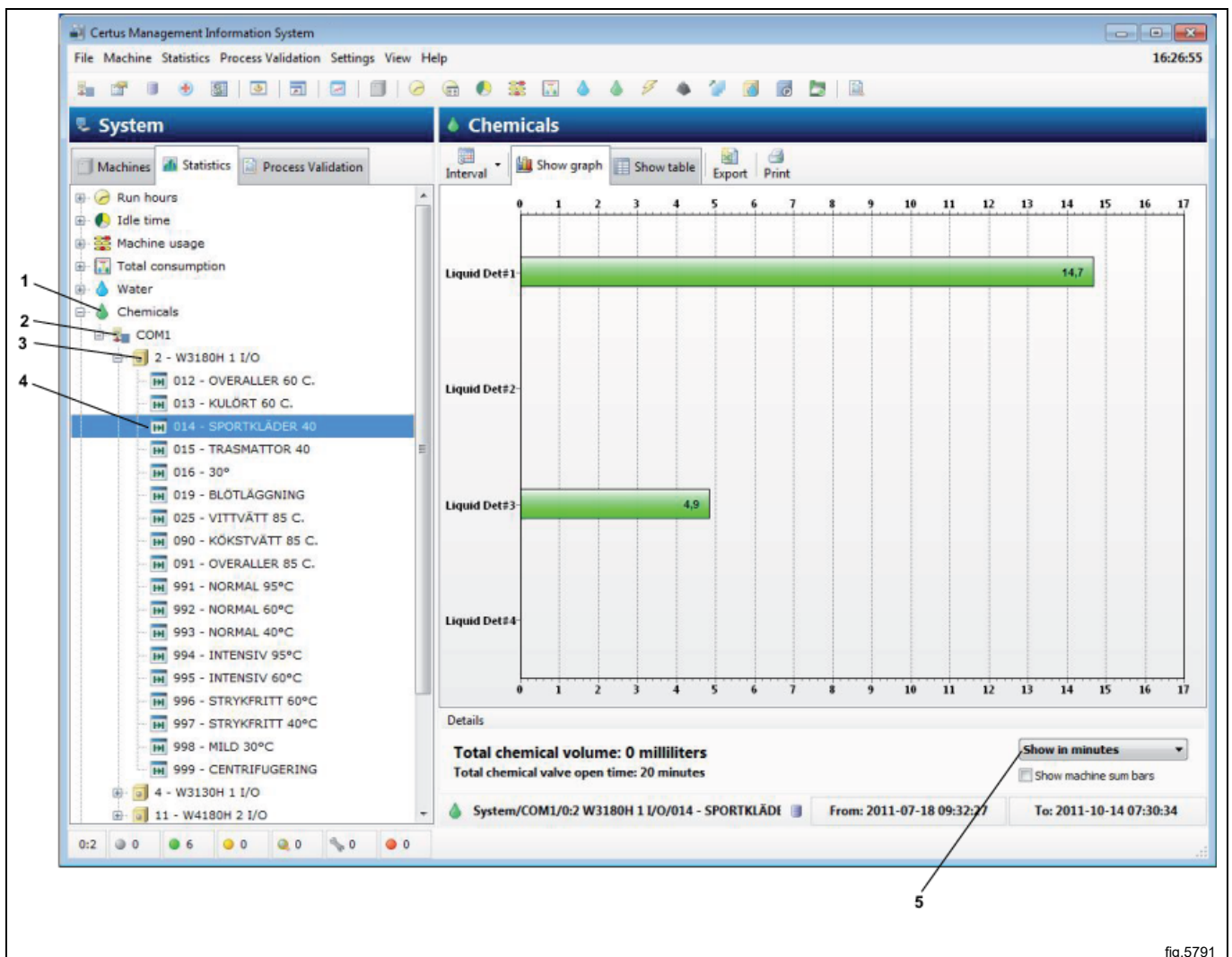


fig.5791

## 4.2.7 Energy

Statistics for Energy consumption could be displayed for all machines in network or for a single machine.

Energy consumption in CMIS is measured as the time each heating relay is activated and the energy consumption in kWh is then calculated by using a constant table.

Please note that all factory values in the constant table are set for electrical heated machines. Installation with machines heated with steam or gas is recommended to set all constant values to zero and then make a manual calculation using the heating time available.

A machine that is only available with a heating system for steam or gas is normally supplied with a factory made constant table set to zero.

For more information about this see Machine settings/Energy consumption.

Statistics for Energy consumption could be displayed in minutes or in kWh.

Energy consumption is hidden as default. See System setup/customize application on how to make this menu visible.

Click on desired icon to see statistics for:

1. All networks
2. All machines in a network
3. Single machine
4. Display statistics in minutes or kWh

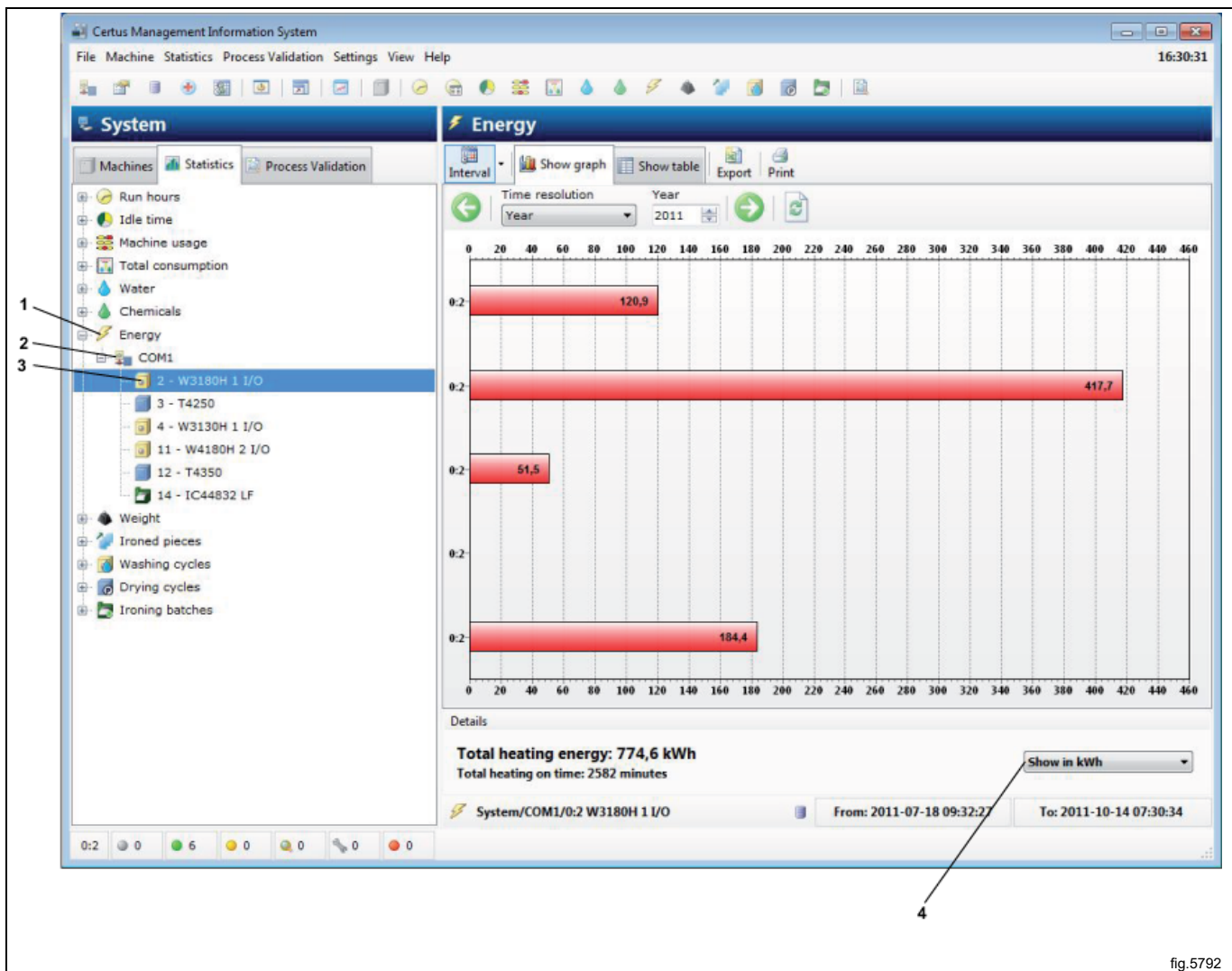


fig.5792



## 4.2.8 Weight

Weight statistics is available on all Clarus Control and Compass Pro washers with IWS (Internal Weight System), and on Compass Pro washers with AWS (Automatic Weight System). (firmware 8.14 and above).

For IWS system the weight is read out at program start. For AWS system, the weight is read after a completed weighing sequence. If AWS is not available or disabled, or if weighing sequence is aborted, the weight will be considered to be the machine's max load.

Statistics for weight could be displayed for the entire network or per program for a single machine.

Note that it is important to Tare the machine before start to have the correct weight.

Weight is hidden as default. See System setup/customize application on how to make this menu visible.

Click on desired icon to see statistics for:

1. All networks
2. All machines in a network
3. Single machine

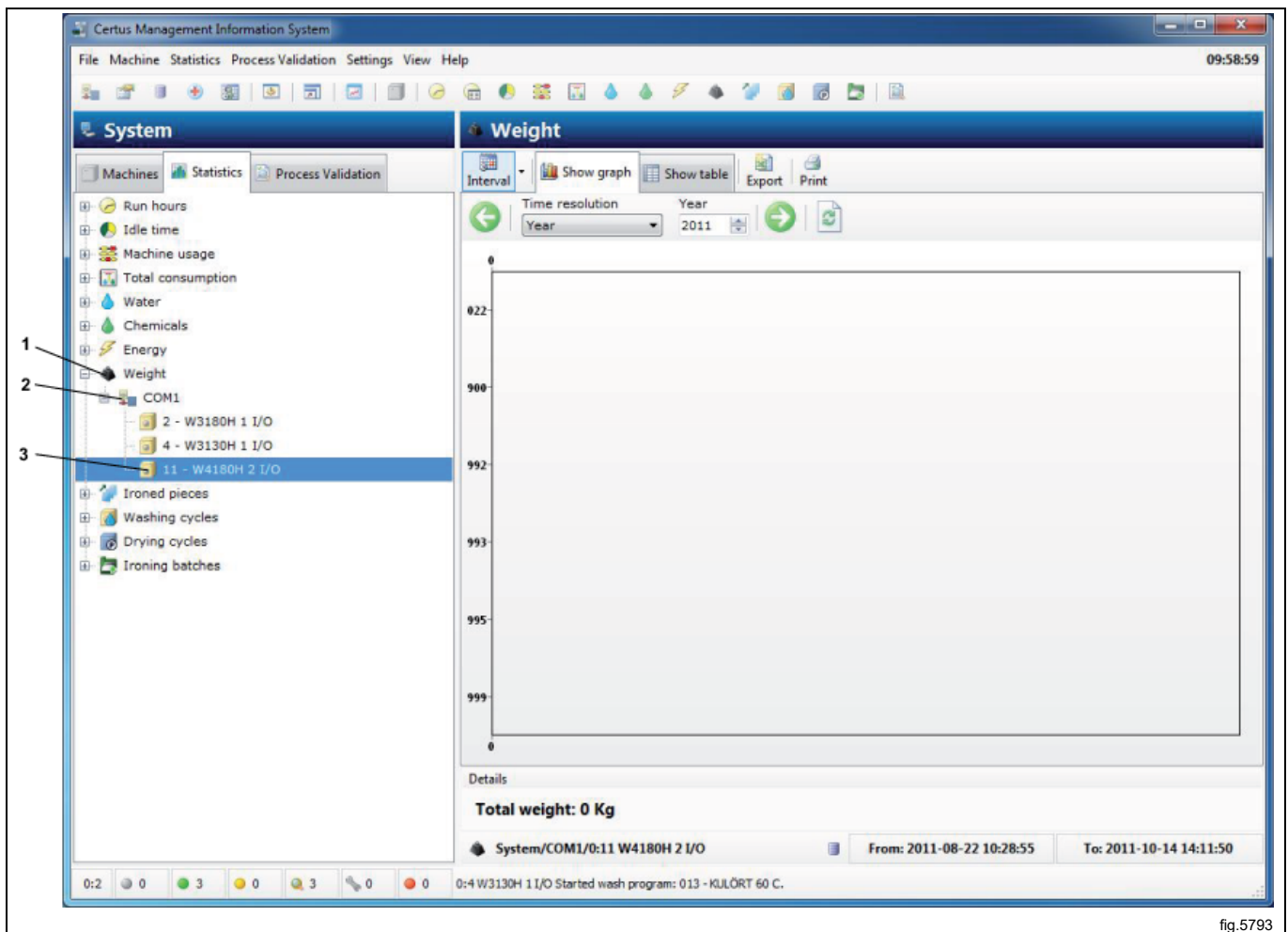


fig.5793

## 4.2.9 Ironed pieces

Statistics for ironed pieces could be displayed totally for entire network, for all machines in network or for a single machine.

Ironed pieces is hidden as default. See System setup/customize application on how to make this menu visible.

Click on desired icon to see statistics for:

1. All networks
2. All machines in a network
3. Single machine

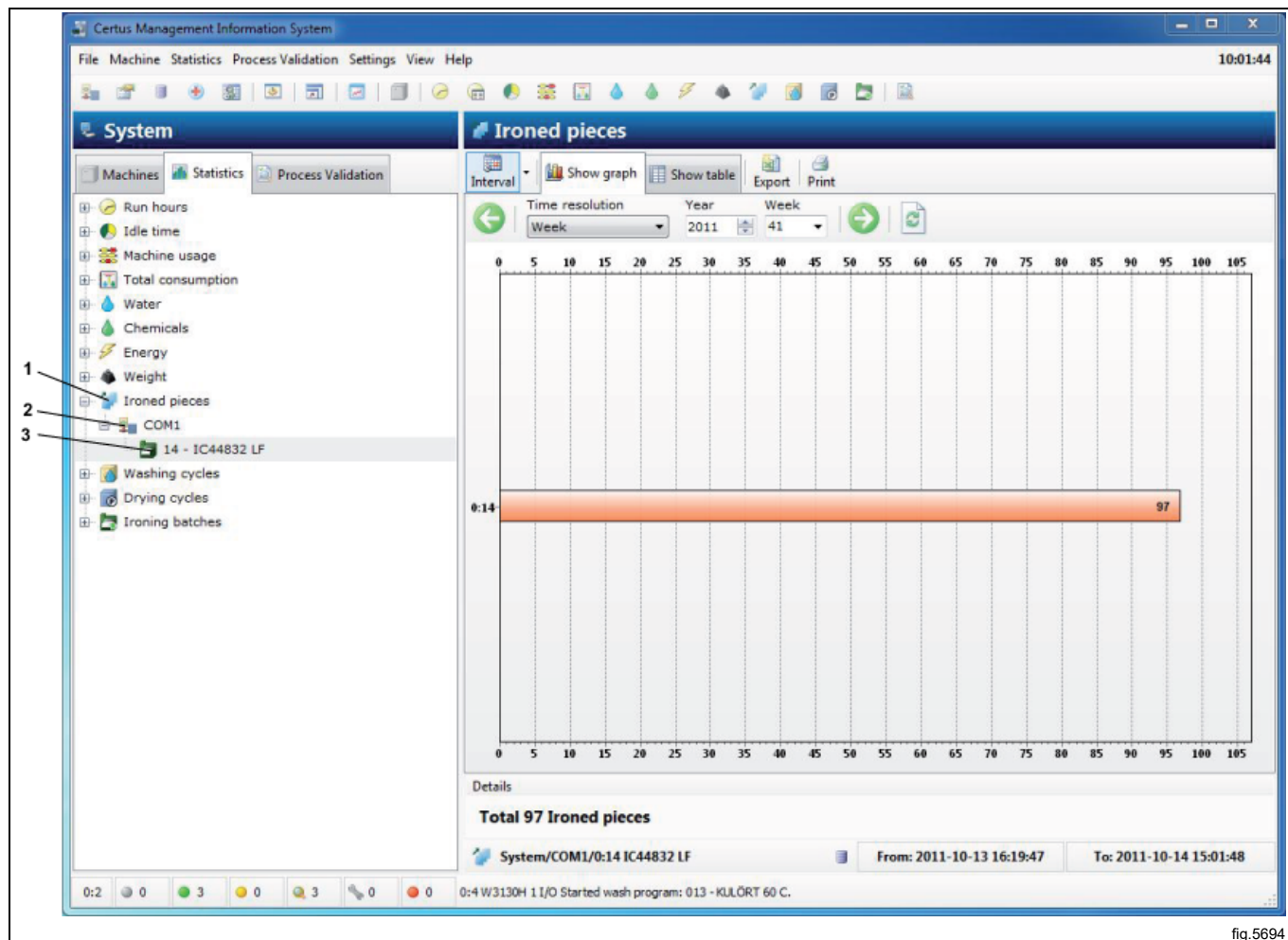


fig.5694

### 4.2.10 Washing cycles

Washing cycles provide additional information about run washing cycles.

Statistics could be displayed for the total network or for a single machine.

Filter PV will show only process validated cycles (A).

Shortcut to show cycle in process validation window (B).

Click on desired icon to see statistics for:






1. All networks
2. All machines in a network
3. Single machine

The screenshot displays the 'Washing cycles' window in the Certus Management Information System. The interface is divided into several sections:


- Left-hand navigation pane:** Contains a tree view with categories like 'Run hours', 'Idle time', 'Machine usage', 'Total consumption', 'Water', 'Chemicals', 'Energy', 'Weight', 'Ironed pieces', 'Washing cycles', 'COM1', 'Drying cycles', and 'Ironing batches'. Callouts 1, 2, and 3 point to the 'Washing cycles', 'COM1', and a specific machine entry respectively.
- Toolbar:** Includes buttons for 'Interval', 'Export', 'Print', 'Filter PV' (labeled A), 'Show PV' (labeled B), and 'Delete'. It also features a 'Time resolution' dropdown set to 'Year' and a 'Year' selector set to '2011'.
- Main Data Table:** A table with columns: PV, Machine, Program, Time at program start, Duration, Batch ID, RMC, Max temp, and Min temp. It lists 154 individual washing cycles with their respective details.
- Details Section:** Shows 'Total 154 washing cycles' and 'System/COM1/0:2 W3180H 1 I/O'. It includes filters for 'From: 2011-07-19 06:38:38' and 'To: 2011-10-17 09:35:41'.
- Status Bar:** Displays '0:2 0 3 0 3 0 0' and '0:4 W3130H 1 I/O Started wash program: 013 - KJLÖRT 60 C.'

fig.5794

Information in first column gives quick information if cycle is:

	Completed OK
	Not completed
	Paused
	Rapid advanced
	Aborted

Second column gives information if a cycle is Process validated:

	Process validated
--	-------------------

No ICON in the second column means that Process validation is not activated in the Run settings.

Following columns gives basic data as machine No, program No, time at program start, Batch ID, RMC (Residual Moisture Content), max temp, min temp etc. Last column gives a more detailed description of the wash progress, error description etc.

Data in each column could be sorted ascending by clicking each column headline i.e. sorted by machine, program, time at program start, Batch ID etc.

A filtering function to filter out those cycles that is process validated is also available in the menu. Press the button "Process validated" in the upper part of the menu.

A wash is completed OK if:

- No errors has occurred during the wash
- Wash is not rapid advanced or aborted
- Wash has not been paused for longer than 10 minutes (Long pause).

When a specific wash in the Washes window is selected right mouse click gives two possibilities:

- If wash is Process validated OK it gives a shortcut to the same wash in the process validation window. (Same shortcut is available by activating the button in the washes menu).
- For all other washes it is possible to delete selected wash. (Same possibility is available by pressing DEL).

A wash that is process validated OK could not be erased in the Washes window but need to be erased in the Process validation window.

For more information see Process validation.

### 4.2.11 Drying cycles

Drying cycle provide additional information about run drying cycles.

Statistics could be displayed for the total network or for a single machine.

Filter PV will show only process validated cycles (A).

Shortcut to show cycle in process validation window (B).


Click on desired icon to see statistics for:

1. All networks
2. All machines in a network
3. Single machine


The screenshot displays the 'Drying cycles' window in the Certus Management Information System. The window title is 'Certus Management Information System' and the current time is 10:09:22. The menu bar includes 'File', 'Machine', 'Statistics', 'Process Validation', 'Settings', 'View', and 'Help'. The toolbar contains icons for 'Interval', 'Export', 'Print', 'Filter PV', 'Show PV', and 'Delete'. The main area shows a table of drying cycles with columns: PV, Machine, Program, Time at program start, Duration, Batch ID, Max in ..., Min in ..., and Max ou... The table lists 20 rows of data for machine '0:3 T4250' with 'MANUAL TIME' programs. Annotations A and B point to the 'Filter PV' and 'Show PV' buttons in the toolbar. On the left, a sidebar shows a tree view of the system hierarchy with 'Drying cycles' selected. A status bar at the bottom shows 'Total 67 drying cycles' and a specific cycle detail for 'System/COM1/0:3 T4250' with a range from '2011-08-12 08:48:16' to '2011-08-31 14:11:34'. The status bar also shows '0:2' and '0:4 W3130H 11/O Started wash program: 013 - KULÖRT 60 C.'

fig.5659

Information in first column gives quick information if cycle is:

	Completed OK
	Not completed
	Completed, but door was opened

Second column gives information if a cycle is Process validated:

	Process validated
--	-------------------

No ICON in the second column means that Process validation is not activated in the Run settings.

Following columns gives basic data as machine No, program No, time at program start, Batch ID, Max. in temp, Min in temp, Max out temp, Min out temp, Start RMC, End RMC (RMC = Residual Moisture Content). Last column gives a more detailed description of the drying progress, error description etc.

Data in each column could be sorted ascending by clicking each column headline i.e. sorted by machine, program, time at program start, Batch ID etc.

A filtering function to filter out those cycles that is process validated is also available in the menu. Press the button "Process validated" in the upper part of the menu.

A drying cycle is completed OK if:

- No errors has occurred during the cycle

When a specific drying cycle is selected right mouse click gives two possibilities:

- If drying cycle is Process validated OK it gives a shortcut to the same cycle in the process validation window. (Same shortcut is available by activating the button in the menu).
- For all other drying cycles it is possible to delete selected cycle. (Same possibility is available by pressing DEL).

A cycle that is process validated OK could not be erased in the drying cycle window but need to be erased in the Process validation window. For more information see Process validation.

### 4.2.12 Ironing batches

Ironing batches provides additional information about run ironing batches.

Statistics could be displayed for the total network or for a single machine.

Filter PV will show only process validated cycles (A).

Shortcut to show cycle in process validation window (B).

