

Unlimited Possibilities with Parallel Titration

Active tasks		
Sample 3/3 » ... » Analysis » Neec		
No.	Type	Name
A	M	ACID
B	M	CALIBRATION

Titrants	Titrant 1
Concentration	0.1 mol/L
Volume	1.0 mL
Dosing rate	60.0 mL/min
Condition	<input checked="" type="checkbox"/>
Formula	E > 7.0
Cancel	Delete

z	z[Natriumhydro
Decimal places	3
Result limits	<input type="checkbox"/>
Send to buffer	<input checked="" type="checkbox"/>
Condition	<input type="checkbox"/>
Cancel	Delete

Series parameters		Tasks
Sample 3/3 » Selection » Series templates		
Comment	Afternoon	A B C
Number of sample	20	1 2 3
1. Sample series	Base	
Workspace	A	
2. Sample series	Conductivity	
Workspace	B	
Cancel	Delete	Print Save



Parallel titration

With the T90, up to 30 tasks that have been started can be assigned to two analysis areas. This allows two titrations to run in parallel independent of one another. Two sample series of different methods on two Rondo sample changers is possible.

Conditions in method functions

The logical condition "if...then" enables the T90 to decide how the analysis should proceed. It can, for example, first measure the pH and then, on the basis of the result, decide whether acid or base should be dispensed.

Result buffer

A result can be optionally transferred to or loaded from the buffer. This allows results of an analysis to be included in the calculation of an analysis running in parallel. The parallel analyses can even be synchronized in this way.

Series Sequence

The Series Sequence function allows individual sample series of different methods to be combined. For example, all the analyses of a particular day can be started together and processed sequentially or in parallel, irrespective of the method used to perform them.

Karl Fischer titration

Preprogrammed METTLER TOLEDO methods start volumetric Karl Fischer titrations without any modifications in One Click. The Online screen always shows the condition of the titration vessel and offers direct access to every important task.



T90 – Unlimited flexibility Titration Excellence line

Besides the many advantages of the Titration Excellence line such as One Click® Titration, Plug & Play, method database (see the One Click Titration family brochure) and the refinements of the T70 (see T70 data sheet), the T90 offers a number of other important features:

- Parallel titration
- Conditions in method functions
- Result buffer
- Series Sequence

T90 Functionality Overview

One Click® Titration	Shortcuts per user	12
	KF Solvent Control	•
Hot Plug & Play	Plug & Play sensor recognition	•
	Burette recognition with titrant and titer	•
	Burette drive	•
	KF Solvent Manager	•
	USB printer	•
	Memory stick	•
Security	USB barcode reader	•
	LevelSens	•
Automation	LogStraight Fingerprint Reader	•
	Rondo sample changer	•
Burette drives	Rondolino autom. titration stand	•
	Stromboli KF oven sample changer	•
Method and series	Max. number to dose and titrate	1 (internal) + 7 external
	Learn titration	•
	Number of method functions per method	150
	Number of loops per method	6
	"if...then" conditions	•
	Result buffer	•
	Series sequences	10
	Number of samples per series	120
	Predefined METTLER TOLEDO methods	>40 (incl. KF methods)
	Max. number of methods	120
Task list	Number of tasks	30
	Number of tasks running in parallel	8
Data Export	RS-232	•
Sensor Boards	Analog or conductivity	1 standard + 2 optional
	Potentiometric	2 standard + 4 optional
Sensor inputs	Polarized	1 standard + 2 optional
	Reference	1 standard + 2 optional
	PT1000	1 standard + 2 optional
	Conductivity / NTC	3 optional
	Ethernet	1
Communication	COM	3 standard + 2 optional
	USB host (printer, memory stick, barcode reader, hub)	1
	USB client (PC)	1
	CAN bus	•
	TTL-I/O	1
	Pump / Stirrer	3 standard + 2 optional
	PC software	LabX® titration connectivity light and pro
Homogenizer		RS/TTL

Technical Specifications

Potentiometric sensor inputs	Measurement range	± 2000 mV
	Resolution / Error limit	0.1 mV / 0.2 mV
Polarized Sensor input	Measurement range I _{pol} / U _{pol}	0 ... 2000 mV / 0 ... 200 µA
	Resolution I _{pol} / U _{pol}	0.1 mV / 0.1 µA
	Error limit I _{pol} / U _{pol}	2.0 mV / 0.2 µA
	Current source range I _{pol} / U _{pol}	0–24 µA AC / 0–2000 mV AC
Temperature sensor input PT1000	Current source resolution I _{pol} / U _{pol}	0.1 µA / 0.1 mV
	Measuring range	-20...130°C
Burette drive	Resolution / Error limit	0.1 °C / 0.2 °C
	Burette resolution (for 10 mL burette)	0.5 µL (1/20000 of the burette volume)
	Error limit	0.2% of the burette volume
	Resolver resolution	0.0625% of burette volume
	Filling time and discharge time	20 s at 100% filling rate
Titration dimensions	Width x depth x height / Weight	210 x 246 x 250 mm / 4.3 kg



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