

## 1 Purpose

This document describes the differences between the new software version **MagIC Net 2.4** and its predecessor **MagIC Net 2.3**.

## 2 New features

### New instruments

- **Combustion Module**
- **MMS 5000 (Autosampler)**
- **920.0010 Absorber Module**

### New instrument firmware

New firmware version 5.850.0110 for 850 Professional IC, 881 Compact IC pro, 882 Compact IC plus, 883 Basic IC plus, 886 Professional Thermostat / Reactor and 896 Professional Detector.

### Program part Method

- Time program command **Combust**. The command combusts solid and liquid samples and permits synchronization with subprograms.
- Time program command **Dosino gradient**. The command makes it possible to program a Dosino gradient.
- Time program command **Insert new line**. The command can be used, for example, to measure a check standard after every 10th injection, thus complying with an EPA standard.

### Program part Database

- Not only **Fixed value**, but also **Mean value  $\pm$  standard deviation**, **Mean value  $\pm 2 \times$  standard deviation** and **Mean value  $\pm 3 \times$  standard deviation** can be selected as warning and intervention limits on the control charts.

## 3 Improvements

### Program part Method

- The unit  $\mu\text{S}/\text{cm} \cdot \text{min}$  can be selected in the dialog window **Define result**.

- The peak parameter **Asymmetry** is calculated with a new formula in the Japanese and European Pharmacopoeia, as is the parameter **Theoretical plates** in the Japanese Pharmacopoeia.
- The time program variables are sorted in the formula editor in ascending sequence.

## 4 Fixed bugs and problems

### Program part Workplace

- An exception error occurred if the evaluation parameters were opened and a component was deleted during an ongoing determination.

### Program part Configuration

- MSB instruments (Dosino, stirrer and Remote Box) connected to the 886 Professional Thermostat / Reactor were not displayed on the tab **Connections** in the dialog window **Properties**.
- The partial initialization of dosing units was faulty under certain circumstances.

### Program part Method

- Only nine instead of ten individual instructions sent by the **Transfer** command to an RS-232 instrument were able to be entered in the table.
- Occasionally one method came to a halt during the execution of the command **Transfer**.
- In rare cases, the common variables were not adopted with the command **Transfer**.
- MSB instruments (Dosino, stirrer and Remote Box) connected to the 886 Professional Thermostat / Reactor could not be allocated.
- If, when an analysis was being renamed, only upper-case or lower-case letters were changed and confirmed with **[OK]**, then both names (the old and the new) would appear in the drop-down list box of the subwindow **Evaluation**.
- Three-digit numbers of time program commands in the table of the time program were displayed incompletely in the method report.
- No flow gradient could be followed with the 883 Basic IC plus.
- If **Range = auto** and **Damping = on** were selected simultaneously with the amperometric detector in DC mode, artifacts in the chromatogram could arise during measurements. The combination **Range = auto** and **Damping = on** is no longer possible.

### Program part Database

- A manual scaling of the y axis on the tab **Graphical settings** in the dialog window **Control chart - result properties** was not adopted.
- Isolated cases of exception errors occurred during the zooming of spectra when the value **Relative** was selected for the graphics properties for **Scaling**, the option **Range** was selected for **Default view**, and fixed values were entered.

### **Program part Manual control**

- An exception error could occur in rare cases during a method run or with manual operation when working with the 889 IC Sample Center.

### **Service functions**

- The button **SCAN** was missing in the dialog window **Columns** with the service functions of the 886 Professional Thermostat / Reactor.

## **5 Compliance**

The current software version does not contain any modifications that affect conformity of **MagIC Net** regarding 21 CFR Part 11 and GAMP.

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