Click on desired icon to see statistics for:

1. All networks
2. All machines in a network
3. Single machine

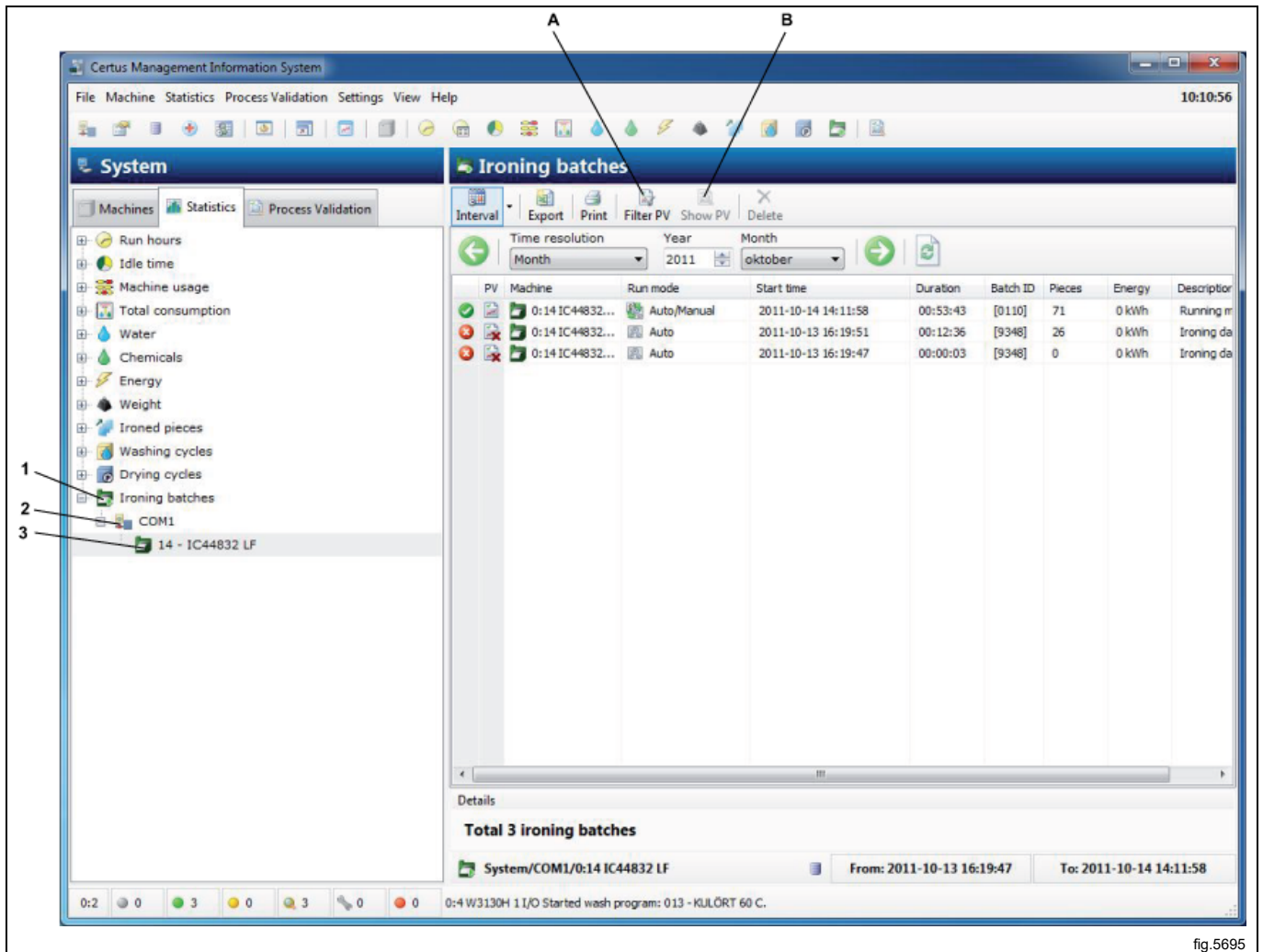





fig.5695

Information in first column gives quick information if cycle is:

	Completed OK
	Not completed and/or blocking error

Second column gives information if a cycle is Process validated:

	Process validated
--	-------------------

No icon in the second column means that Process validation is not activated in the Run settings.

Following columns gives basic data as Machine No, Run mode, Start time, Duration, Batch Id, Pieces and Energy.

Last column gives a more detailed description of the Ironing batch, error description etc.

Data in each column could be sorted ascending by clicking each column headline i.e. sorted by Machine, Run mode, Start time etc.

A filtering function to sort out those batches that is process validated is also available in the menu. Press button "Process validated" in the upper part of the menu.

An ironing batch is completed OK if:

- No blocking error has occurred during ironing batch (i.e. errors codes higher than 127).

When a specific ironing batch is selected right mouse gives two possibilities:

- If ironing batch is process validated OK it gives a shortcut to the same ironing batch in process validation window (same shortcut is available by activating the button in ironing batch menu).
- For all other ironing batches it is possible to delete selected ironing batch. (Same possibility is available by pressing DEL).

An ironing batch that is process validated OK can not be erased in the ironing batches window but need to be erased in process validation window. For more information see process validation.



### 4.3 Process validation

Process validation is a way to automatically verify that a cycle has ended without any errors and has fulfilled the cycle as intended (programmed).

1. Select cycles to be displayed:
  - All time – all cycles
  - Interval – select interval
  - Search – Updates window
2. Possibility to print receipt
3. Possibility to export to Excel-sheet
4. Temperature chart for the process
5. Machine information
6. Search for a special Batch ID
7. Select the machines for which cycles are to be displayed
8. Select the programs for which cycles are to be displayed
9. Select desired cycle to view process information
10. Temperature data in table form
11. RMC value (Residual Moisture Content). Only washing machines with IWS (Internal Weight System).
12. Process verification data for selected cycle

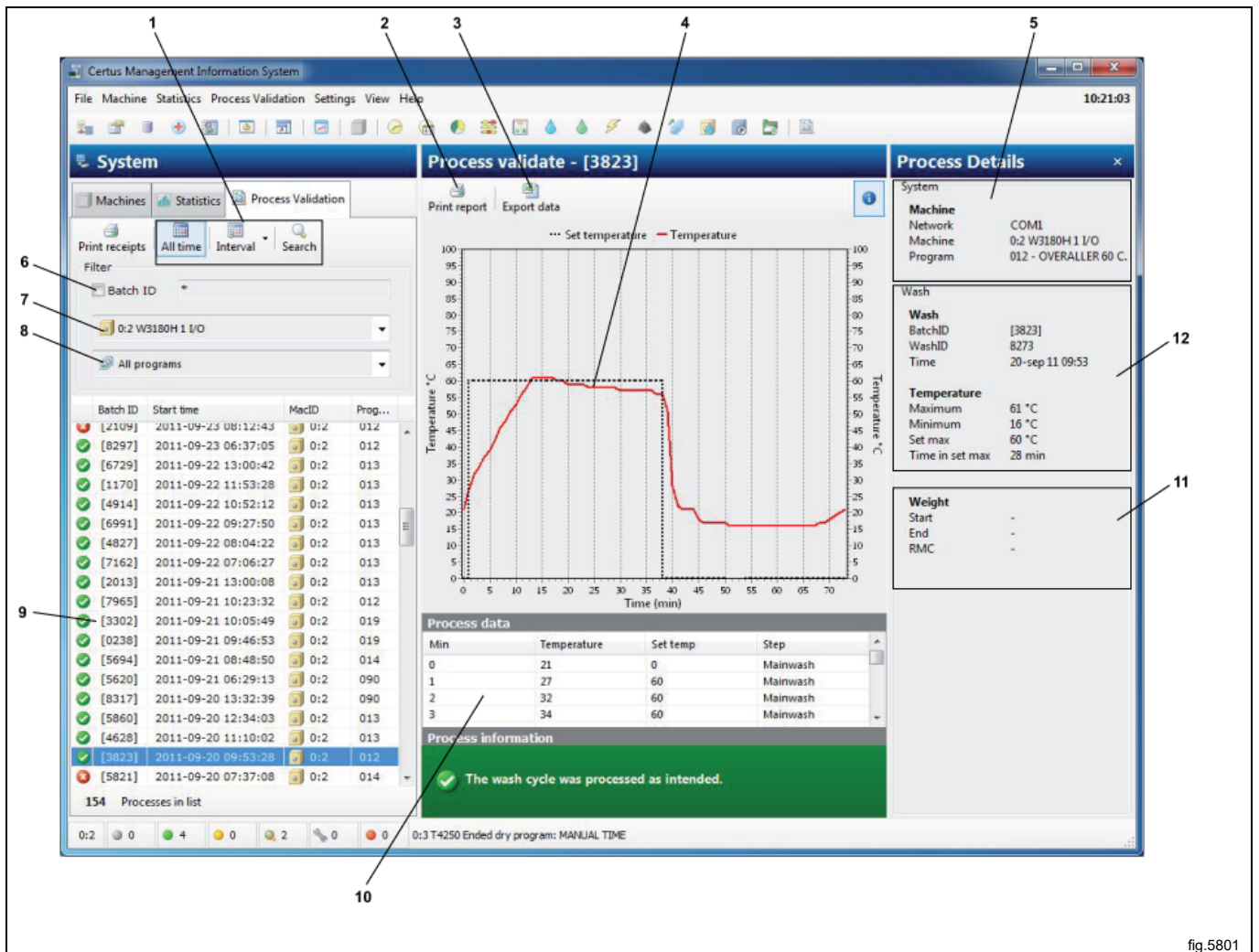


fig.5801

Process validation could be set up in several different ways/levels. For All set up possibilities for Process validation are described in System setup.

- It could be set up for manually input on Batch ID on machine or automatically generated by washing machine (only washers).
- Monitoring wash (no errors/no rapid advance/no long pause).
- Monitoring drying cycle (no errors).
- Monitoring ironing batches (no blocking errors).
- Health care settings washer, i.e verifying minimum temperature and minimum time for a wash cycle.
- Health care settings dryer, i.e RMC or minimum temperature and minimum time for a drying cycle.
- Health care settings ironer, i.e. RMC out value.
- Automatically print receipt when process done.
- Print receipt on process validation success.
- Print receipt on process validation error.
- For a washing machine with IWS (Internal Weighting System) RMC value.
- For a dryer with RMC, actual RMC values.

Possibilities to manually print process validation receipt but also to export process validation data to Excel sheet. Note that an export to an excel sheet will use two worksheets in the same document. One for process information and one for cycle progress.

### Search for a process-verified cycle

Using the process verification buttons, it is possible to select which process-validated cycles are to be displayed. Cycles can be selected as follows:

- Cycles carried out during a particular time interval.
- Cycles carried out on a particular machine.
- Cycles carried out with a special program No.
- Cycles with a specific Batch ID.

It is also possible to combine these variants, e.g. cycles on a particular machine during a particular time interval.

1. Search – Update search with specified criteria
2. Select during which time interval cycles are to be displayed:
  - All time – all cycles
  - Interval – Select interval
3. Select the machine for which cycles are to be displayed
4. Select the program for which cycles are to be displayed

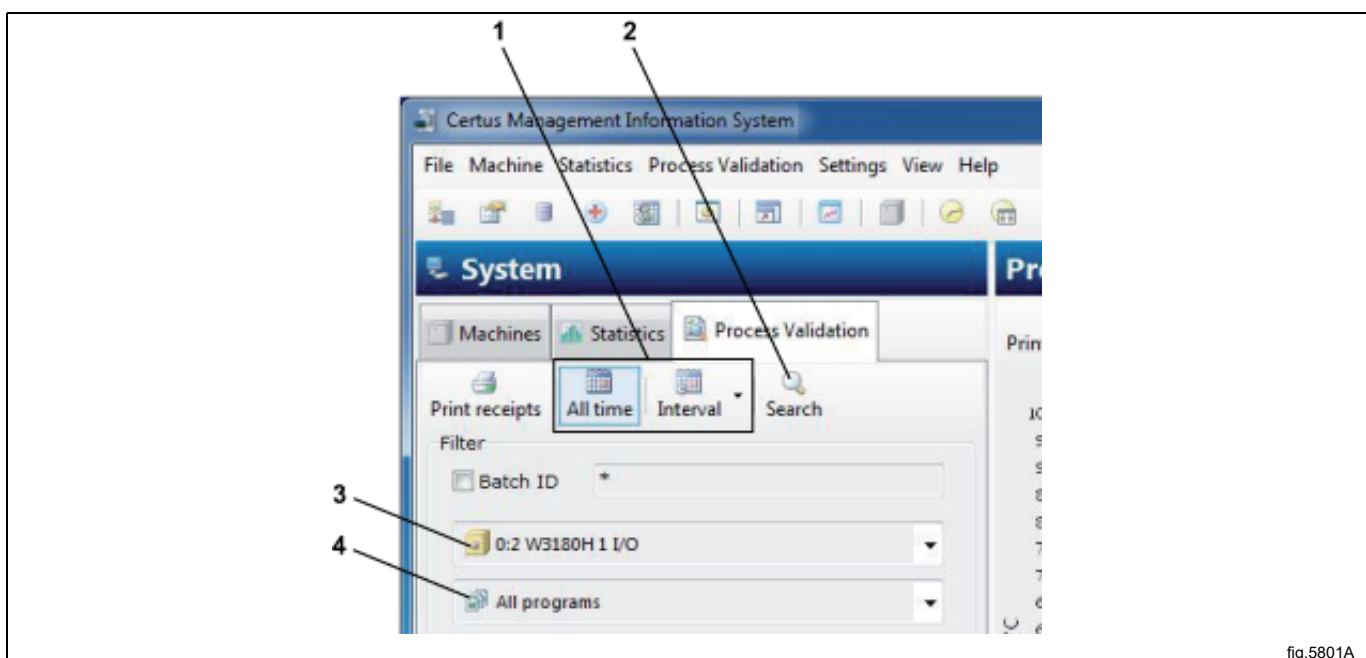


fig.5801A

**To select which process-validated cycles are to be displayed**

1. Click on Process validation.
2. Search for cycles within a desired time interval using All time or Interval.

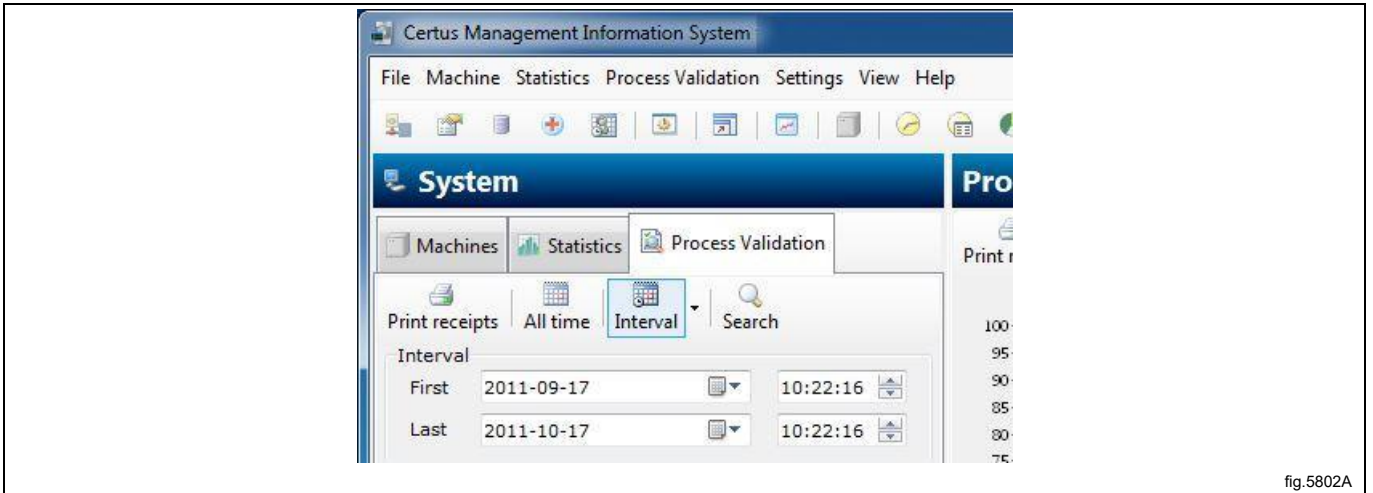


fig.5802A

3. Search for cycles with a specific Batch ID. Select Batch ID. When searching with Batch ID, standard search concepts such as the wild cards "\*" and "?" may be used.

Square brackets indicate that Batch ID has been created by the machine. Without square brackets, the value has been entered. Square brackets do not need to be indicated when searching.

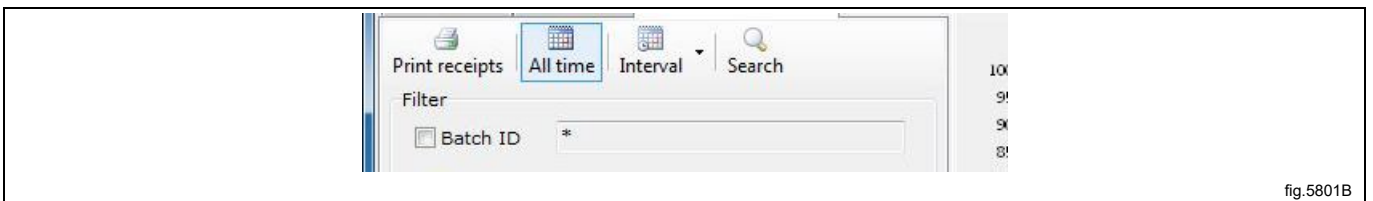


fig.5801B

4. Search for cycles on a specific machine.

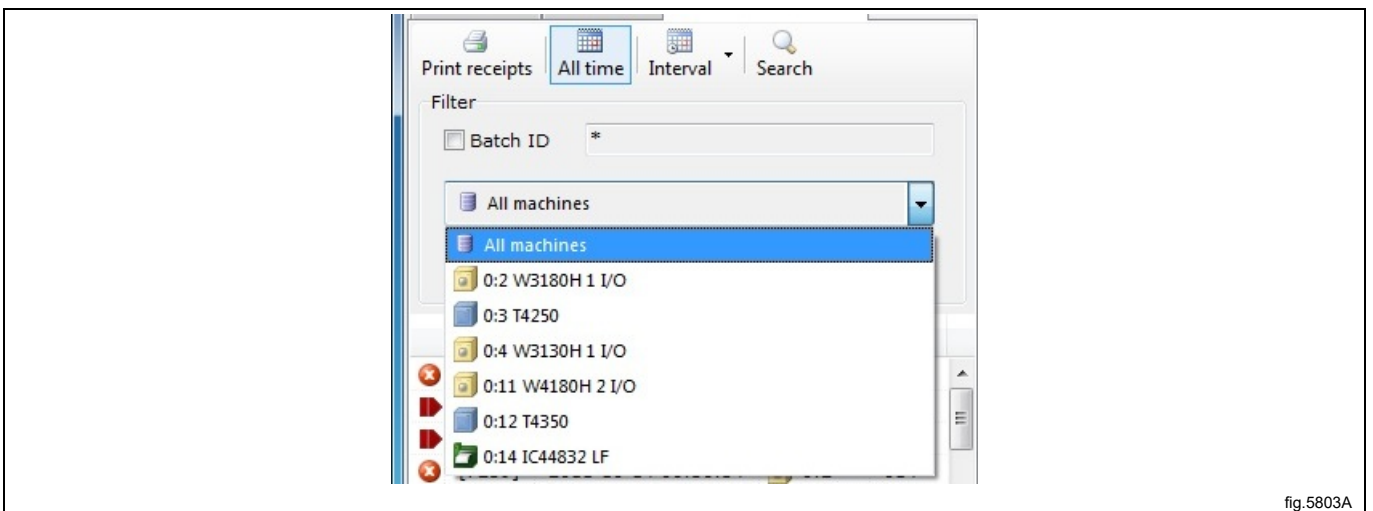


fig.5803A

5. Search for cycles on a specific program.

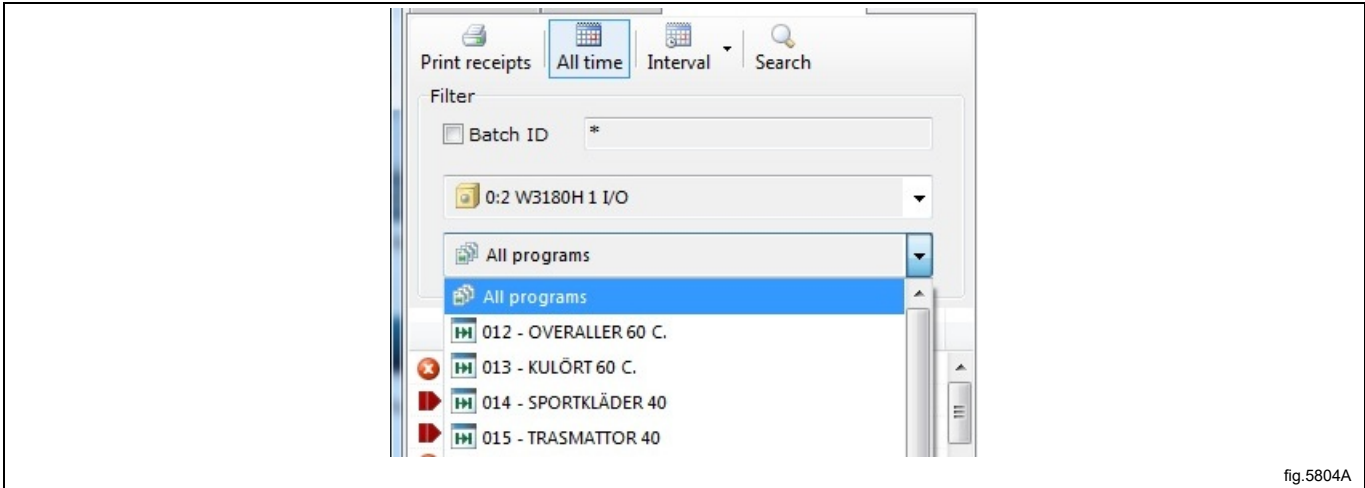


fig.5804A

6. Click on desired cycle to show process verification data for one cycle.

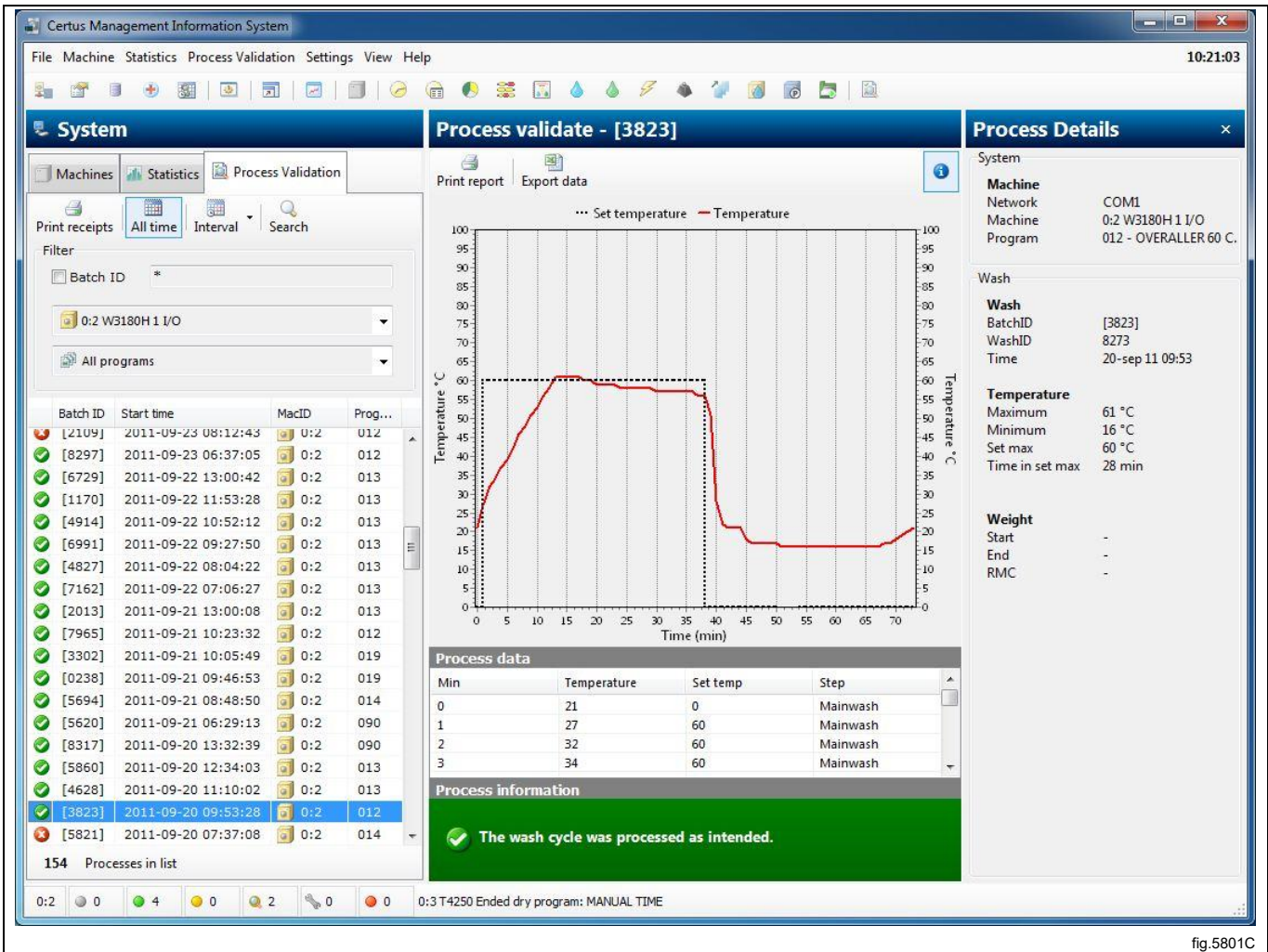


fig.5801C

---

**Export data to an Exel file**

To export data from process validation to an Excel file:

1. Click on Process validation.
2. Select cycle according to "Search for a process-verified cycle".
3. Click on export to Excel file.
4. Select where the file is to be saved. Note that an export to an excel sheet will use two worksheets in the same document. One for data and one for progress.

**Print receipt**

To print from process verification data:

1. Click on Process validation.
2. Select cycle according to "Search for a process-verified cycle".
3. Click on print receipt.

