

Project 2501800

Audit Report: 21 CFR Part 11

tiamo 2.3

chemgineering

Metrohm

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Audit Date: 20.05.2011¹

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Audit Target: Compliance check of tiamo 2.3 software for controlling titration devices against the

requirements of 21 CFR Part 11.

Description: PC software for controlling titration devices. Creation of methods, carrying out

determinations (titrations and measurements), data acquisition, evaluation and

archiving in a database.

The above software was developed and manufactured in accordance with the requirements demanded by the ISO 9001 quality system regarding the design,

manufacture and servicing of Metrohm instruments.

Investigation: The functions and properties of the above software system are audited with the

requirements of 21 CFR Part 11 and the current interpretations.

During the audit the following items were examined:

validation, documentation, audit trail, electronic copies, access rights, user access, password, access violation, sequence of steps, plausibility, device check, data

encryption, electronic signature.

Operator Responsibility:

The compliance with the requirements of 21 CFR Part 11 can only be met together with the operational environment. The requirements for such an environment are:

- technical environment, data management
- training
- administration
- SOP (Standard Operating Procedures)

Summary: The software is compliant to the following 21 CFR Part 11 requirements:

- 11.10 (b), (d), (e), (f), (g), (h)
- 11.30, 11.50, 11.70
- 11.100 (a), 11.200 (a), 11.300 (a), (b), (d)

The software is compliant to the following 21 CFR Part 11 requirements with support of the operator.

- 11.10 (c), (i), (j), (k)
- 11.100 (b), 11.300 (c), (e)

The software is supporting electronic signature.

Sieghard Wagner

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¹ January 13, 2009 a physical audit has been performed based on the tiamo 2.0 version. According to Metrohm AG, the implemented changes in the current version are not relevant with regard to 21 CFR Part 11 or compliant with 21 CFR Part 11 (see Release Notes 8.101.8017EN, 8.101.8027EN and 8.101.8039EN). Therefore, this update does not require a physical reaudit.