**4.4 System setup**

Under system setup is a description of all settings which can be made for CMIS. The description is divided into:

- Networks – Settings for network and machines.
- Main settings – Settings for receipt, temperature and sound.
- Database settings – Settings for database.
- Health care settings – Parameter settings for min. temp and min. time. RMC etc.
- Language settings.
- Customize application – Menu settings for statistics.

## Network settings

Network settings can be adjusted at three levels:

- General network settings – applies to all the networks in the system.
- Network settings – applies to the selected network.
- Machine settings – applies to the selected machine.

Click to make an adjustment to:

1. System
2. Network
3. Machine

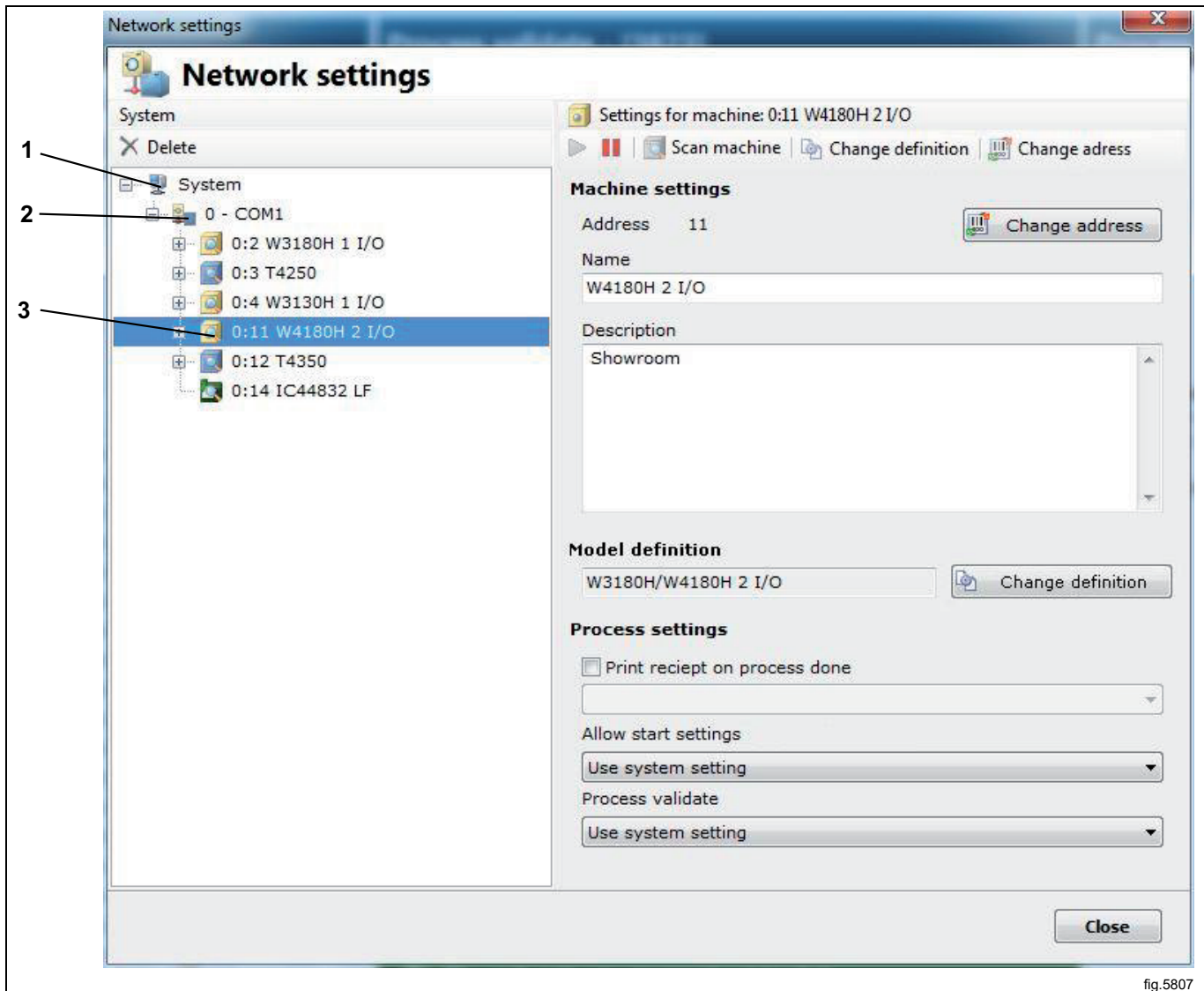







fig.5807

Depending on which level is selected, there are different shortcut keys available.

	Add new network
	Add machine to network
	Delete network/machine
	Activate network/machine
	Deactivate network/machine
	Scan network
	Scan machine

**Add new network**

To add a new network:

1. Configure all machines to be included in the network with a unique machine address (for information, see installation instructions). The machines must have the power switched on and be in the main menu.
2. Click on Network settings (1).

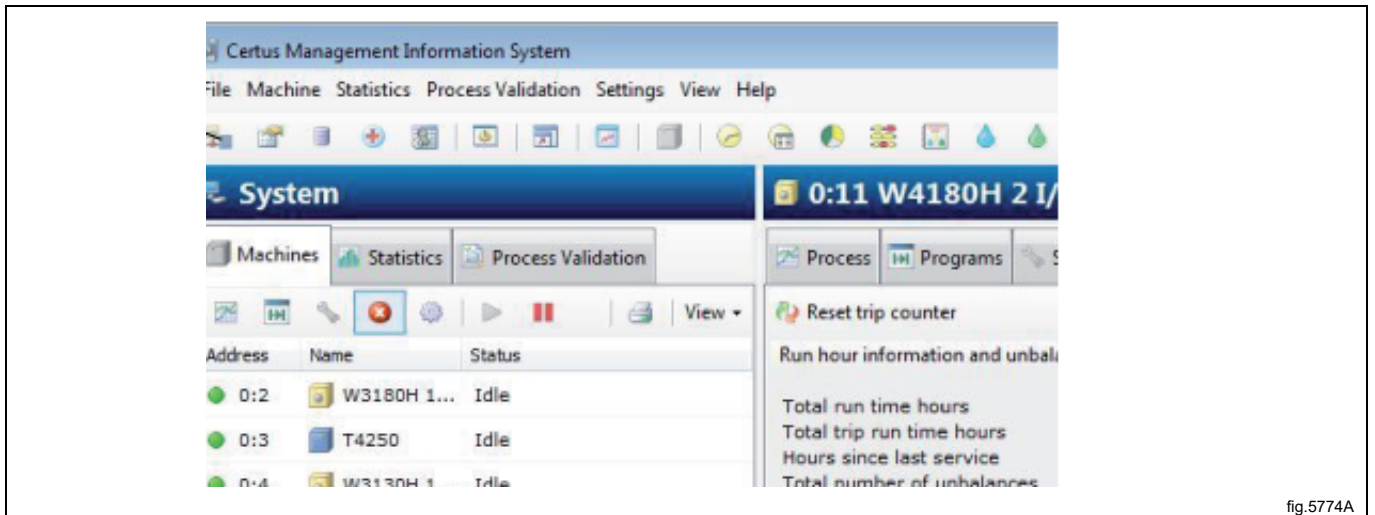



fig.5774A

3. Click on System .

4. Click on Add network .

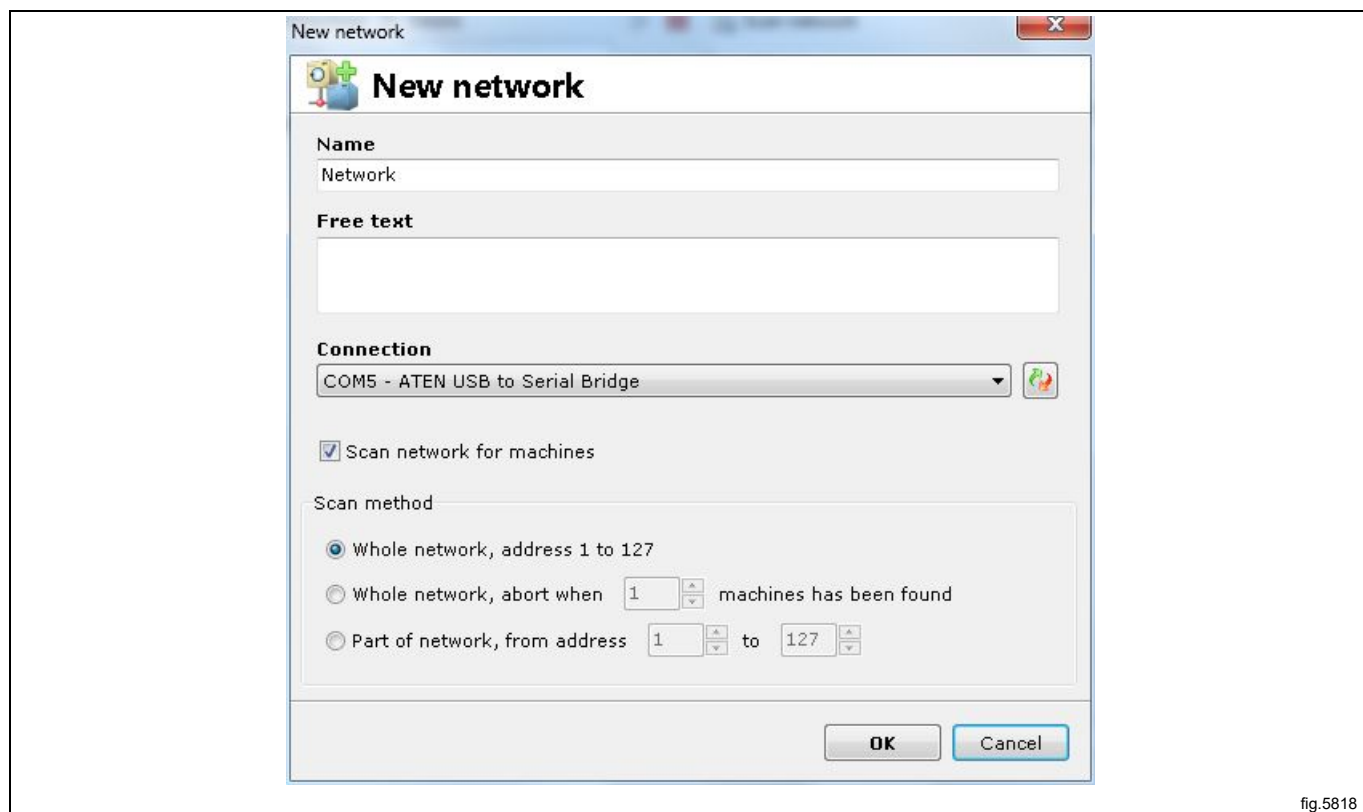


fig.5818

This menu provides several options:



- **Name**– Gives the possibility to give the network a suitable name. The suggested name “Network” is valid and could be used if no other name could be found.
- **Connection** – Select which serial port this network should use on your PC. Default is Com 1, but other serial ports could be used.
- **Scan network for machines** – Check this box to automatic scan a network when OK button is pressed. If box is not checked the network will be created but no machines will be added.
- **Scan method** – Select whether you want to scan the whole network (valid numbers 1-127), whole network or part of network until a desired number of machines are found.

5. Click on OK after all settings have been adjusted. CMIS automatically retrieves all necessary information from the machines.



### Add machine to network

Add machine is used to add a machine to an existing network. This function is suitable to use if another machine has been added to a network. To add a new machine to a network:

1. Configure the machine to be included in the network with a unique machine address (for information, see installation instructions).  
The machine must have the power switched on and be in the main menu.
2. Click on Network settings .
3. Select the network to which you want to add a machine.
4. Click on Add machine .

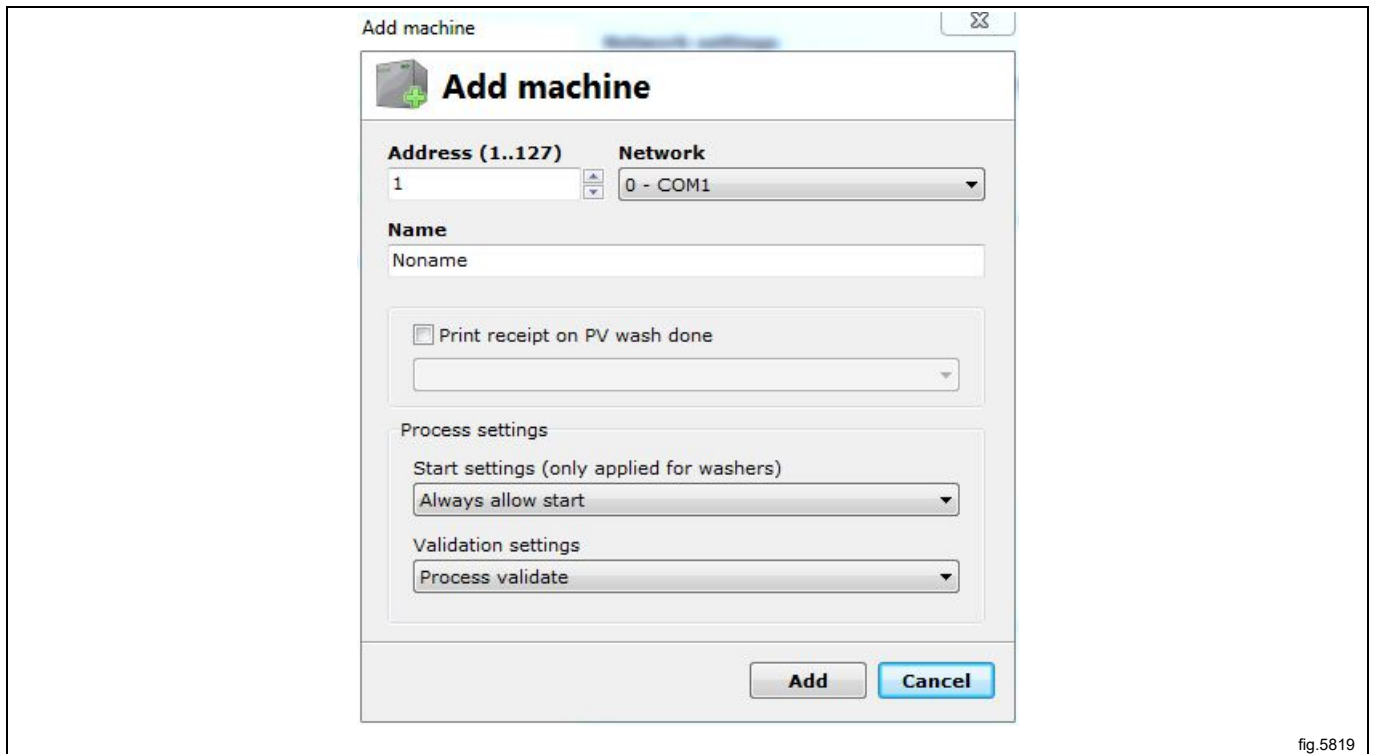


fig.5819

This menu provides several options:

- Address (1..127):  
Enter the address of the new machine here.  
Note! If an existing address is entered or no machine responds to the address given, the following error message will appear.  
In this case, check the machine configuration under point 1.

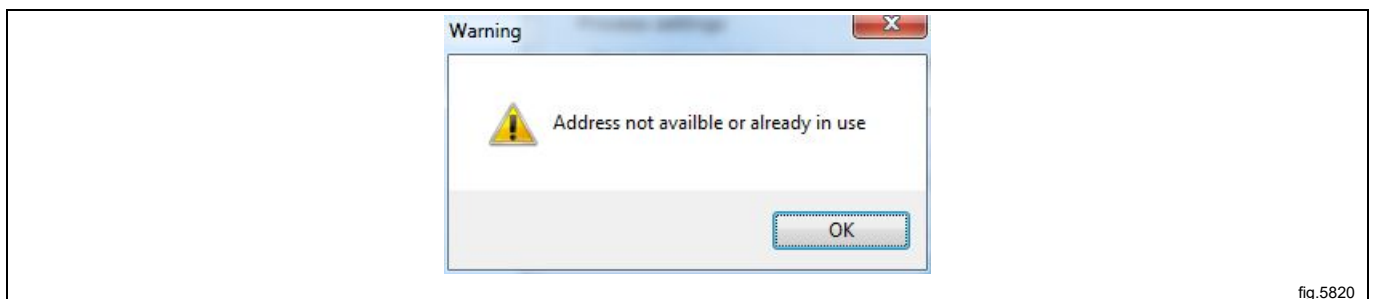


fig.5820

- **Name:**  
The name is automatically retrieved from the machine. If there is an available driver for the machine, a pre-selected name is given. The name can be changed at a later date if you want.  
If "Noname" appears, no driver has been found. Contact the supplier for assistance.
- **Network:**  
The network to which the machine is to be added.

### Print receipt on PV wash done

Check this box if you want that a receipt should be automatically printed. For more information, see System setup/ Networks/ Print settings.

### Process settings

#### Start Settings (only applied for washers)

This setting sets the machine's starting conditions.

- Start always allowed - Default at installation. Batch-ID is generated automatically by machine.
- Start not allowed - Machine is out of operation and can't be started.
- Demand Batch-ID before start - An extra menu will turn-up in machine when start button is pressed. This menu will make it possible to put a 4-digit number to the wash, for traceability.

#### Validation Settings

Settings for whether the machine's cycles are to be process validated or not.



- Normal wash - Machine runs normally without logging process validation data.
- Process validate all cycles - CMIS records necessary data being able to process validate all cycles in machine.

More record means larger databases which means this only should be activated if it is interesting and useful for the installation.

### Delete network/Machine

Delete is used for deleting a network or a machine.




To delete a machine/network:

1. Click on Network settings .
2. Select the network or machine to be deleted.
3. Click on Delete  and confirm in the Delete network or Delete machine box that you want to delete.

### Activate/Deactivate network

With Activate network and Deactivate network you can activate or deactivate a network. If a network is deactivated, CMIS ceases to retrieve information from the network. Consequently, no statistics will be saved.

To activate or deactivate a network.




1. Click on Network settings .
2. Select the network to be activated or deactivated.
3. Click on Activate network  or Deactivate network .

A deactivated network and its machines will be crossed out in the system configuration and the machines will be greyed in Machine information.

### Activate/Deactivate machine

With Activate machine and Deactivate machine you can activate or deactivate a machine in a network. If a machine is deactivated, CMIS ceases to retrieve information from it. Consequently, no statistics will be saved. It is appropriate to deactivate a machine if e.g. it is to undergo an extended service, as it will not then affect the network.

To activate or deactivate a machine.



1. Click on Network settings .
2. Click on the network containing the relevant machine.
3. Select the machine to be activated or deactivated.
4. Click on Activate machine  or Deactivate machine .

### Scan network

This is a function for updating information from the machines in a network. This function is used if:

- Several machines have been replaced or more machines have been added.
- Changes have been made to several machines (e.g. equipped with an additional I/O card). It is also possible to use Scan machine.
- Statistics from several machines appear to be incorrect.
- Error message 'MIS communication error' is displayed after changes have been made to the machines.

To update information from the machines in a network:

1. Configure all machines to be included in the network with a unique machine address. The machines must have the power switched on and be in the main menu.
2. Click on Network settings .
3. Click on relevant network
4. Click on Scan network . CMIS automatically retrieves all necessary information from the machines.



### Scan machine

This is a function for updating information from a machine.

This function is used if:

- Changes have been made to the machine (e.g. equipped with an additional I/O card).
- The statistics from the machine appear to be incorrect.
- The error message 'MIS communication error' is displayed repeatedly on the machine.
- A machine has been replaced and the new machine has been given the same machine address as the old one.

To update the information from a machine:

1. Ensure that the machine has the power switched on and is in the main menu.
2. Click in CMIS on Network settings .
3. Click on the relevant machine
4. Click on Scan machine . CMIS automatically retrieves all necessary information from the machine.

### Select machine configuration manually

In case that CMIS can't match configuration automatically for a machine, you will have to select configuration manually. Select the configuration you know is closest to the machine you are installing or contact supplier for help.

#### Note!

**Model for dryers is normally programmed in parameter 4.10. If this is set to "0", CMIS will alert for this.**

**Please see Installation manual how to set up correct model No. in Selecta Control.**

**Model for ironers is normally programmed in service option, "No Address CMIS". Please see Installation manual how to set up correct model No. in electronic control panel for ironer.**

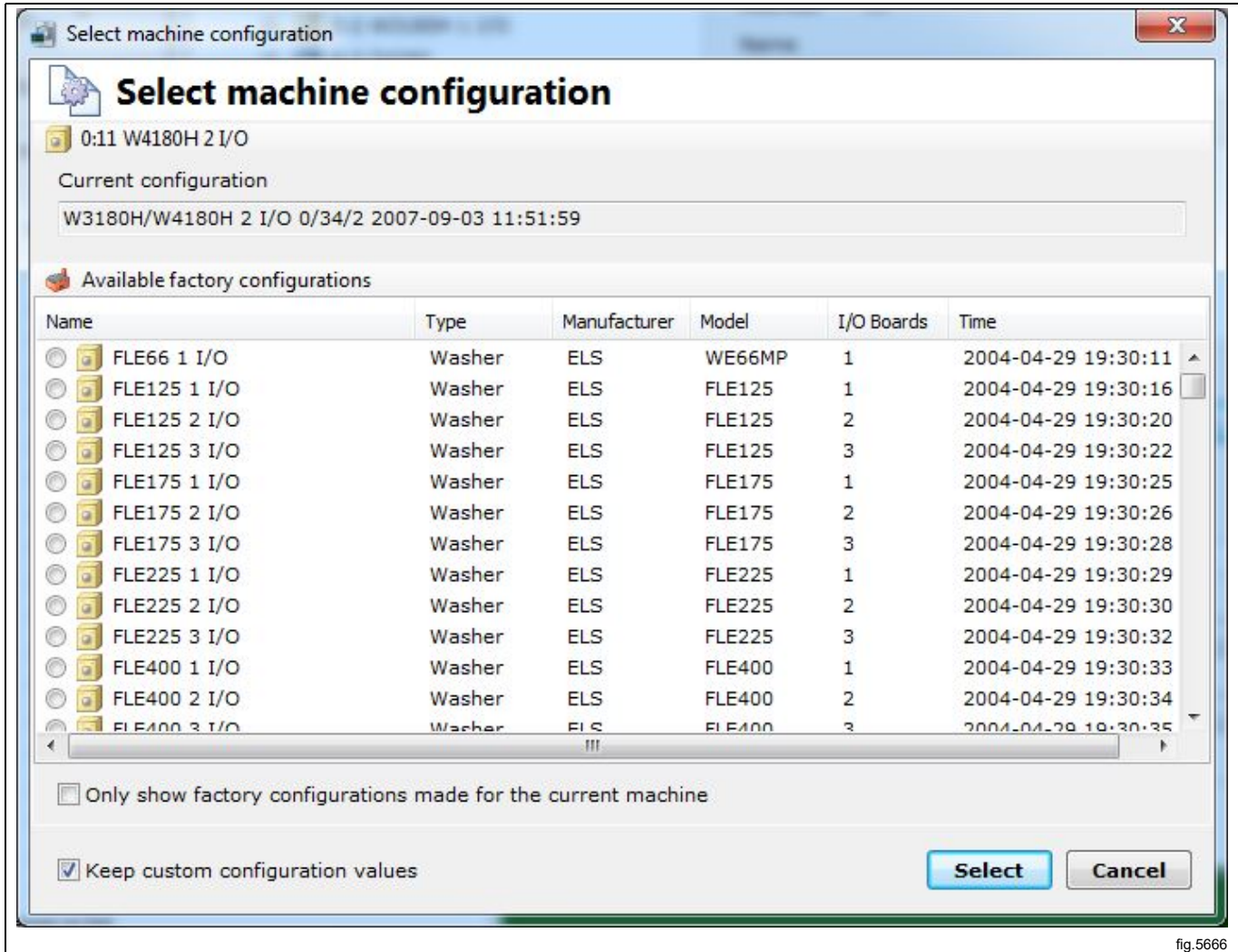


fig.5666



#### Note!

Selecting an incorrect configuration will cause CMIS to work improperly.

### 4.4.1 Network settings — System level

Network settings on System level apply as default values for all networks and machines in the system. Note that start settings and settings for process verification can also be adjusted on machines or at program level. These settings then apply in preference to settings under General system settings. For further information, see under Allow start settings and Process validate.

To adjust general settings for the network and machines:

1. Click on Network settings .
2. Click on System .
3. Make the required changes under:
  - System settings
  - Process settings
  - Allow start settings
  - Process validate

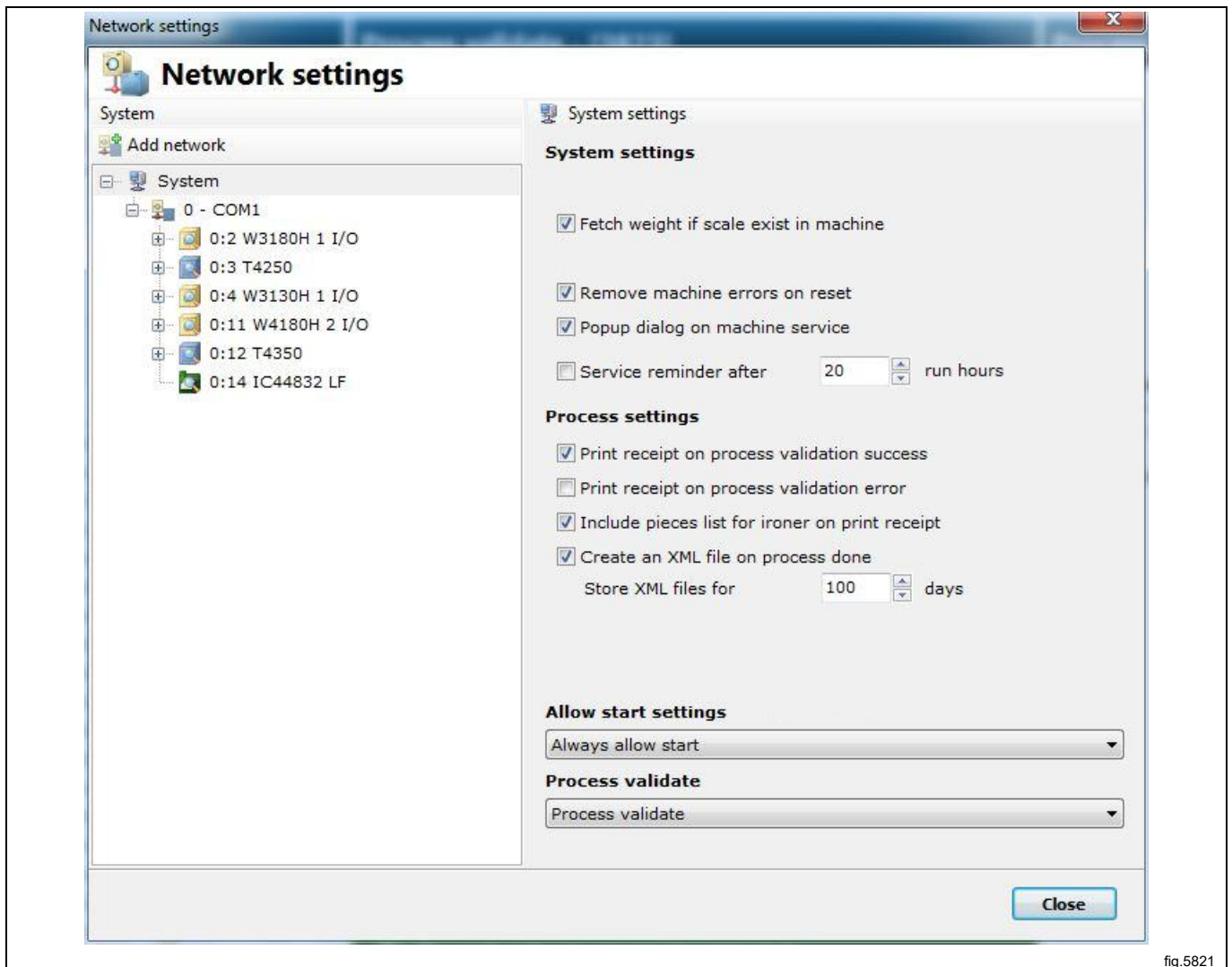


fig.5821

#### 4.4.1.1 System settings

##### Fetch weight if scale exists on machine

Normally CMIS updates data from the IWS system (Internal Weight System) if this system exists on the machine. This box could be unchecked if update of weight is not needed. This box is checked as default (only washers).

##### Remove machine errors on reset

An error code could normally be removed on the machine and if this box is checked it will be removed in CMIS as well. If it is requested to keep the alarm on CMIS even if it is removed on machine this box should be unchecked. This box is checked as default.

##### Pop-up dialog on machine service

A service alarm will pop up as a service menu in CMIS. If this function is not wanted and should be disabled - this box should be unchecked. This box is checked as default.

##### Service reminder XXX Run hours

If this box is checked a service reminder will pop up after the given number of hours if a service is not done. This box is unchecked as default.

#### 4.4.1.2 Process settings

Print receipt on process validation success/Print receipt on process validation error.

It is possible to decide whether a receipt should be printed on Process validation success or Process validation error by checking the correct box. Default is Print receipt on validation success.

This function requires Process validation to be defined and a printer to be selected. Those options are defined for each machine in Machine settings, see System setup/Networks/Machine settings.

##### Create an XML file on process done

It is possible to decide whether each process should be stored to an external file (XML-file) or not. It is also possible to decide how many days an XML-file should be stored.

The function is used when a cycle should be analysed after the cycle has ended.

The XML-files could be viewed in the included Process viewer or with the stand alone Process viewer.

#### 4.4.1.3 Allow start settings

This setting is valid for the whole system. Note that machine specific settings also could be made on a lower level – the machine level or in some cases even in the program level. Settings made on machine or program level has higher priority.

##### Always deny start

Puts the machine out of operation

##### Demand Batch ID before start

Adds an extra menu at the washing machine that requires the operator to feed a 4-digit number – a Batch ID number. This number is used to keep trace of a specific wash in CMIS.

##### Always allow start

Select this option to always allow start. Default configuration.

#### 4.4.1.4 Process Validate

This setting is valid for the whole system. Note that machine specific settings also could be made on a lower level – the machine level or in some cases even in the program level. Settings made on machine or program level has higher priority.

##### Normal run

Use this menu if there is no need to process validate. This is the default configuration. No process validation data will be saved.

##### Process validate

Use this menu if you want to process validate. Process validate will record extra data to make it possible to print a validation receipt.

#### 4.4.2 Network settings — Network level

Network settings on Network level apply to the relevant network. Here you can e.g. change the network's name or take the opportunity to describe the network in the Description box.

To change the network setting:

1. Click on Network settings
2. Select the required network.
3. Make the required changes under:
  - Network settings
  - Communication settings

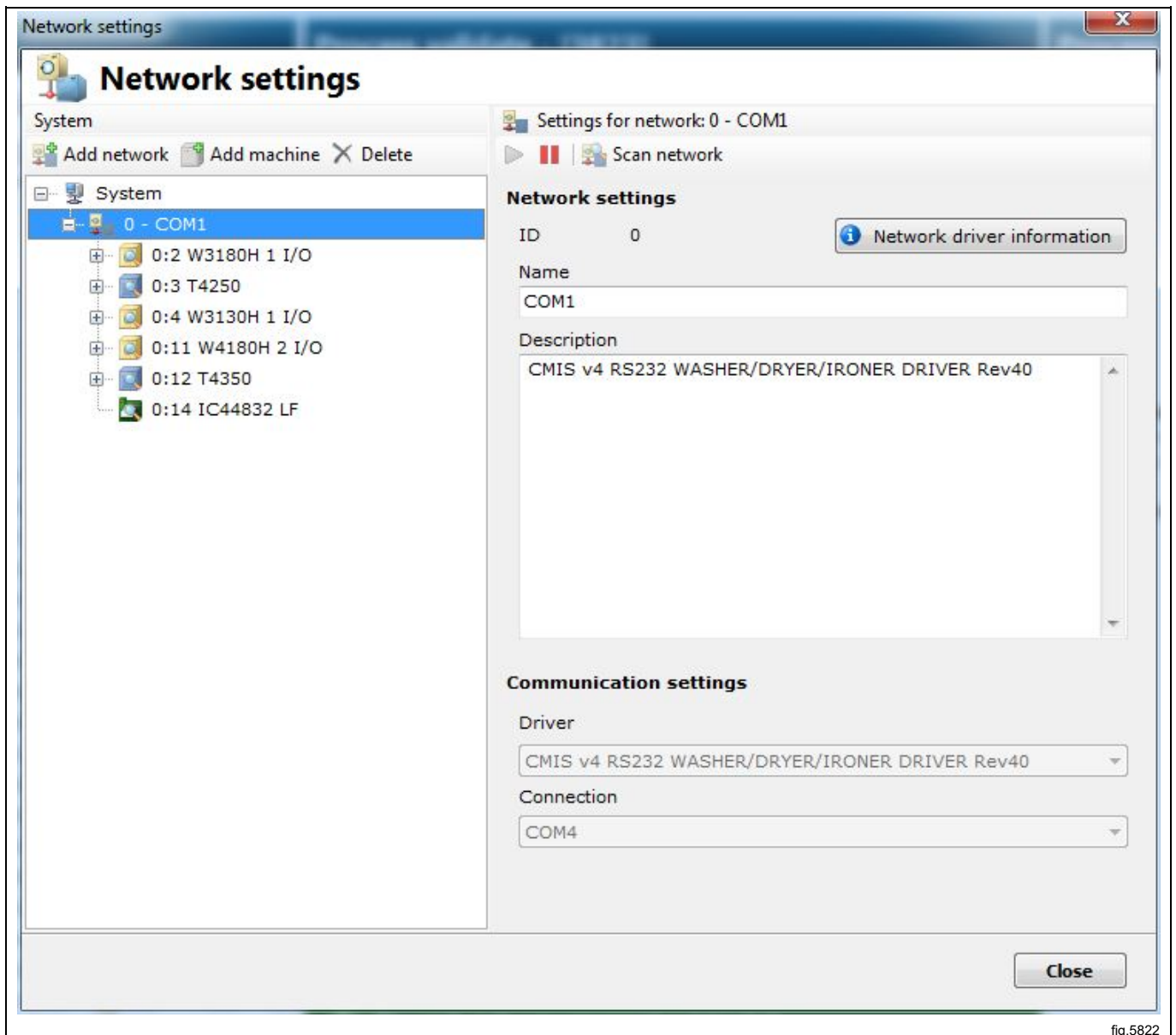


fig.5822

#### 4.4.2.1 Network settings

##### **ID**

The network's ID number. Several networks may be present, and each network has a unique ID number. Cannot be changed after a network has been configured.

##### **Name**

Network's name. By default, COM port is shown

##### **Description**

Description is a free text field describing the network. This text is only used here. Useful for specific information if several networks are used simultaneously.

#### 4.4.2.2 Communication settings

The values in Communication settings are automatically assigned on installation and should not normally be changed.

##### **Connection**

The serial port which this network use on your PC. Default is Com 1, but other serial ports could be used.

##### **Network driver information**

Contains actual information for current driver. For service purpose mainly.



### 4.4.3 Network settings — Machine level

Network settings on Machine level apply to the relevant machine and are consequently also the default values for all the programs on the machine. Note that start settings as well as settings for process validation on a specific machine have higher priority than settings adjusted in Network settings – System level.

To change the network setting for machine:

1. Click on Network settings.
2. Select desired network.
3. Select desired machine.

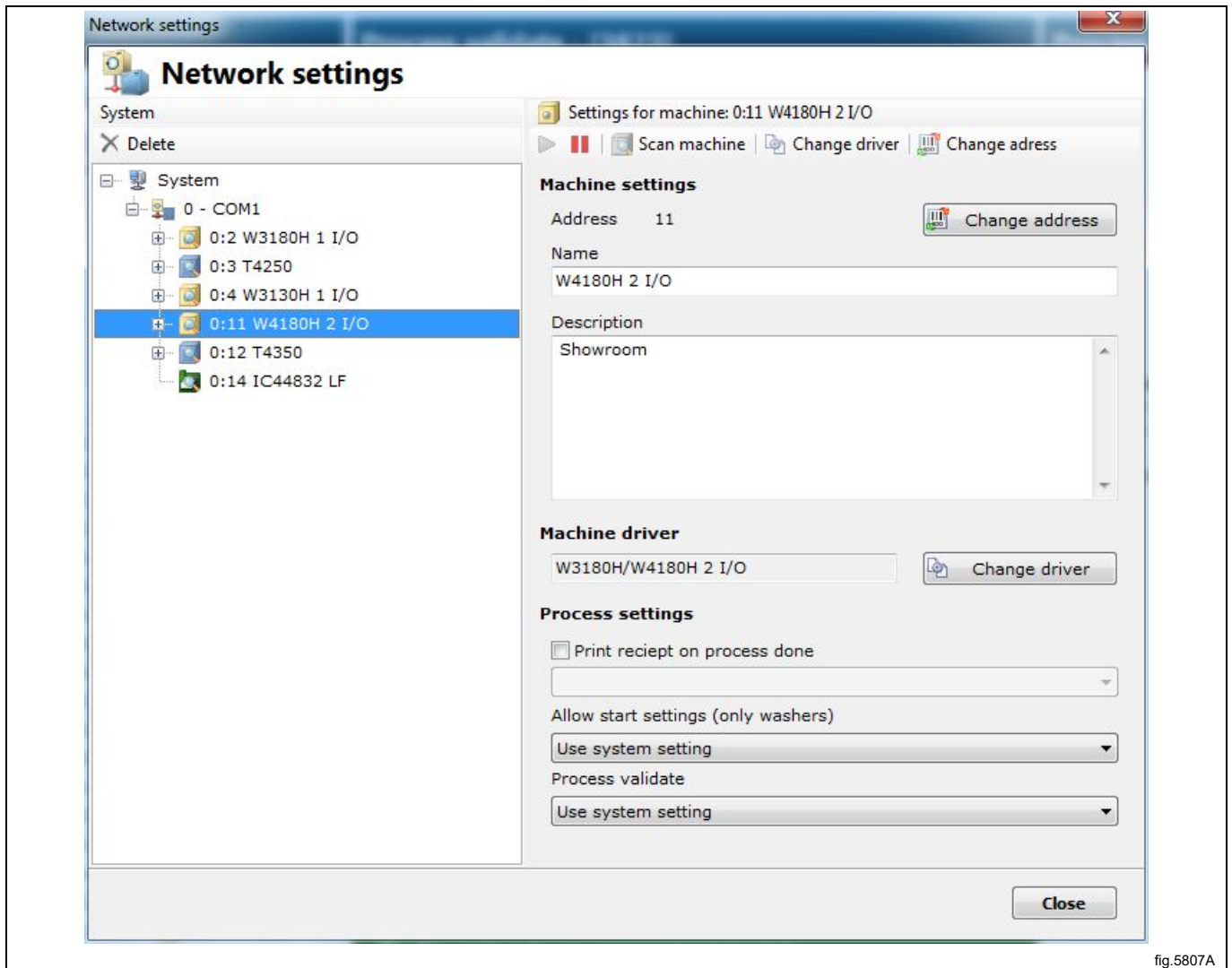


fig.5807A

4. Adjust settings for the selected machine under:

- Machine settings
- Model definition
- Process settings

#### 4.4.3.1 Machine settings

##### Address

The machine's network address. Can be a number between 1- 127. Note! If the machine's ID number is changed here it must also be changed in the appropriate machine.

##### Name

Text box in which the name of the machine can be changed. The name is assigned automatically on installation but can be changed if required. The name chosen here will be displayed in the various CMIS menus.

##### Description

Text box for entering an explanatory description of the machine. This text will be displayed in the various CMIS menus in the Machine free text box.

#### 4.4.3.2 Model definition

Model definition is the communication definition that the activated machine uses. The pre-selected definition for each model is standard and should be selected. Changing definition should only be made when advised from supplier. Incorrect configuration will affect on statistics.

#### 4.4.3.3 Process settings

Under this menu you can decide if you want to print a process validation receipt at the end of the cycle as well as select which printer to use. When you check off the dialogue "Print receipt on process done", the printer menu is activated. Then select the required printer (Windows standard, assumes that there is a printer installed). Note that several other settings affect the function:

- Under Network settings – System level – Process settings you should state if you want a receipt after a normal completed process verification or incorrect process verification. See System setup/General system settings.
- Under Network settings – System level – Process settings or Network settings – Machine level, Process validate settings must be set to process validate. See System setup/General system settings or System setup/Machine settings.

#### 4.4.3.4 Allow start settings (only washers)

1. Click on Network settings.
2. Select desired machine.
3. Adjust settings for the chosen machine in the Start pull-down menu (A):

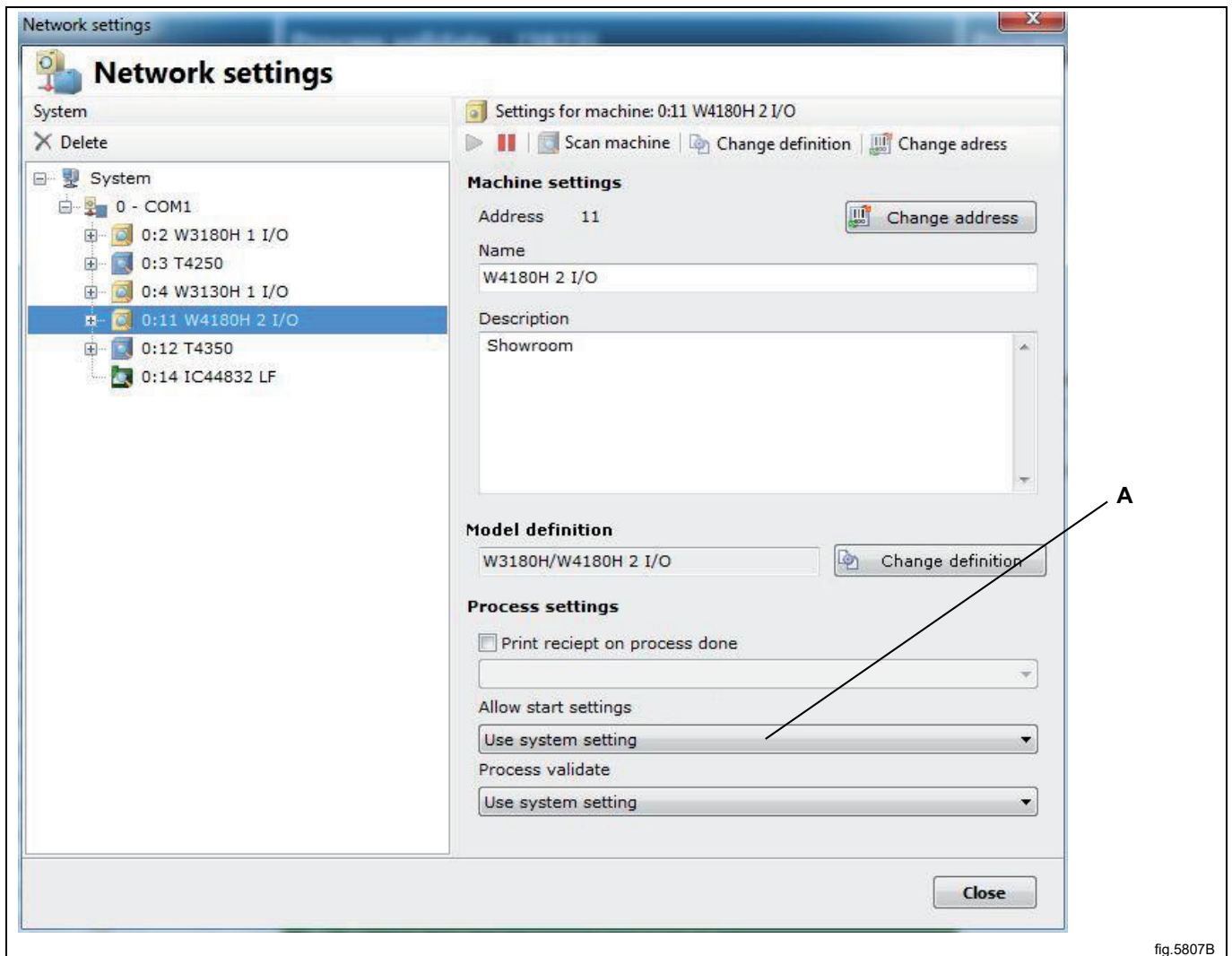


fig.5807B

#### Use System settings

Use this setting if the machine is to use the system's general setting adjusted in Global run settings.

#### Always deny start

Puts the machine out of operation

#### Demand Batch ID before start

Adds an extra menu at the washing machine that requires the operator to feed a 4-digit number – a Batch ID number. This number is used to keep trace of a specific wash in CMIS.

#### Always allow start

Select this option to always allow start. Default configuration.

#### 4.4.3.5 Process validation settings

1. Click on Network settings.
2. Select desired machine.
3. Adjust settings for the chosen machine in the Process validate pull-down menu (B):

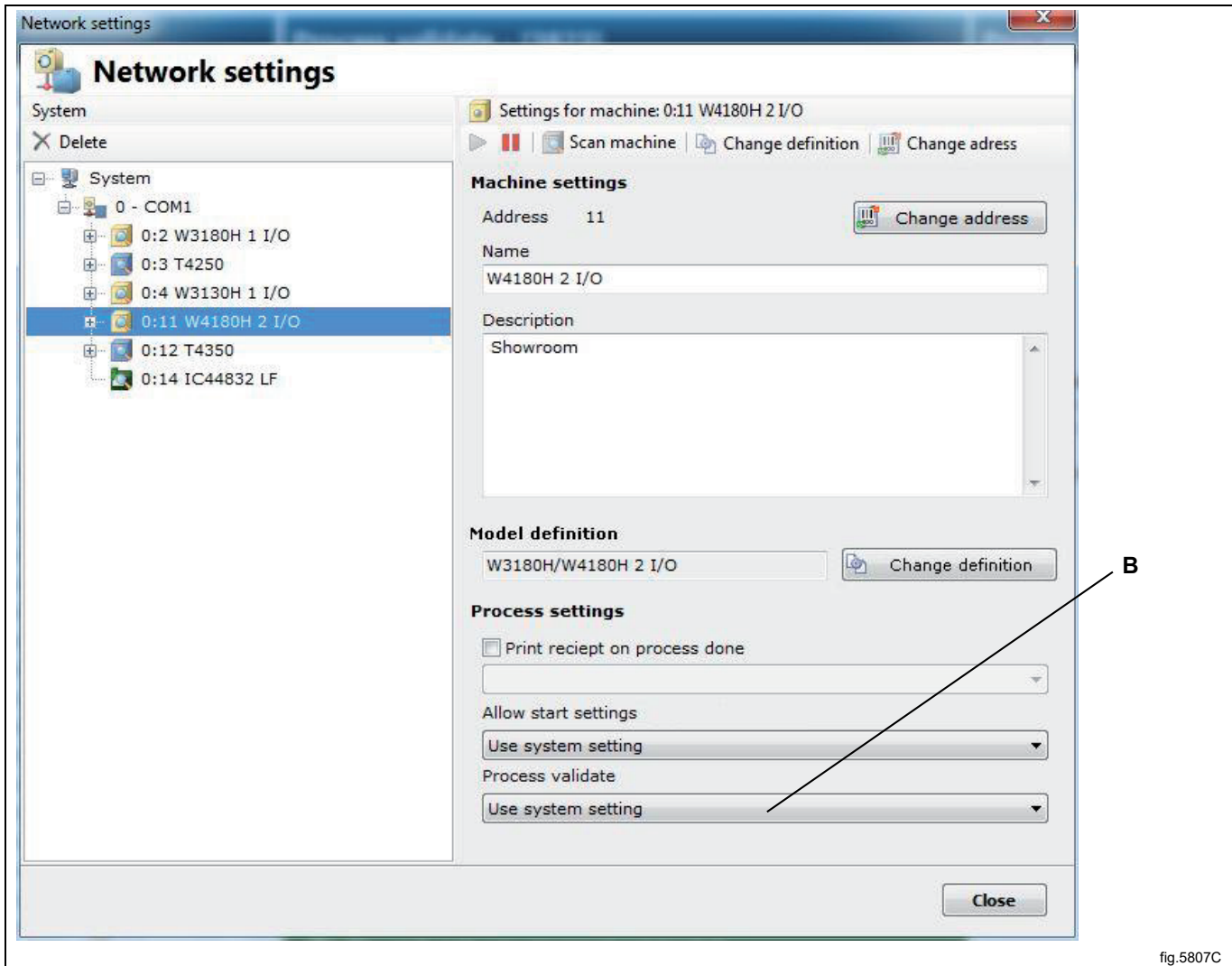


fig.5807C

#### Use System settings

Use this setting if the machine is to use the system's general setting adjusted in Global run settings.

#### Normal run

Use this menu if there is no need to process validate a cycle. This is the default value.

#### Process validate

Use this menu if you want to process validate a cycle. Process validate will mark process data and also record extra data to make it possible to print a validation receipt.

#### 4.4.3.6 Program settings (washers and dryers only)

Under program settings, apart from reading detailed information about a program, you can also set process settings. It is also possible to deactivate process verification for the selected program. The settings for a program always have higher priority than settings in Network settings/Machine settings.

To change the run settings for a program:

1. Click on Network settings.
2. Select desired network.
3. Select desired machine.
4. Select desired program.
5. Adjust settings for the chosen machine as described below:  
These are reset by Reset program information (A).

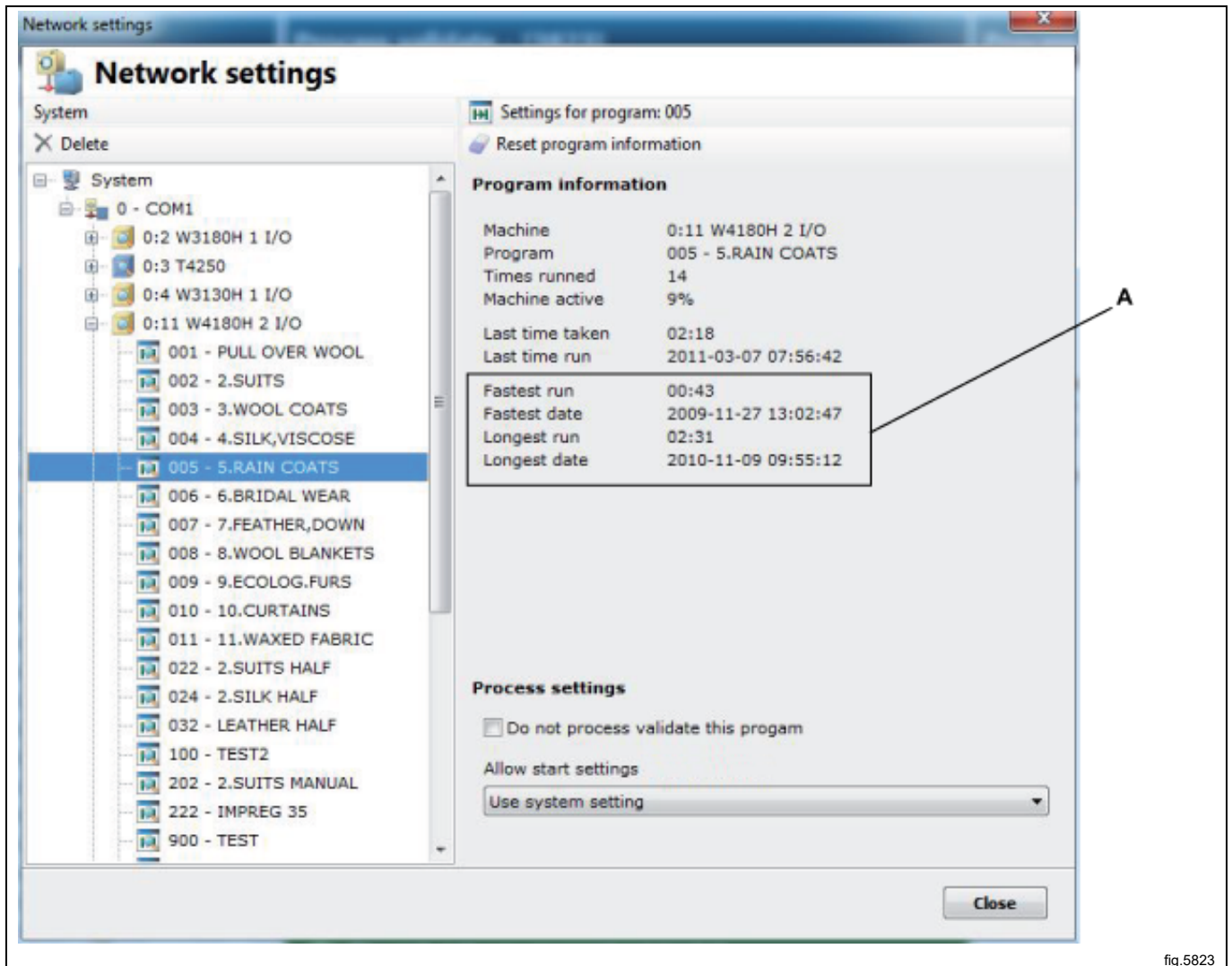


fig.5823

#### Program

In the Program box, information and statistics for the selected program are displayed. Values for Fastest run, Fastest date, Longest run and Longest date are reset with the Reset program information button.

#### Process settings — Deactivate process verification for a specific program

It is possible to deactivate process validation for the selected program. Check the Do not process validate this program box if the program is not to be process validated. This box is empty by default, i.e. process verification active.

**Process settings — Allow start settings (only washers)**

1. Click on Network settings .
2. Select desired machine.
3. Select desired program
4. Adjust settings for the chosen machine in the Start pull-down menu (C)

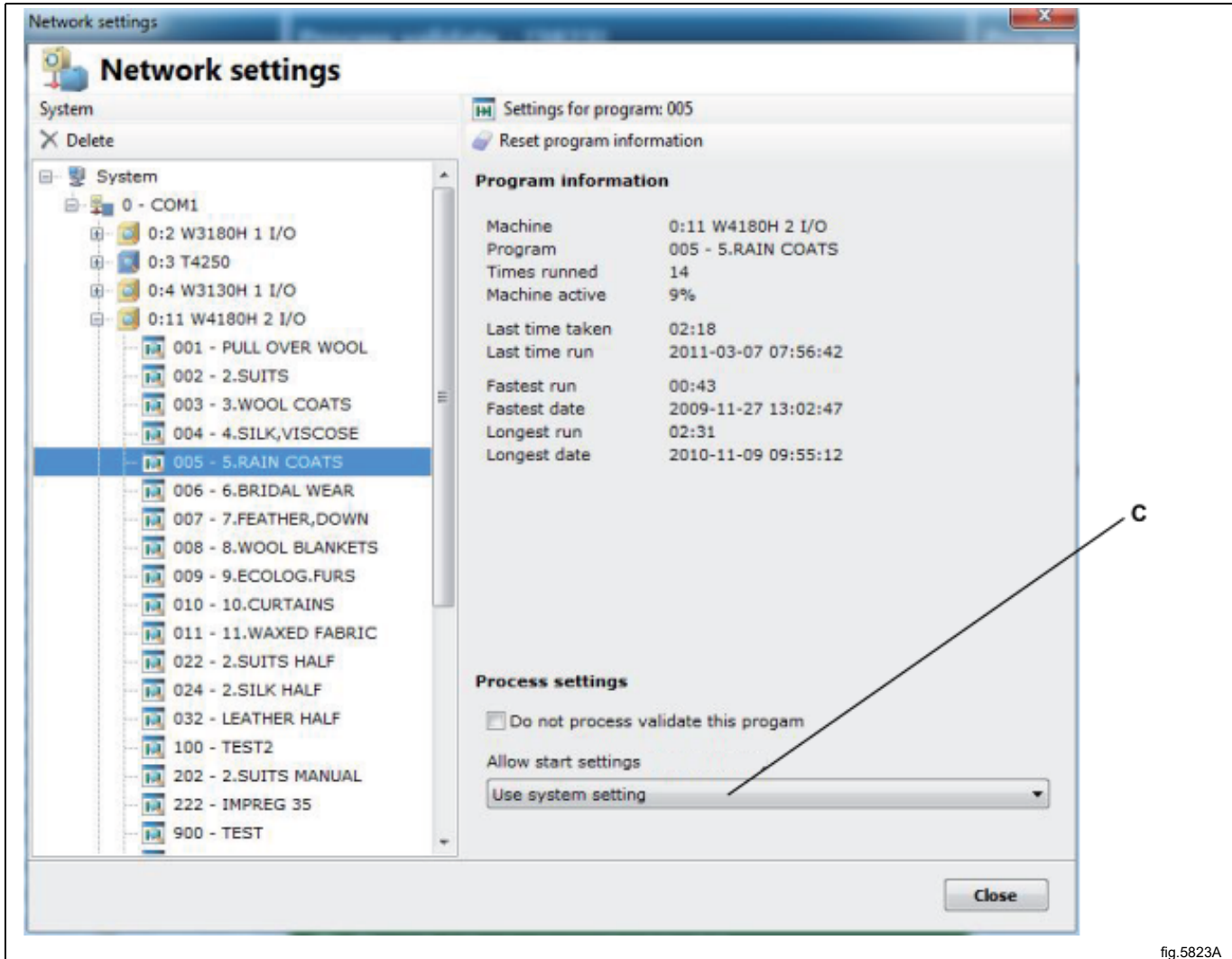


fig.5823A

**Use System settings**

Use this setting if the machine is to use the system's general setting adjusted in Global run settings.

**Always deny start**

Puts the machine out of operation.

**Demand Batch ID before start**

Adds an extra menu at the washing machine that requires the operator to feed a 4-digit number – a Batch ID number. This number is used to keep trace of a specific wash in CMIS.

**Always allow start**

Select this option to always allow start. Default configuration.

#### 4.4.4 Main settings

The Main settings menu can be found in the System pull-down menu.

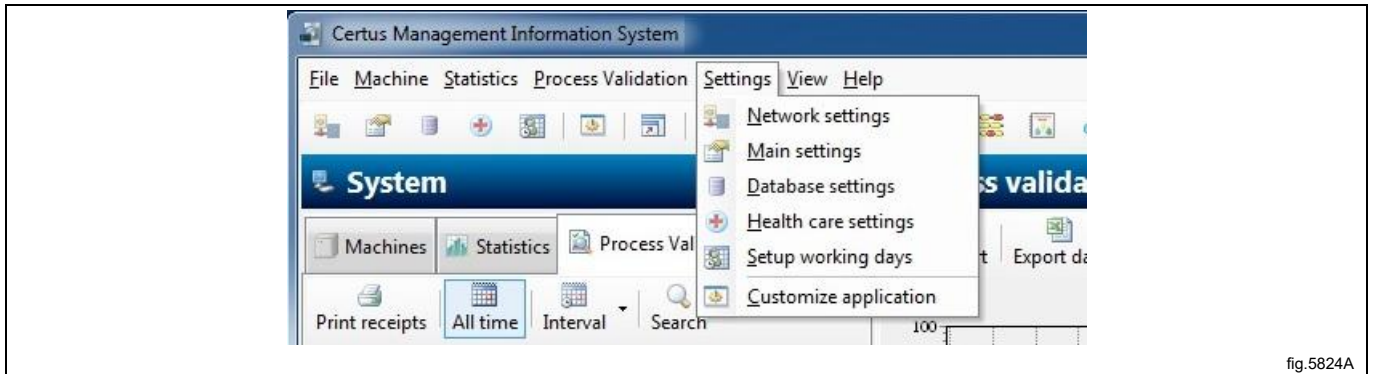


fig.5824A

Under Main settings it is possible to adjust a number of settings for

- Temperature
- Directories
- Sound effects
- Receipt settings
- Language settings

##### 4.4.4.1 Temperature

Under Temperature you can select if the temperature is to be displayed in Celsius or Fahrenheit. Celsius is pre-set. To select the temperature unit:

1. Under Temperature, select Celsius or Fahrenheit.
2. Click OK when the settings are complete.

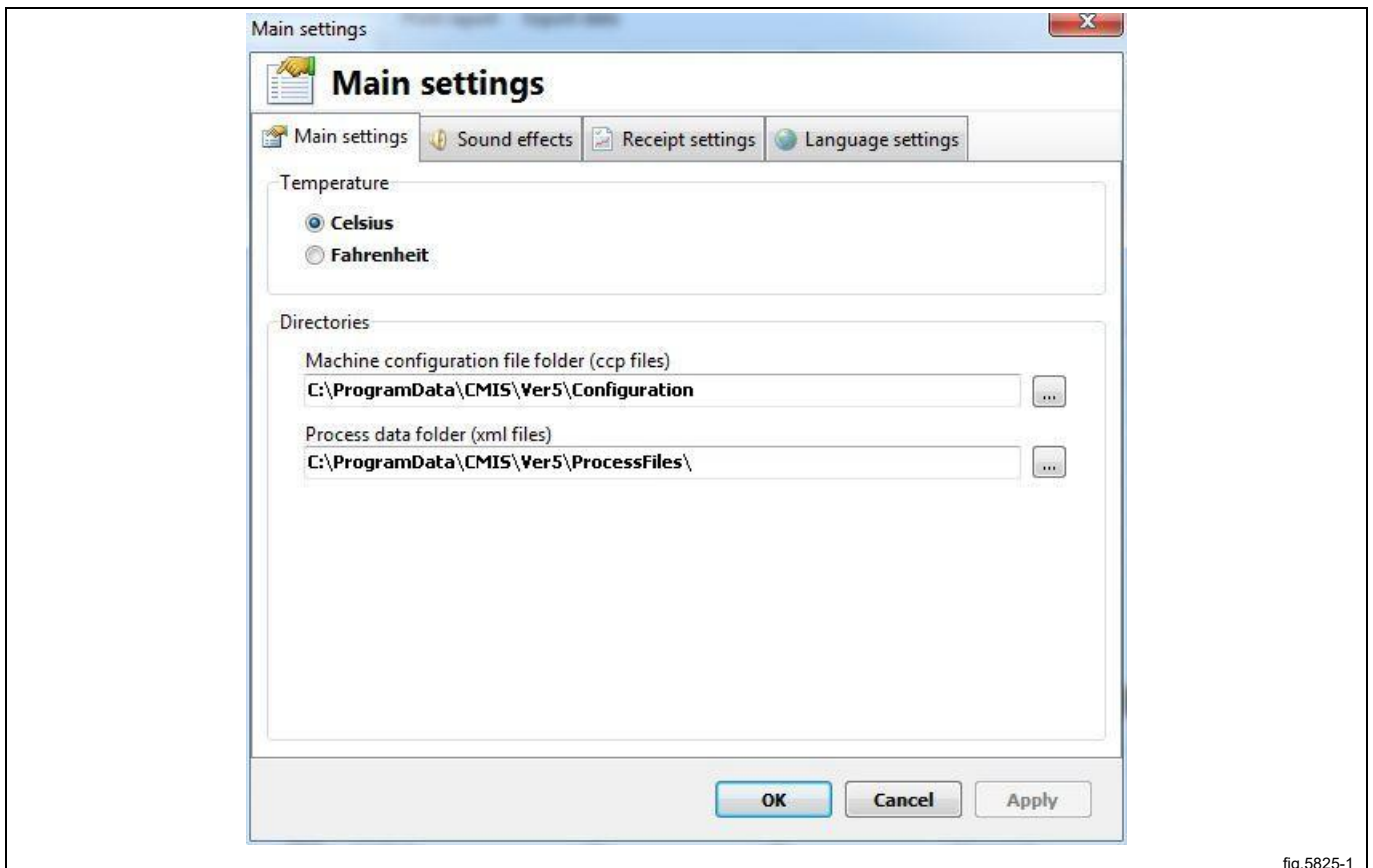


fig.5825-1

#### 4.4.4.2 Directories

Under Directories you can set the path to the folders where certain information is stored by CMIS.

##### Machine configuration files

This is the path to the folder where the machine files are located.

Note that the settings for machine files may only be changed on the recommendation of the manufacturer. Incorrect configuration can result in incorrect operation in CMIS.

##### Process data folder

This is the path to the folder where XML process files are located. Whether process data should be saved to XML-files or not is configured in Network Settings/General system settings, see Create XML-files on process done.

##### Cost calculation template

This is the path to the folder where the Cost calculation template is located.

##### Cost calculation result

This is the path to the folder where the Cost calculation result is located. Whether process data should be saved to XML-files or not is configured in Network Settings/General system settings, see Create XML-files on process done.

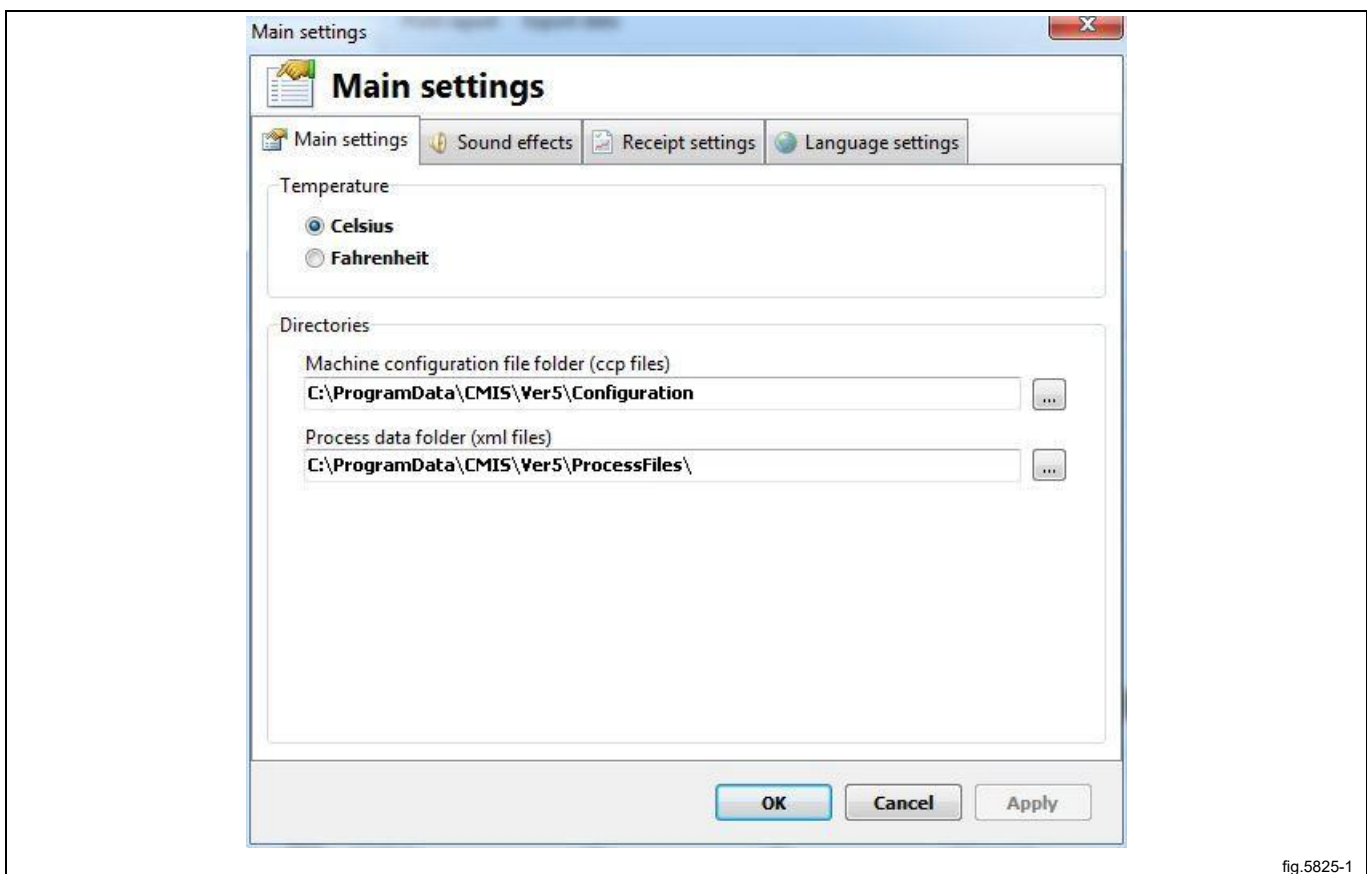


fig.5825-1



#### 4.4.4.3 Sound effects

Under Sound effects it is possible to activate and select the required sound for each type of alarm.

To select sound files for alarms:

1. Check the required alarms and select the appropriate sound file (\*.wav) with the button. Test the sound with the button. Sound files do not come with the program but are available as standard in the Windows folder.
2. Click OK when the settings are complete.

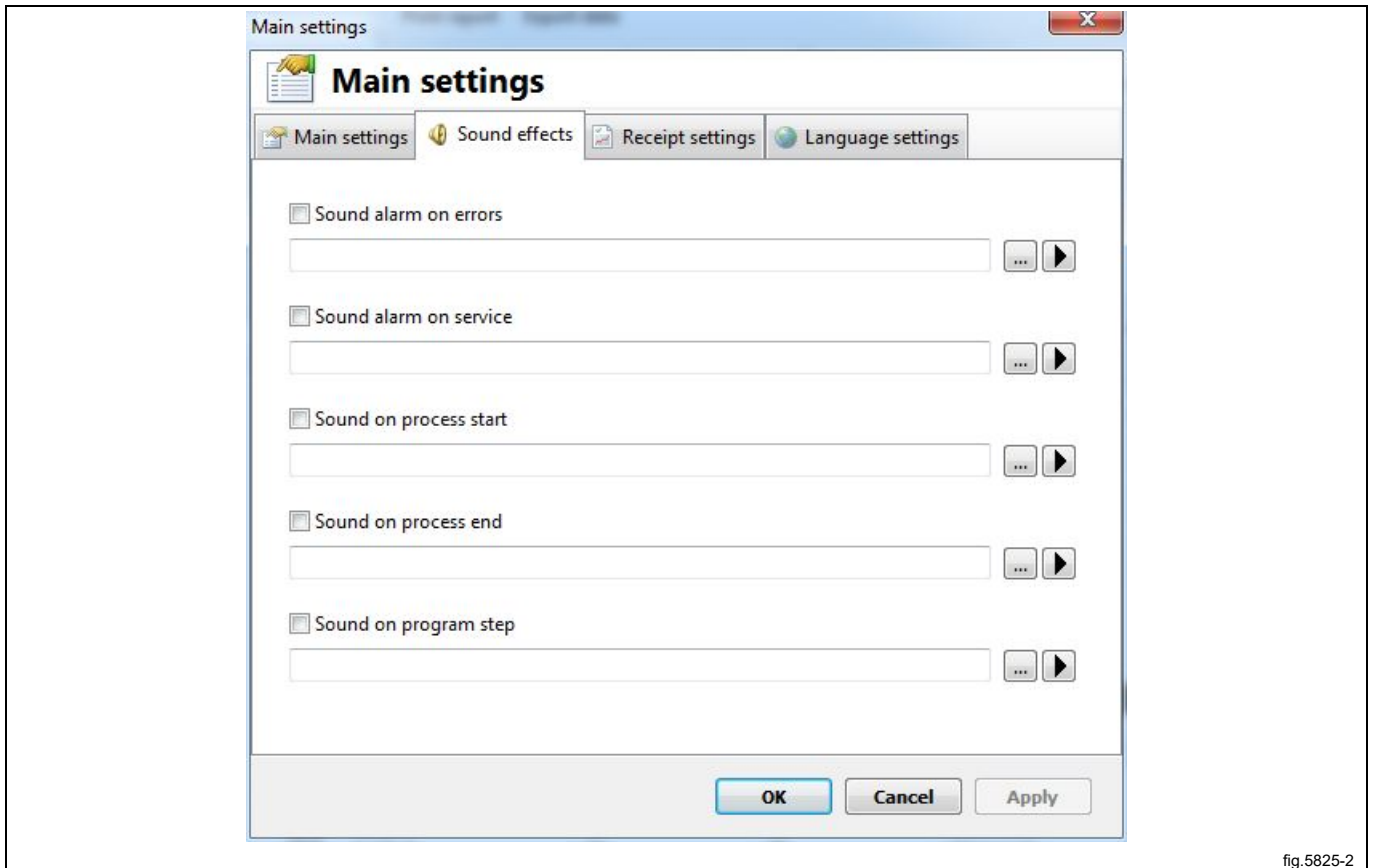


fig.5825-2

#### 4.4.4.4 Receipt settings

Under Receipt settings you can enter additional information for the process verification receipt. You can also add your own logo to the receipt.

1. Under Receipt settings, enter the additional information which is to appear on the receipt.
2. Select the logo to be printed on the receipt. The logo must be in BMP file format and measure approx. 20 x 60 mm.
3. Click OK when the settings are complete.

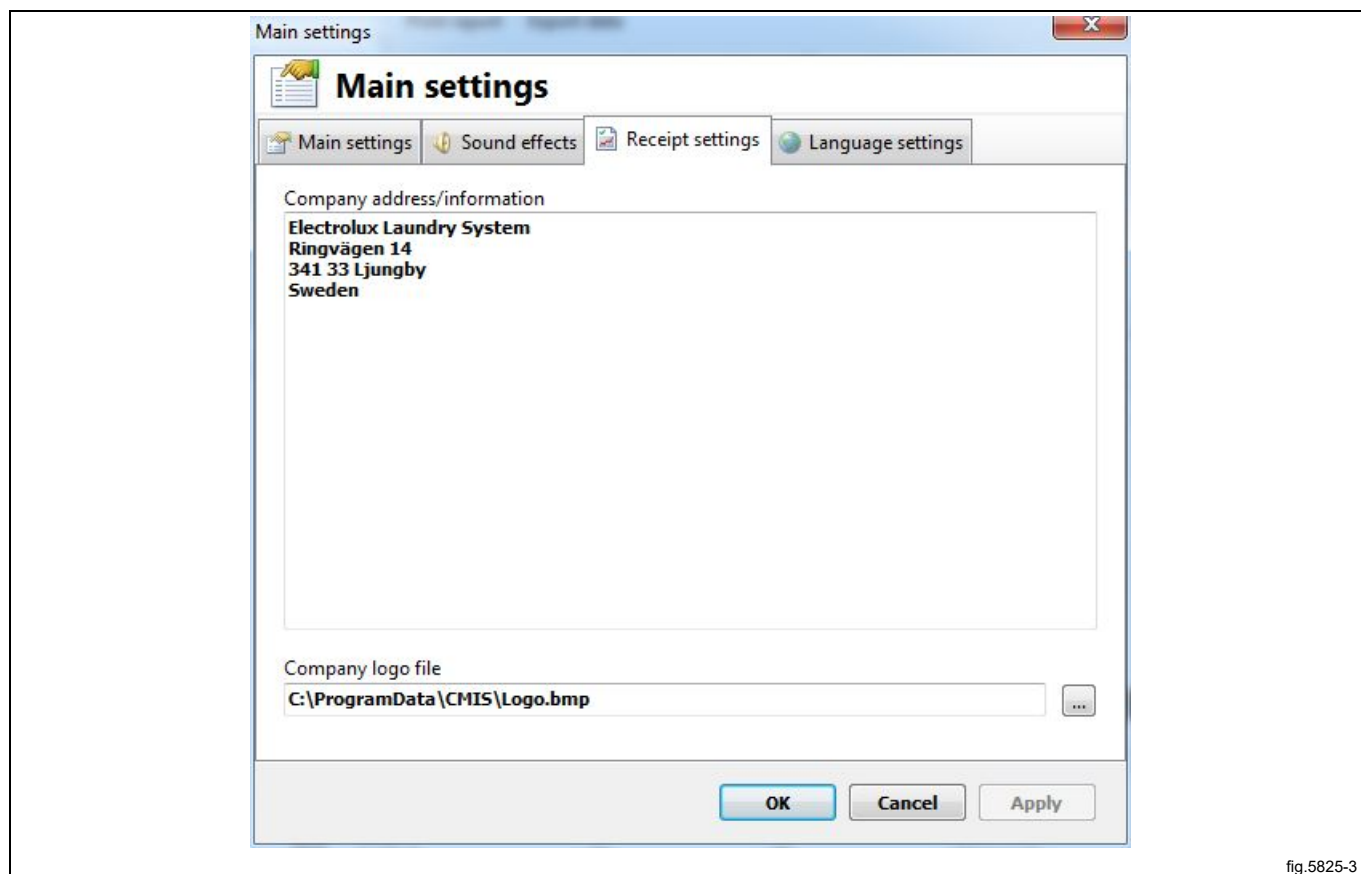


fig.5825-3

#### 4.4.4.5 Language settings

Under language settings you can change the language in which the CMIS application is presented. The list shown contains available languages.

1. Under Language settings, press the button in front of the desired language.
2. Press OK to confirm.
3. In order for the language change to take effect, you must close the CMIS application and restart it.

Note that Language settings will change the language in all texts in the program apart from model designations, error code texts, etc. In order for language changes also to affect these, Scan network or Scan machine has to be run again.

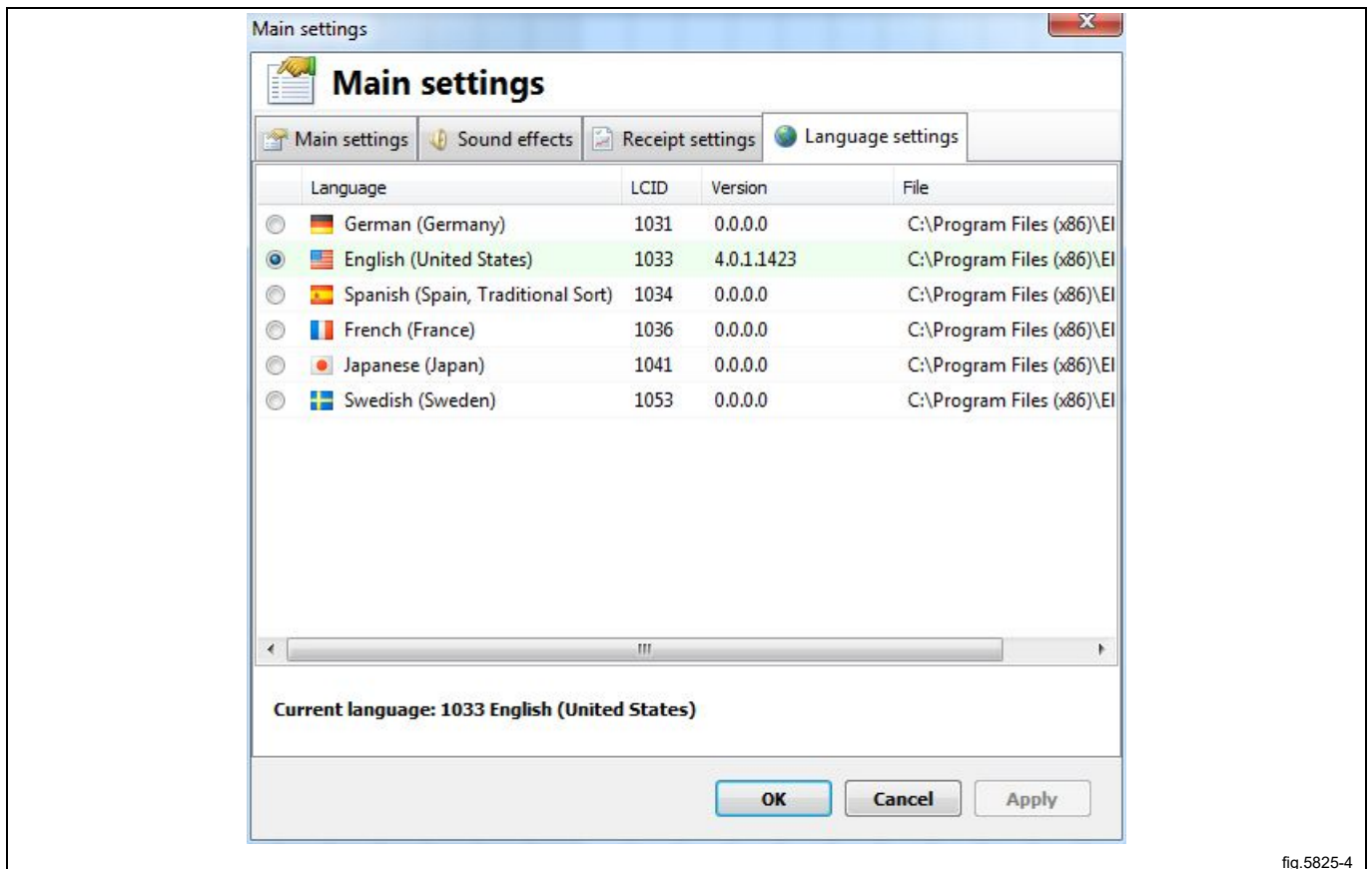


fig.5825-4

### 4.4.5 Database settings

The Database settings menu can be found in the System pull-down menu.

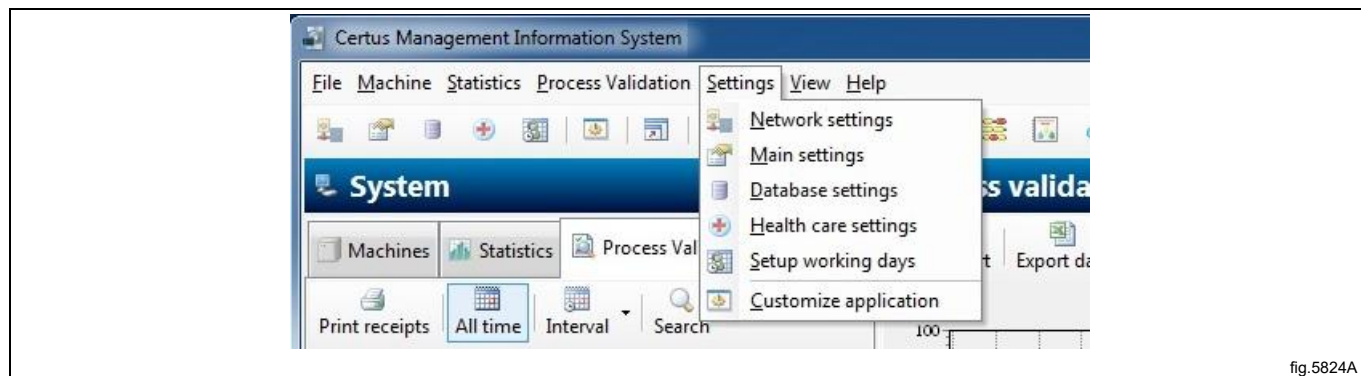


fig.5824A

Under Database settings you can display and adjust settings for the database

- Display database information
- How long to save data in the program's database
- Database folder and file name
- Create a backup of present database
- Restore database backup

#### **Note!**

**Changes to the database settings can result in information being lost, in the database becoming very large or in the program crashing. Do not make any changes to settings before consulting the supplier.**

#### 4.4.5.1 Information

Shows statistics of present database, such as size, version, number of events and location.

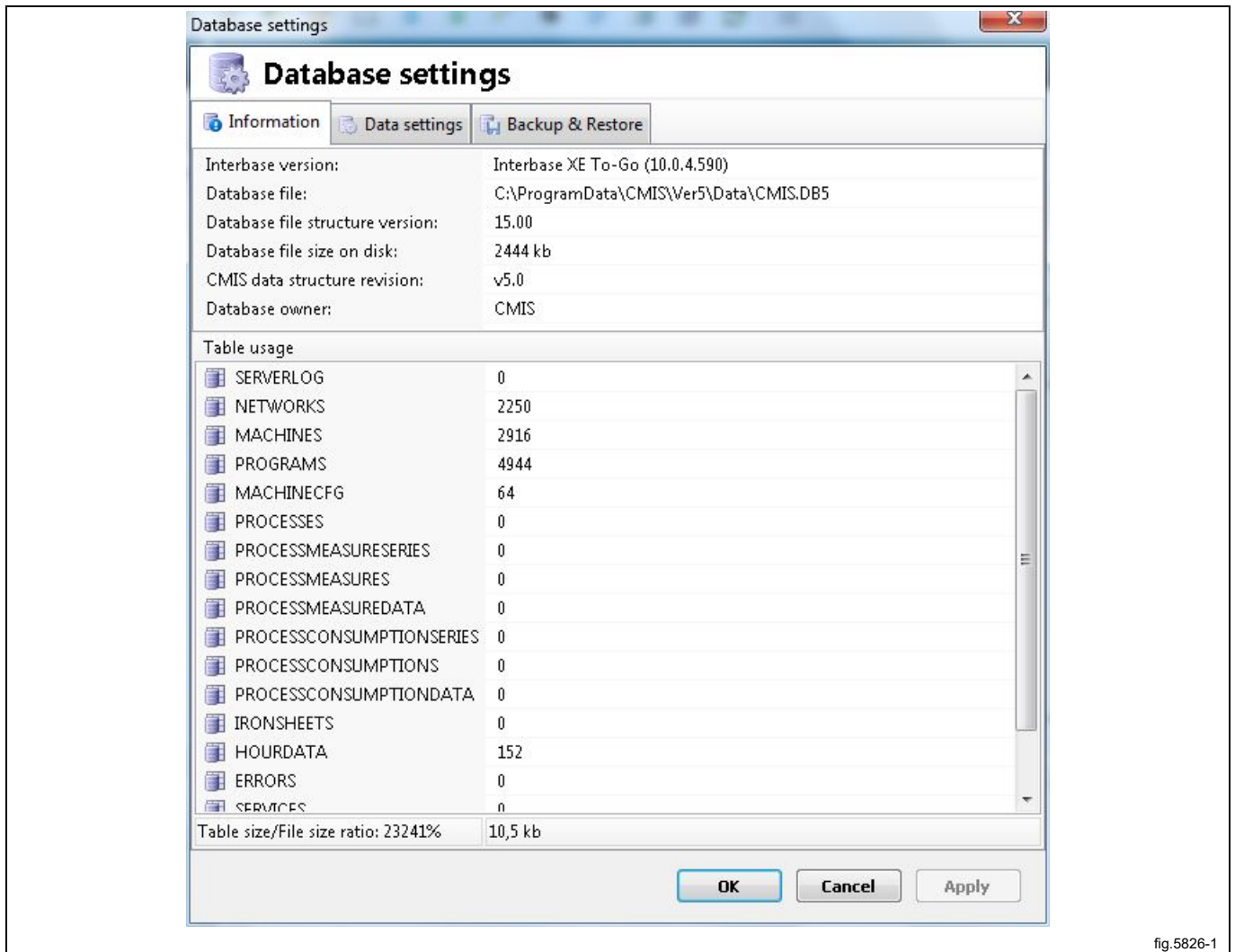


fig.5826-1

#### 4.4.5.2 Data settings

##### Database file

Path to CMIS database. Default file is C:\ProgramData\CMIS\ver5\Data\CMIS.DB5

To select a different database:

1. Press the button on the right of the database's path and search for the new database. It is also possible to enter the path to the required database directly.
2. Press OK when the settings are complete.

##### Active data history

Process data within the Active data history time has got the highest resolution for statistics like energy and water consumption. Pre-set value is 30 days.

By pressing Perform active data purge now, it is possible to pack the active data history to the lower resolution used by the passive data history.

### Passive data history

When data is no longer within the Active data history, it will be moved to the Passive data history. In this stage, the database is packed but data retained. Data older than Passive data history will be deleted, only statistics saved in Cost calculation and Service alarms will remain. Pre-set value is 90 days.

Service alarms older than this date can be manually cleared using Purge, see Machine/Machine service/Purge.

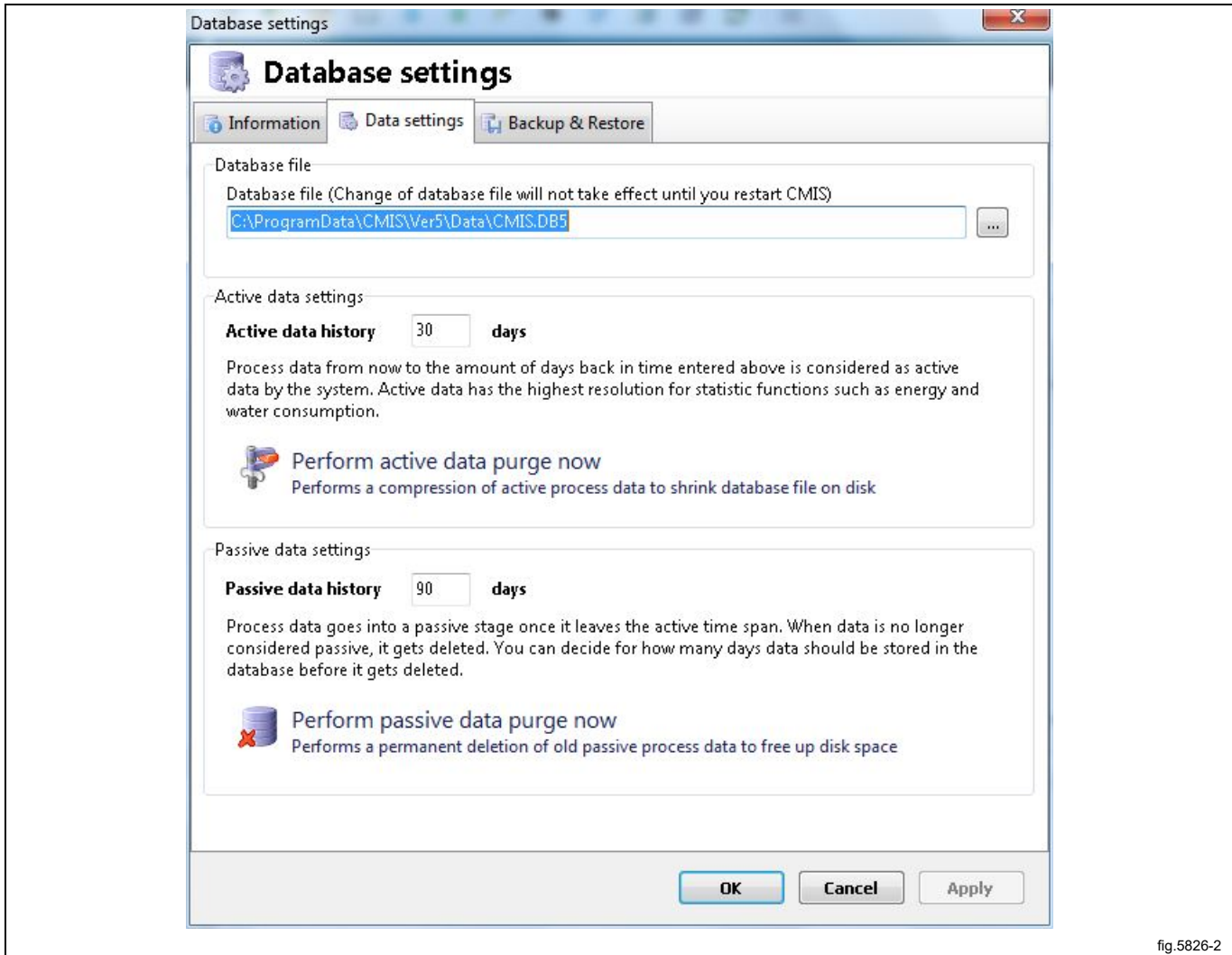


fig.5826-2

### 4.4.5.3 Backup and Restore

#### Create backup

Use this function to create a backup of current data

1. Press on Create backup
2. Add a description of the backup (optional)
3. Press OK
4. Default name of backup file is date and time (YYYYMMDDhhmm.cmisbkp). You can change it if you wish.
5. Press OK to save the file.

### Restore backup

Use this function to restore a previously saved backup

1. Press on Restore backup
2. Locate and select the backup file you wish to restore
3. Press OK

### Note!

**This action will overwrite the present database. Create a backup if you wish to be able to restore it later.**

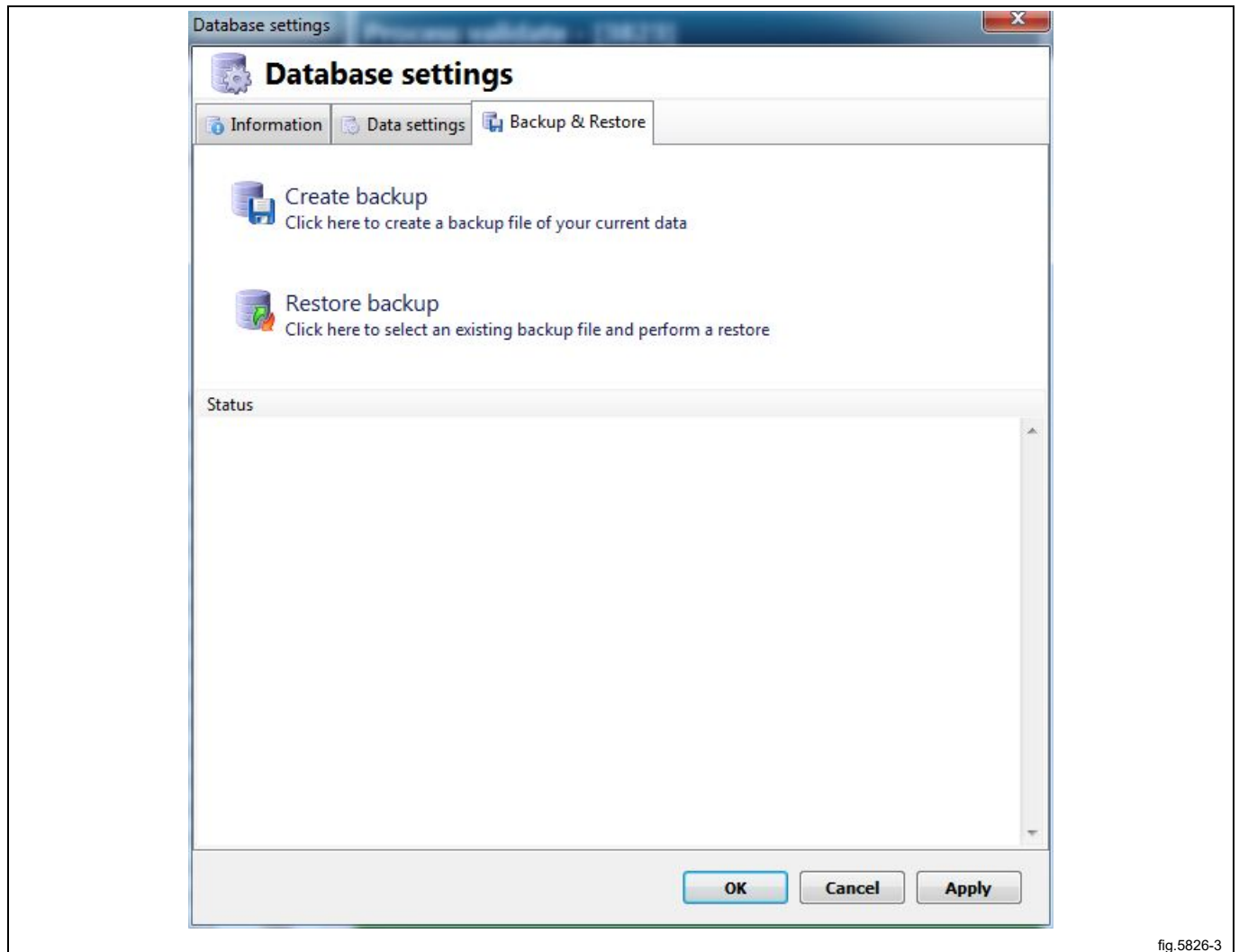
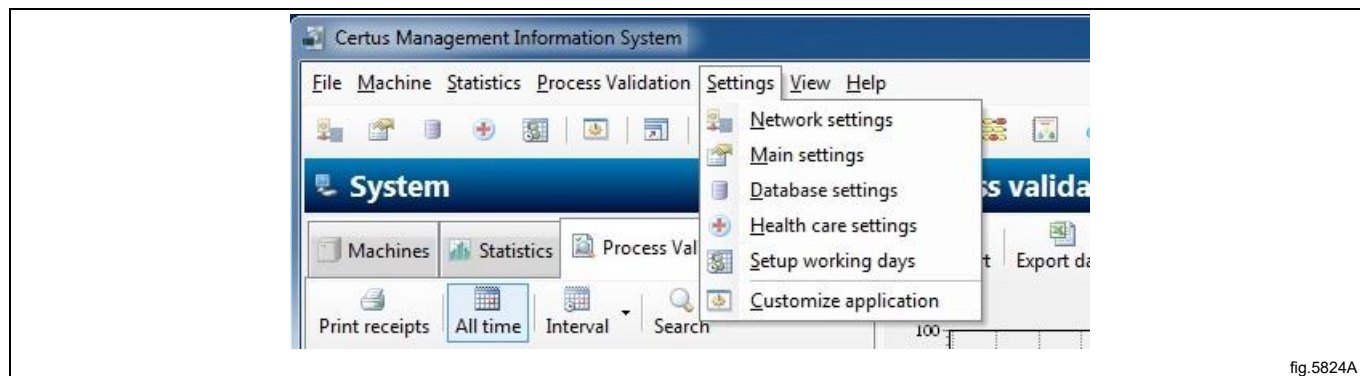


fig.5826-3

#### 4.4.6 Health care settings

The Health care settings menu can be found in the System pull-down menu.



Health care settings are settings for the way process validation should manage:

- Temperature and time in a wash process
- RMC or temperature and time in a drying process
- RMC in an ironing batch

**Note!**

When Health care settings are active, the settings apply globally for all programs that are process verified in all networks.



#### 4.4.6.1 Washers

Health care settings for washers verifies minimum temperature and time in a wash process.

**Min temperature** – The lowest temperature the machine must achieve and remain above for the time specified in Time in min. temp.

**Time in min temp** - The time in minutes that the machine must remain, at or above the temperature specified in Min temperature.

**Name** - Here you can enter a text that will appear together with the temperature, e.g. RABC, HACCP, ISO 22000, EN 14065 or other information, to indicate the standards or limits used for health care verification.

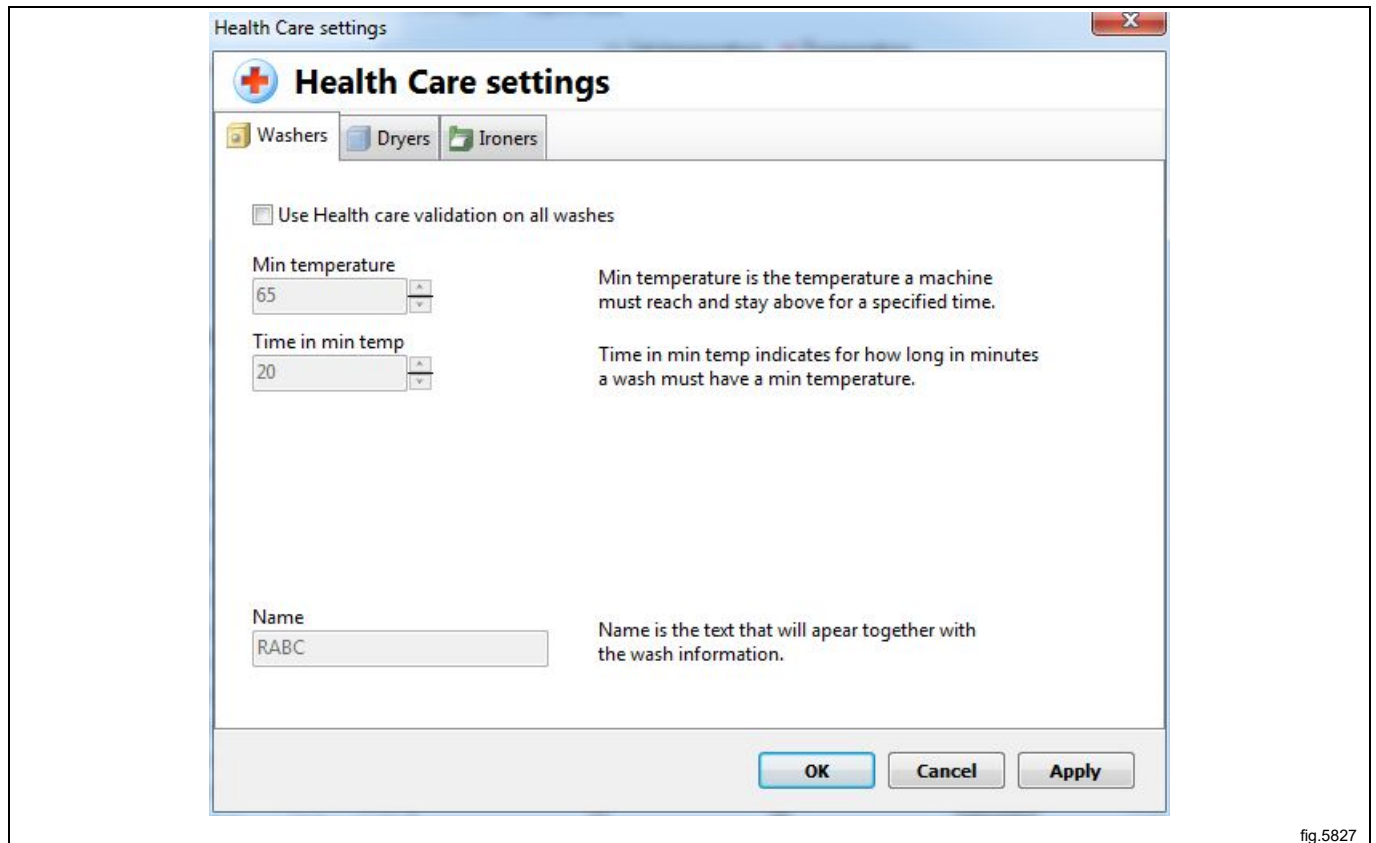


fig.5827

**Min temperature, Time in min temperature and Name**

Adjust the settings as described below:

1. Select washers.
2. Choose if Health care validation is to be used by activating Use Health care validation on all washes.
3. Set the required values in Min temperature, Time in min temp and Name.
4. Click OK when the settings are complete.

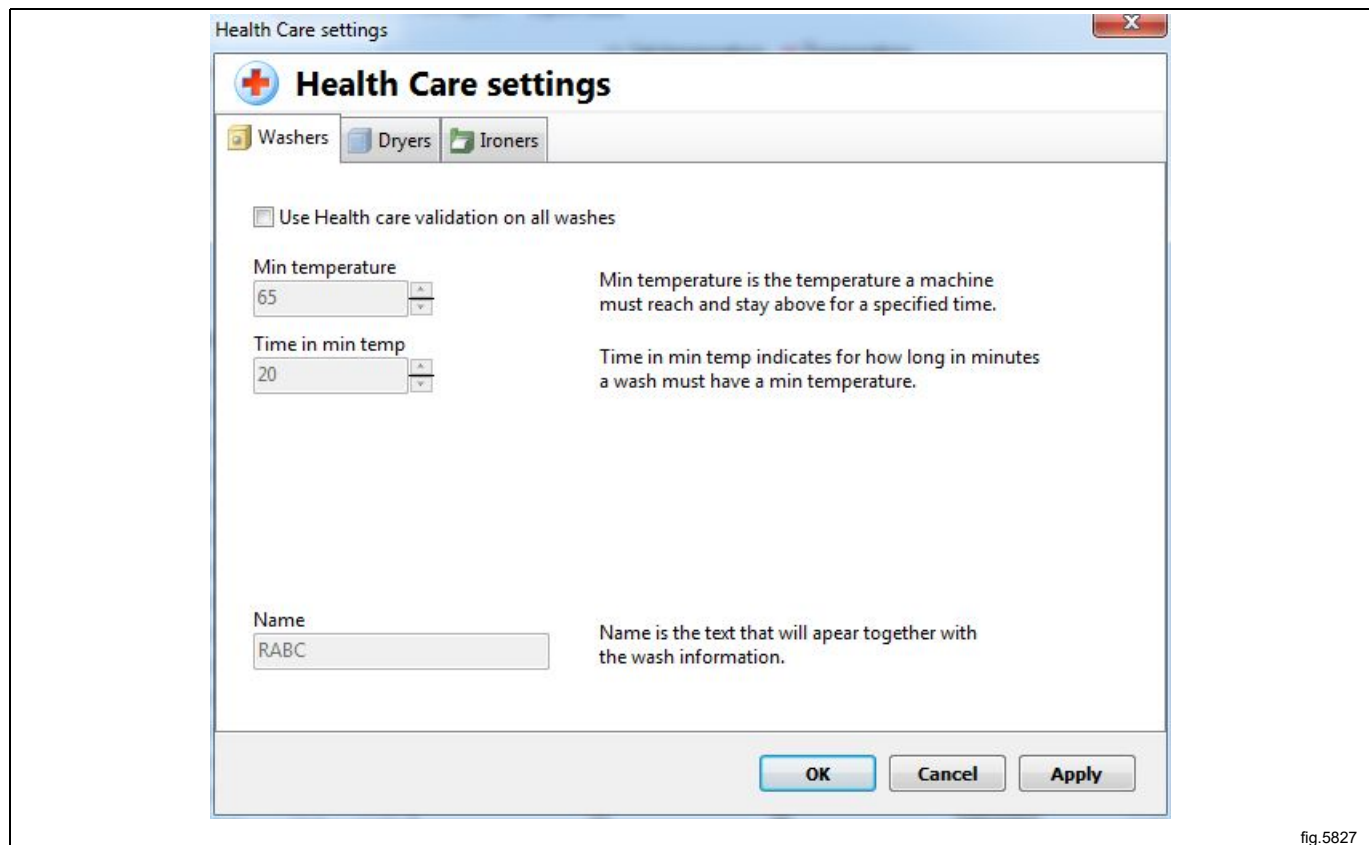


fig.5827

#### 4.4.6.2 Dryers

Health care settings for dryers verifies RMC (if exist), or temperature and time (if RMC does not exist).

**Max RMC at end** – The maximum RMC value that is allowed (when program has ended, to accept process (only used on dryers with RMC)).

**Min temperature** – The lowest temperature the machine must achieve and remain above for the time specified in Time in min. temp.

**Time in min temp** – The time in minutes that the machine must remain, at or above the temperature specified in Min temperature.

Min temperature and time in min temp is only used on dryers without RMC.

**Name** – Here you can enter a text that will appear together with the temperature, e.g. RABC, HACCP, ISO 22000, EN 14065 or other information, to indicate the standards or limits used for health care verification.

The screenshot shows a window titled "Health Care settings" with a red cross icon. It has three tabs: "Washers", "Dryers" (selected), and "Ironers". Below the tabs is a checkbox labeled "Use Health care validation on all dryings".

There are three main settings sections:

- Max RMC at end:** A numeric input field with the value "0". To its right is the text: "If machine has a RMC indicator, this is the value that will be followed by the health care control. Otherwise the health care control will check the temperatures below".
- Min temperature:** A numeric input field with the value "50". To its right is the text: "Min temperature is the outlet air temperature a machine must reach and stay above for a specified time."
- Time in min temp:** A numeric input field with the value "1". To its right is the text: "Time in min temp indicates for how long in minutes a drying must have a min outlet air temperature."

At the bottom, there is a text field labeled "Name" containing the text "RABC". To its right is the text: "Name is the text that will appear together with the drying information."

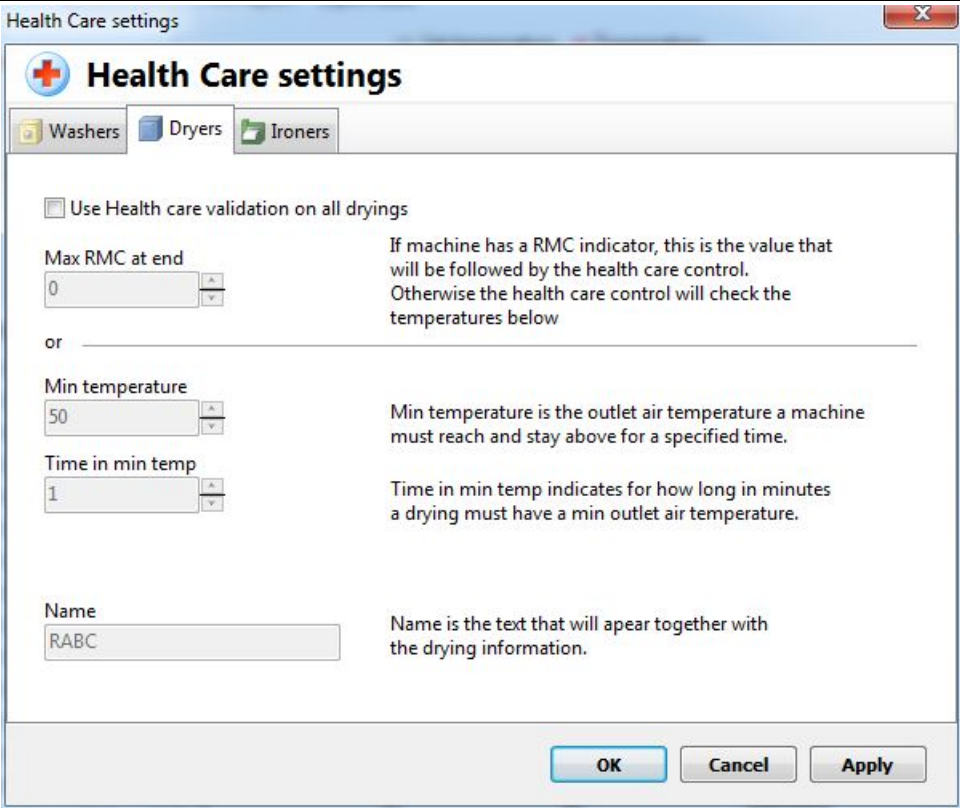
At the bottom right of the dialog are three buttons: "OK", "Cancel", and "Apply".

fig.5664

**Max RMC at end, Min temperature, Time in min temperature and Name**

Adjust the settings as described below:

1. Select dryers.
2. Choose if Health care validation is to be used by activating Use Health care validation on all washes.
3. Set the required values for max RMC at end or Min temperature, Time in min temp. Also set an appropriate name.
4. Click OK when the settings are complete.



The screenshot shows a dialog box titled "Health Care settings" with a close button (X) in the top right corner. The dialog has three tabs: "Washers", "Dryers" (selected), and "Ironers". Below the tabs, there is a checkbox labeled "Use Health care validation on all dryings" which is currently unchecked. Underneath, there are three rows of settings, each with a label, a value field, and a descriptive text:

- Max RMC at end:** The value field contains "0". The text to the right says: "If machine has a RMC indicator, this is the value that will be followed by the health care control. Otherwise the health care control will check the temperatures below".
- Min temperature:** The value field contains "50". The text to the right says: "Min temperature is the outlet air temperature a machine must reach and stay above for a specified time."
- Time in min temp:** The value field contains "1". The text to the right says: "Time in min temp indicates for how long in minutes a drying must have a min outlet air temperature."

At the bottom, there is a "Name" label and a text field containing "RABC". The text to the right of the field says: "Name is the text that will appear together with the drying information." At the bottom right of the dialog, there are three buttons: "OK", "Cancel", and "Apply".

fig.5664

### 4.4.6.3 Ironers

Health care settings for ironers verifies the output RMC value.

**Max RMC** – The maximum RMC value that is allowed during the batch.

**Name** – Here you can enter a text that will appear together with the temperature, e.g. RABC, HACCP, ISO 22000, EN 14065 or other information, to indicate the standards or limits used for health care verification.

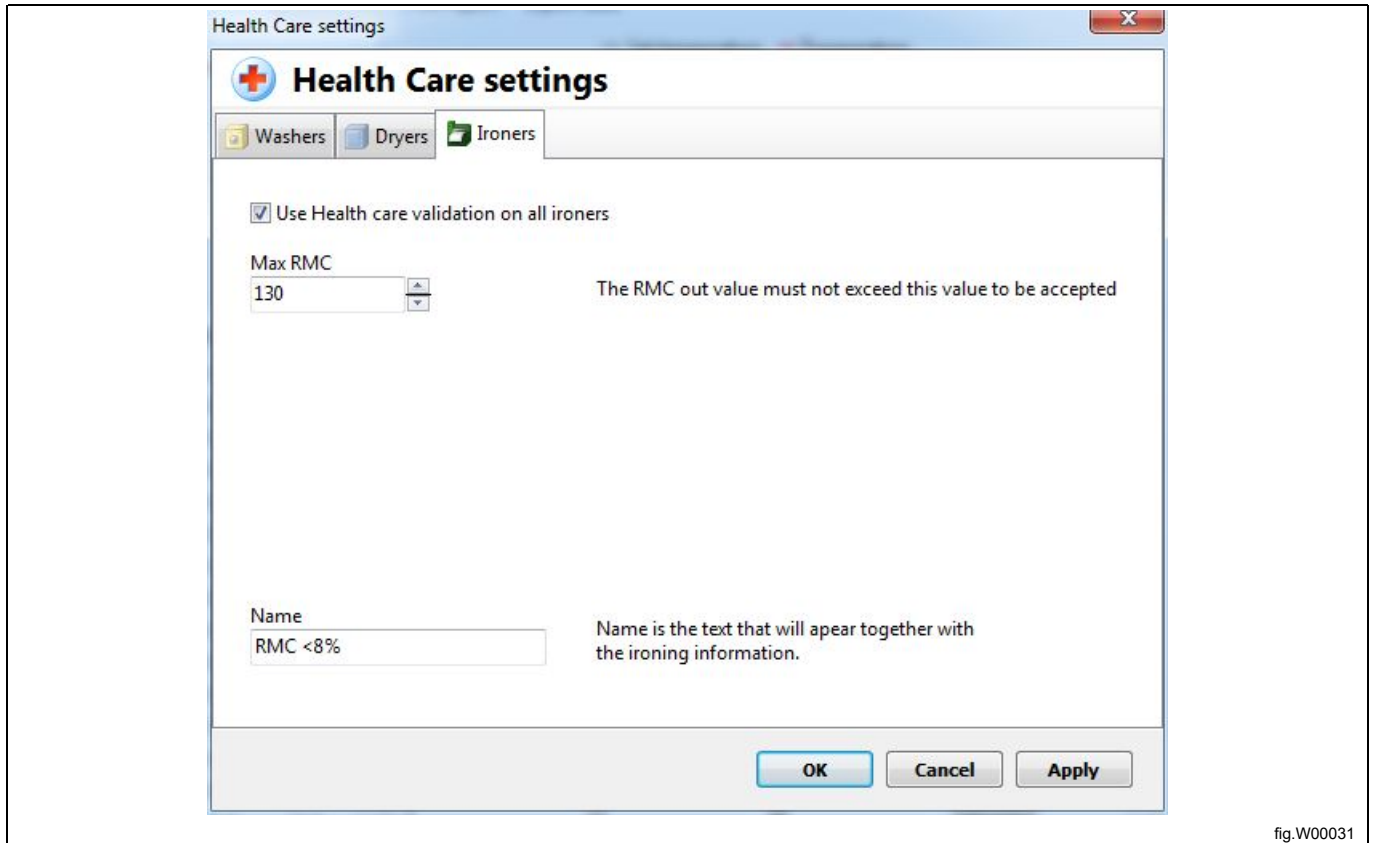


fig.W00031

#### Max RMC and Name

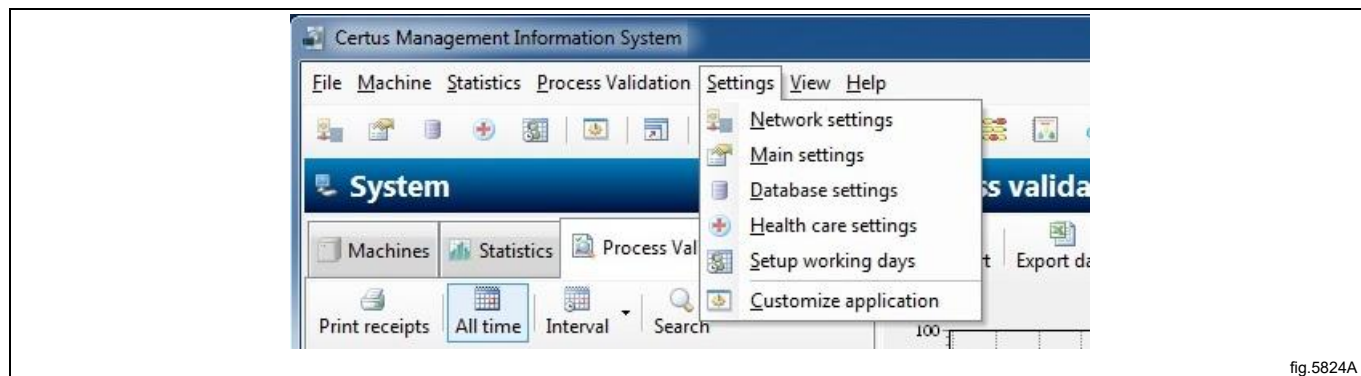
Adjust the setting as described below:

1. Select Ironers
2. Choose if Health care validation is to be used by activating Use Health care validation on all ironers.
3. Set the required values for Max RMC. Also set an appropriate name. Default setting is 130, which corresponds to a residual moisture content of 6.5%

Calculate max RMC value from following formula:  $\text{Desired RMC content in \%} \times 20 = \text{max RMC value}$ .

### 4.4.7 Set up working days

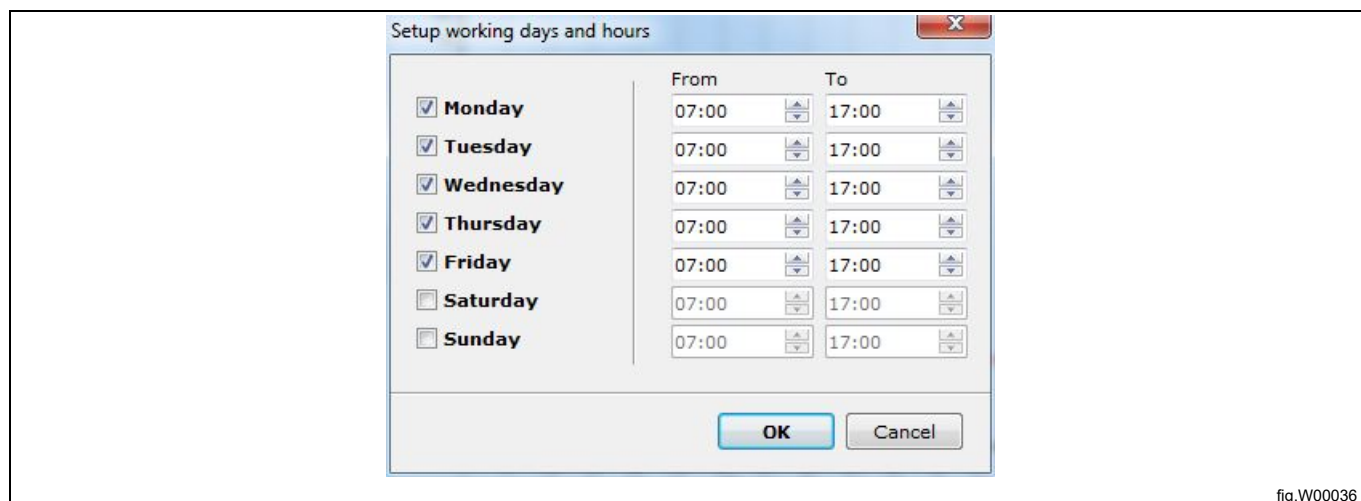
Setup working days menu can be found in the System pull-down menu.



Working days are used to calculate working overtime in Machine utilization and in Total consumption menu. It is also used for calculating idle time.

A working day is activated by the checkbox in front of each day.

Set the starting and ending time of each working day in the format hh:mm .



### 4.4.8 Customize application

The Customize application menu can be found in the System pull down menu.

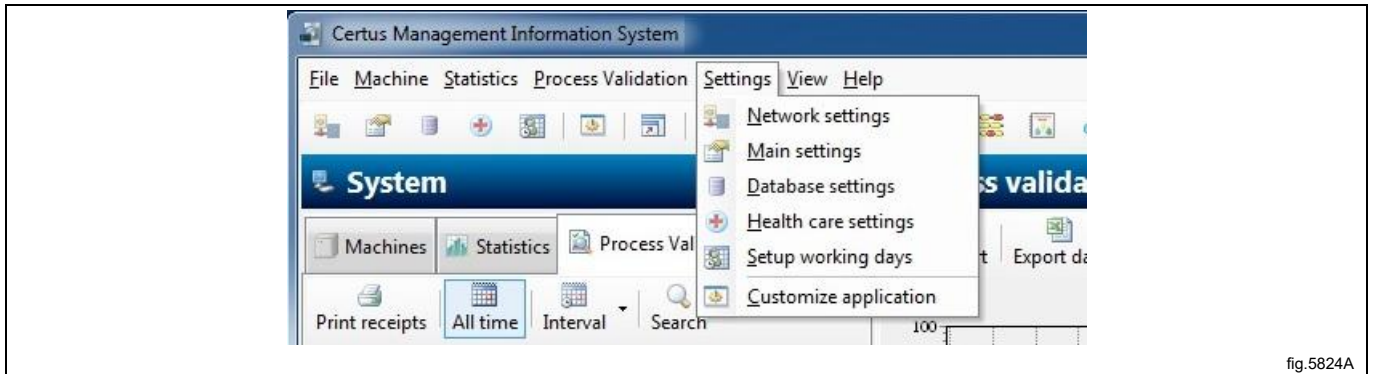


fig.5824A

It is possible to adjust the menus for statistics and process verification so that only the desired functions are displayed.

#### Show statistics/Process validation

To adjust the menus:

1. Select the functions that you want to be displayed in the Statistics menu under Show statistics. CMIS will collect data even for the statistics that are not checked.
2. Unchecking the Show process validation functions box will hide the Process Validation folder from the System menu. CMIS will keep the previously saved data, but not collect any further until this box is checked again.
3. Click OK when the settings are complete..

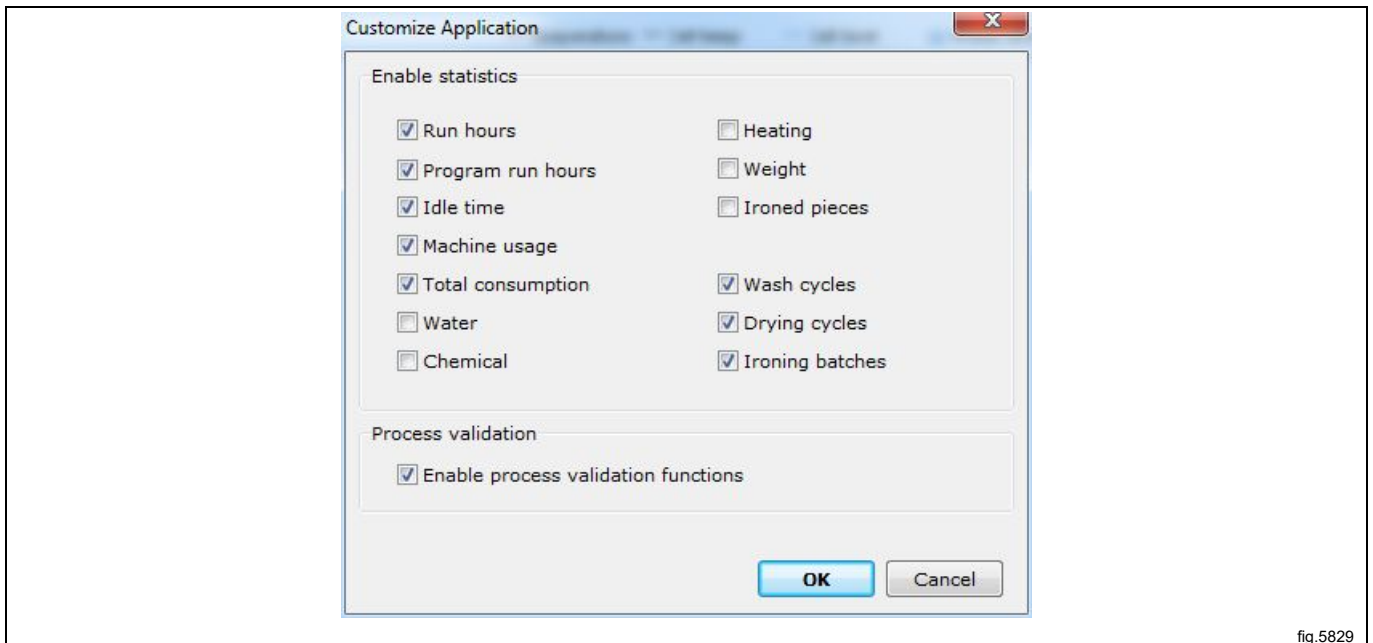


fig.5829

#### 4.4.9 Process viewer

Process viewer makes it possible to view a single process after it has ended and during the number of days that is configured in CMIS.

It is possible to view both information about the selected process...

CMIS Process Viewer

File View

Processes x Wash process

Process information Process graph Send as e-mail Print

Machine	Batch	Time
0:2 - W3180H 1 I/O	[8299]	2011-10-13 10:00:24
0:3 - T4250	[0613]	2011-10-13 10:07:41
0:12 - T4350	[0006]	2011-10-13 10:17:59
0:11 - W4180H 2 I/O	[8856]	2011-10-13 10:18:29
0:4 - W3130H 1 I/O	[4266]	2011-10-13 10:37:12
0:3 - T4250	[0614]	2011-10-13 11:01:38
0:2 - W3180H 1 I/O	[2164]	2011-10-13 11:05:06
0:3 - T4250	[0616]	2011-10-13 11:09:53
0:11 - W4180H 2 I/O	[7301]	2011-10-13 11:12:45
0:12 - T4350	[0008]	2011-10-13 11:13:34
0:3 - T4250	[0617]	2011-10-13 11:17:00
0:4 - W3130H 1 I/O	[2589]	2011-10-13 11:31:57
0:12 - T4350	[0010]	2011-10-13 12:03:45
0:11 - W4180H 2 I/O	[3091]	2011-10-13 12:04:47
0:3 - T4250	[0619]	2011-10-13 12:08:40
0:2 - W3180H 1 I/O	[0111]	2011-10-13 13:11:05
0:4 - W3130H 1 I/O	[1013]	2011-10-13 13:17:09
0:3 - T4250	[0620]	2011-10-13 13:17:17
0:3 - T4250	[0621]	2011-10-13 14:05:00
0:14 - IC44832 LF	[9348]	2011-10-13 16:19:51
0:2 - W3180H 1 I/O	[7259]	2011-10-14 06:36:34
0:4 - W3130H 1 I/O	[6793]	2011-10-14 06:37:00
0:3 - T4250	[0622]	2011-10-14 07:27:13
0:12 - T4350	[0012]	2011-10-14 14:11:09
0:11 - W4180H 2 I/O	[4635]	2011-10-14 14:11:50
0:14 - IC44832 LF	[0110]	2011-10-14 14:11:58
0:12 - T4350	[0014]	2011-10-14 14:57:35
0:4 - W3130H 1 I/O	[6593]	2011-10-17 06:33:23

C:\ProgramData\CMIS\ProcessFiles\W11-992-8856-8375.XML

Machine information

Address	0:11
Machine	W4180H 2 I/O
Manufacturer	0 ELS
Model	34 W4180H
SMID	635072
Process module firmware	21.00

Process information

Time	2011-10-13 10:18:29
Program	992 - NORMAL 60°C
Batch	[8856]
Duration	00:53:17
Max temperature	56 °C
Min temperature	16 °C
Process Validated	Yes
Error	No
Rapid advanced	No
Long pause	No
Completed OK	Yes

fig.5662



...and the process itself.

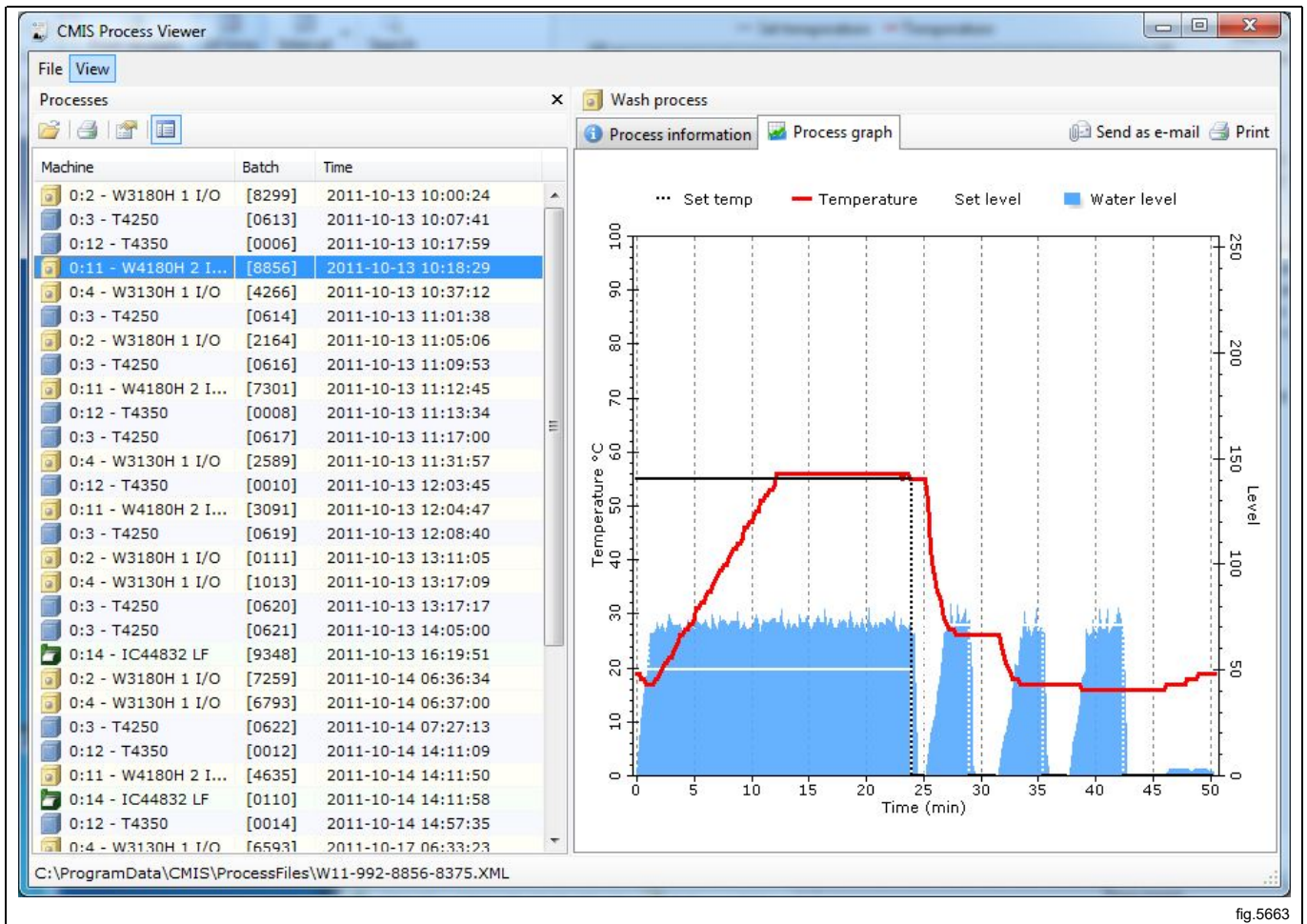


fig.5663

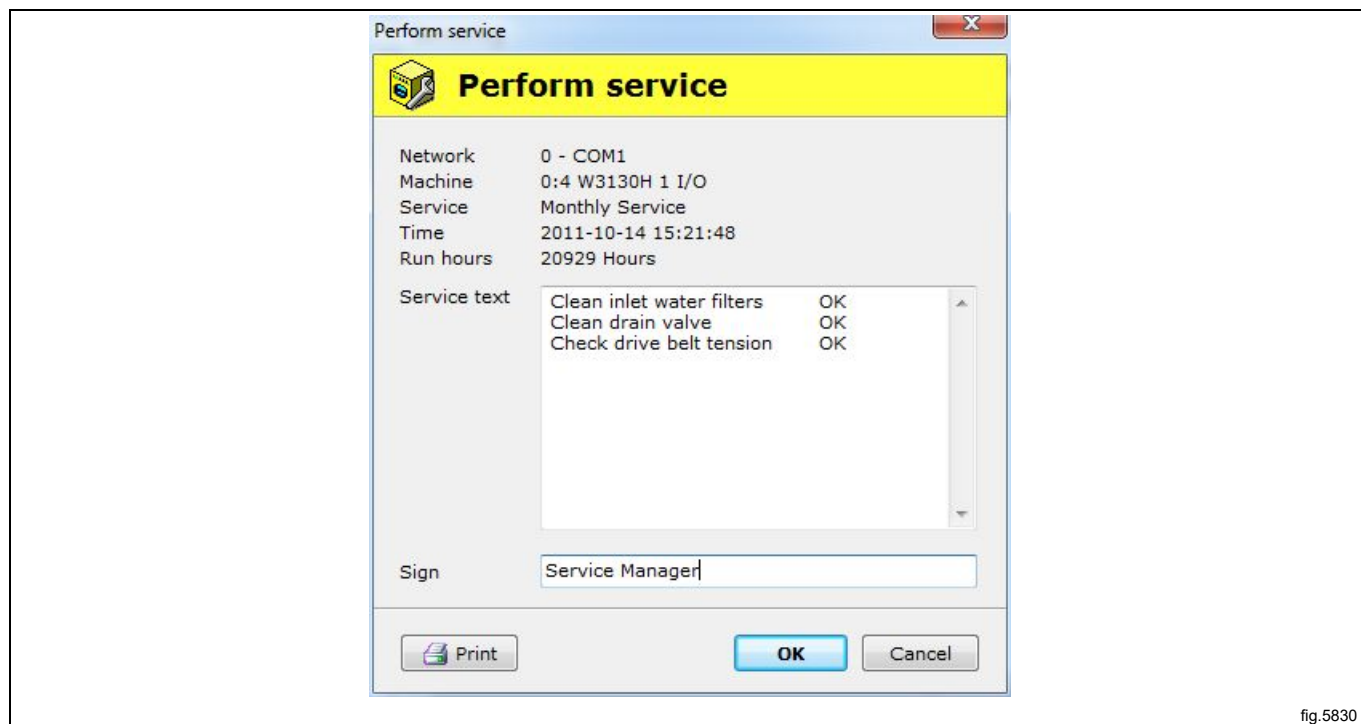
## 4.5 Pop-up menus for service alarms

Service alarms are displayed in the pop-up boxes and acknowledged in CMIS. The alarm is logged in Machine Service. See also Machine - Service.

In the pop-up box, information about the service alarm is displayed, such as the network, machine, type of service, time and operating time.

In the Service text box, an explanatory text about the alarm is displayed.

A service alarm must be signed in the Sign field, before being acknowledged with OK. It is also possible to print a service alarm report.



## 4.6 Pop-up menus for error codes

Error codes are displayed in pop-up boxes and acknowledged in CMIS or on the machine. If an error code is acknowledged on the machine, it is also automatically acknowledged in CMIS and logged in Error codes. See also Machine/Machine Error. In the pop-up box, information about the fault is displayed, such as the network, machine, program and program step involved, as well as the time and number of hours since the last service. The Suggestions box displays a suggestion as to how the fault should be rectified.

Errors are acknowledged using the Confirm All and Confirm buttons.



fig.5831

## 5 Trouble shooting

### 5.1 Communication

**CMIS is unable to contact a machine in the network. The machine information window displays time out**

1. Check that the voltage on the machine is switched on.
2. Check that the green LED on the Machine Interface PC is lit. Green LED indicates the Power supply to the Interface. Communication does not work if this doesn't light up.
3. Check communication to and from the machine. Both yellow and red indicates transmission in the network. This means that both LED's are light off when there is no communication, but flashing when communication is running.
  - Yellow LED indicates transmission to the CMIS Interface.
  - Red LED indicates transmission from the CMIS Interface.

If a CMIS Interface Machine has a flashing Yellow LED, but the Red LED is off there could be some different causes:

- Correct Machine Address is not set, or set to '0' = Inactive.
- CMIS is not configured correctly. If CMIS communicates with another machine (red and yellow LED on CMIS Interface PC is flashing) but yellow LED on Machine Interface is off.
- Check electrical connections from network to CMIS Interface Machine.

**A machine is not found during a network scan or when using Add machine**

1. Turn off the power to the machine for 10 seconds, and then on again. This will re-initiate the communication protocol in the control system.
2. Perform a Network scan or use Add machine to add it to the network.
3. Perform actions according to 2 and 3 above.

## 5.2 Process verification

### Program cycle is not process verified

Check the settings for process verification. Settings for which programs are to be process verified are carried out in the menus:

- General system settings
- Network settings
- Machine settings
- Program settings

These settings can be found in Software description and settings/ System Setup/Networks.

Of the settings in these menus, program settings have the highest priority and General system setting the lowest.

### The program cycle is process verified although this was not requested

Check the settings for process verification. Settings for which washes are to be process verified are carried out in the menus:

- General system settings
- Network settings
- Machine settings
- Program settings

These settings can be found in Software description and settings/ System setup/Networks.

Of the settings in these menus, program settings have the highest priority and General system setting the lowest.

### The program cycle is process verified but the receipt says nothing about Health care settings

Health care settings must be activated manually; for setting Healthcare settings, see Software description and settings/System setup/Health care settings.

### Only one wash/drying program to be process verified

Begin by activating the process verification settings for the required machine; for setting, see Software description and settings/System setup/Networks/Machine settings. Then deactivate the programs that are not to be process verified at wash program level; see Software description and settings/System setup/Networks/Wash program settings.

## 5.3 Statistics

### No statistics are shown for liquid detergent

This function assumes that the wash programs on the machine have the detergent valves programmed. This is not the case for the factory programs, which have to be programmed manually.

When the valves are programmed, you should always be able to see statistics in minutes. If this is working but not the statistics in millilitres of detergent, this is probably because the constant data values are always set at zero on installation. For further information, see Software description and settings/Machine/Machine settings/Liquid detergent.

### No statistics are shown for Energy consumption

Assuming that the machine has heating and that the heating is programmed in the programs, you should always be able to see statistics in minutes. If this is working but you still cannot see statistics in kWh, this is probably because the constant data values for heating are set at zero on installation. For further information, see Software description and settings/Machine/Machine settings/Energy consumption.

### One or more machines appear grey in the machine information window. No statistics for these machines are shown

The machines have probably been deactivated. Select the machines and press Activate machine to activate them.

### No statistics for weight measurement are shown despite weight measurement being present in the machine

Most washing machines have some form of weight measurement, but this function requires the presence of IWS (Internal Weight System).

If IWS is present, but the function still does not work, check under System setup/Networks/General system settings, that the "Fetch weight if scale exists on machine" box has been checked off.

**The text “ID number” appears in the washer extractor’s display each time it is started**

CMIS is configured to retrieve ID numbers at start-up.

These settings are adjusted in the menus:

- General system settings
- Machine settings
- Program settings

These settings can be found under Software description and settings/System setup/Networks.

Change Start settings to “Always allow start” if you wish to deactivate the function.

Of the settings in these menus, Wash program settings have the highest priority and General system setting the lowest.

**There are no XML-files displayed when opening Process viewer**

Saving XML-files must be activated manually, see Network settings – System – Process settings, Create XML-file on process done.

**Length of an ironed piece is not correct**

Calibrating the length of a sheet is done in service menu for the ironer by adjusting/calibrating the “Length value”. Please refer to Ironer Service manual how to enter service program and adjust parameter “Length value”.

**5.4 Miscellaneous****Warning Message “New ID number detected”**

This can happen if:

- The machine has been replaced and the new one has been given the same machine address as the old one.
- If the CPU card in the machine has been replaced.

Select Erase statistics if all statistics are to be deleted. This is used if a machine has been replaced. Then run Scan machine to update all information about the machine, see System setup/Networks/Scan machine.

Select Keep existing statistics if the statistics for the machine are to be saved. This is used if the CPU card in the machine has been replaced.

Select Deactivate machine if you want to investigate the reason for this message to appear. The machine will then be deactivated in the network. When you activate the machine, this message will appear again.

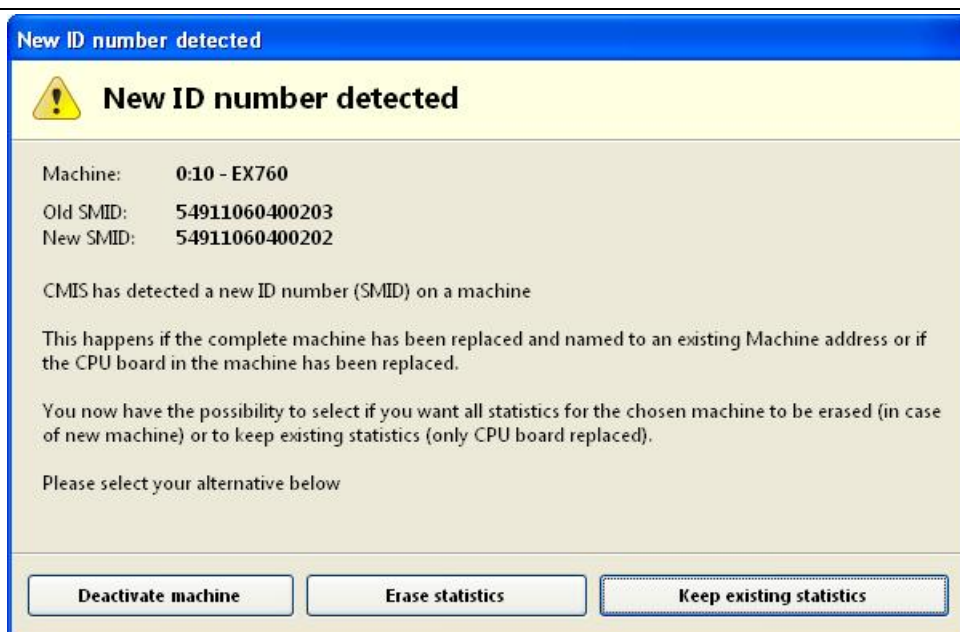


fig.W00518

**Warning Message “Unexpected machine found on address X:Y”**

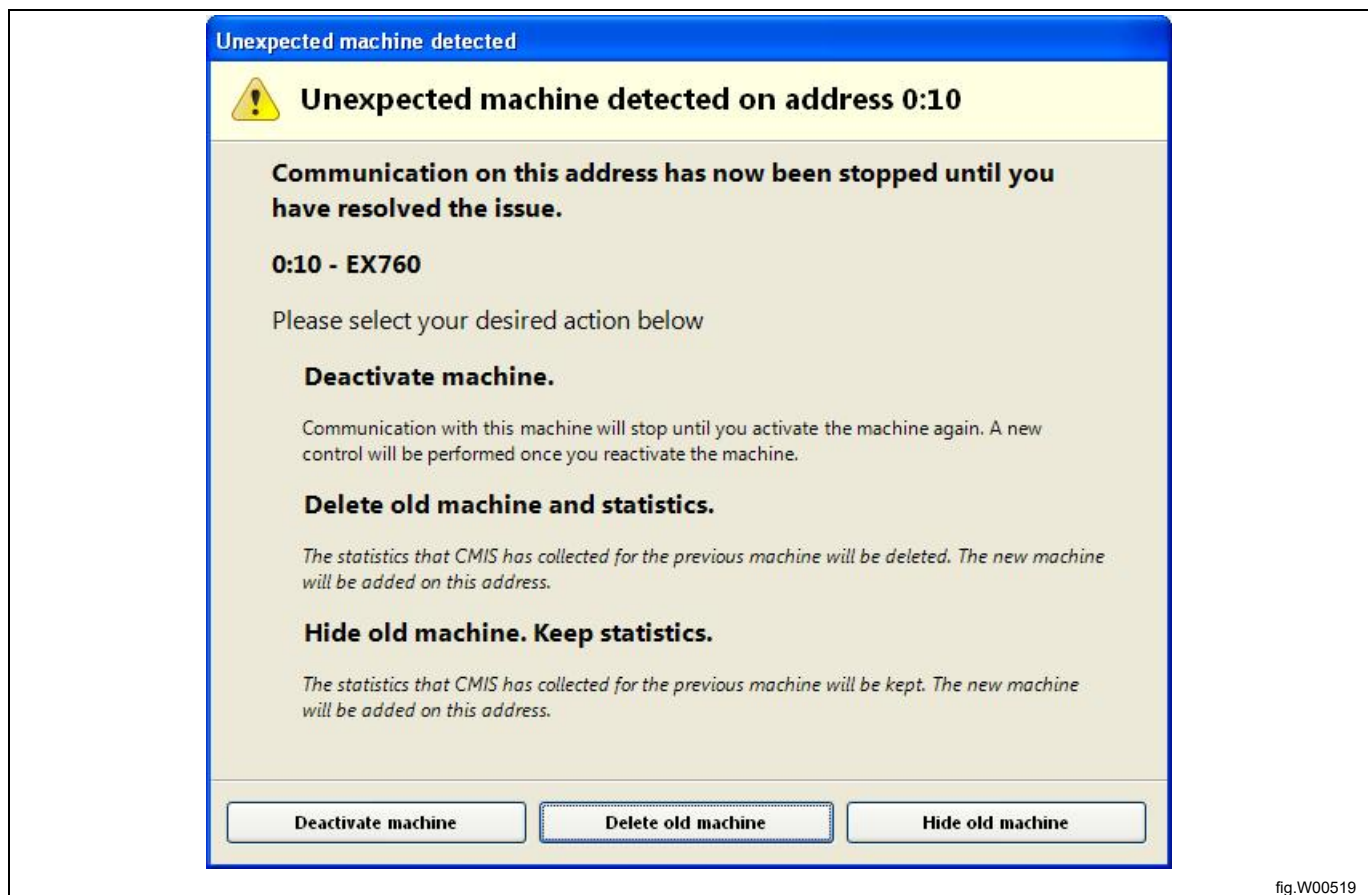
This means that CMIS has detected a different machine model than before on an existing address.

It can be caused if wrong machine software was uploaded to an existing machine, or if an existing machine has been replaced with a different model, and the same address is used.

Select Delete old machine if all statistics are to be deleted. This is used if a machine has been replaced and you do not want to save the old statistics. Then run Scan machine to update all information about the machine, see System setup/Networks/Scan machine.

Select Hide old machine if the statistics for the old machine are to be saved. This is used if a machine has been replaced and you want to save the old statistics. Then run Scan machine to update all information about the machine, see System setup/Networks/Scan machine.

Select Deactivate machine if you think it is a mistake that causes the message. The machine will then be deactivated in the network. Investigate the reason for this message to appear, and correct it. If you activate the machine without correcting the mistake, this message will appear again.

**Message “Unsupported (old) machine software” During Network scan or Add machine process**

CMIS has detected that the software in the scanned machine does not support CMIS. See section System requirements.

The machine will not be added to the network.

Contact Authorized Service to update the machine software and then use Add machine or Scan network again.





Electrolux Professional AB  
341 80 Ljungby, Sweden  
[www.electroluxprofessional.com](http://www.electroluxprofessional.com)