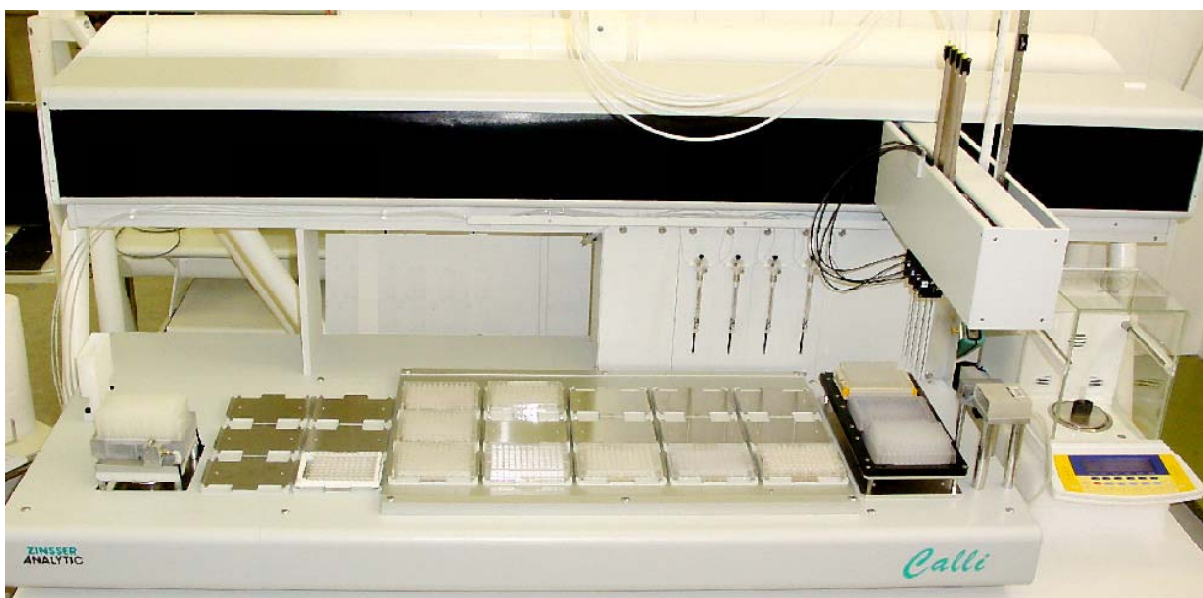


ZINSSER ANALYTIC CALLI®

Automatic Weighing, Liquid & Powder Handling and Sample Management System



Calli XXL-plus

CALLI combines automatic liquid and powder handling with precision weighing in a single system and opens up new dimensions in workbench automation for sample handling and preparation as well as sample management.

Proven reliable X,Y,Z-platform

with 4 independent Z-drives for liquid and powder handling and an integrated robotic arm for gripping vials, tubes, plates and pick-up tools, which can then be placed in any position of the workbench area.

Unique new hardware approach

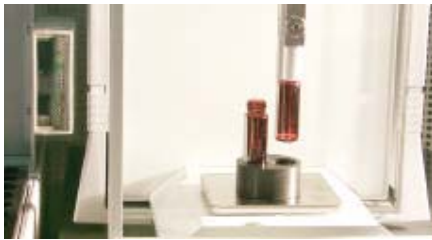
The precision balance is positioned outside the workbench still within reach of the robotic arm. The balance stand avoids any mechanical distortion, minimizing the settling time, improving the sensitivity and therefore increasing the throughput.

Designed for customisation

To meet individual requirements, it can be equipped with vortexers, hotplates, cooling plates, stirrers, reactor blocks, incubators or other modules from our extensive range of tools. The unique software allows the customer to even integrate his own modules. For special applications we offer the service of integration of custom modules.

CALLI systems tailored for specific needs

Weighing only



CALLI Sero is the economic system for weighing and taring. It reads the barcode, automatically tares and weighs any kind of vials, tubes etc. and can communicate with external databases to compare or transfer data.

Weighing and liquid handling



CALLI LH reads barcodes of vials and plates, calibrates vials, weighs the content, calculates dilution volumes, files the data in an internal database, and offers, with 4 independent variable spacing probes, all possible liquid handling functions.

Weighing and powder handling

CALLI VARIX® combines automatic weighing and variable powder distribution. It reads barcodes, tares containers and can either control the dosage of distributed dry materials by weighing the receiving container or automatically weighs with its software controlled variable powder pipette (VARIX) a target quantity from 10mg to 500mg into a destination vial. Smaller quantities as low as 1,5mg can be distributed with a calibrated fixed volume REDI® pipette (option).



Weighing, liquid and powder handling

CALLI ESP has been designed for enhanced sample preparation combining liquid and powder handling together with automatic weighing. It can distribute dry materials such as powders and salts and add liquid reagents simultaneously. It has 2 liquid handling channels with variable spacing and one VARIX® powder pipette.



Weighing, sorting, organizing

CALLI-plus is an optional sample management software package, offering comfortable sorting functions such as “Hit Picking” of vials and micro tubes by individual sample properties (barcode, weight, product data) and any combination of internal and external database values and entries.

The sorting instructions can be set up from an Excel-sheet and SQL-commands. CALLI-plus produces report protocols which can be formatted to individual requirements, in printed form or into special data formats for peripheral systems and host computers.

Options for outstanding flexibility

The open design of the CALLI platform and the WinCalli Software allow the integration of a number of modules to optimize the functions of CALLI for individual applications.

The Choice of probes

Each needle drive of the CALLI system can be equipped with a different probe. They are individually controlled by the WinCalli software. For optimum liquid handling results Zinsser Analytic has designed a large variety of probes: You can choose from single channel, coaxial dual channel, triaxial tripple channel probes of chemically resistant stainless steel, electro polished, PTFE or glass coated, for standard liquid handling, special probes for filtration, spotting, spraying, piercing and inert gas exchange.

To avoid cross contamination disposable tips are available for delicate applications in chemistry and sample distribution. 100µl, 230µl and 1.000µl tips offer optimum liquid handling results.



Powder Pipettes

For quantities below 10mg the REDI fixed powder pipette is recommended. This tool can be mounted on any Z-drive instead of a liquid handling probe.

Powder shakers with 1, 2 or 4 stainless steel 17 or 60ml reservoirs, which agitate the powder for a uniform particle size distribution, can be integrated.

A vacuum and positive pressure cleaning station assures efficient cleaning of the tips. For delicate work, where absolutely no cross contamination can be risked, fixed volume reusable pick up tips with disposable filters are available.

Freedom of Racks

Besides a wide range of racks and carriers which are available as standard, the CALLI workbench can take up your own racks. You can specify with your order the types of racks you want to use or have special racks designed for your application. The racks are positioned by location pins on the workbench.

Complete exchangeable workbenches are available for dedicated multi-user applications.

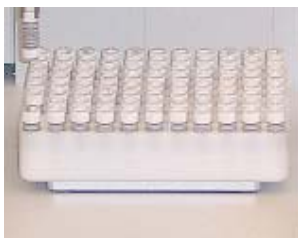


The Power of Vortexing

For dissolving solids with solvents, special powerful, low noise vortexers have been designed. The Heavy Duty Vortexer takes up to 2,5 kg. Vortex racks for any type of test tubes and vials or holding plates for centrifuge carriers etc can be supplied to individual specifications.



If you require efficient dissolution under vortexing in deepwell plates (or any other microplate formate) or small tubes with an inside diameter as small as 4mm, Desyre[®]Mix is the solution. The software controlled vortexer has a specially selected amplitude and high speed (up to 1800 rpm) and automatic clamping of the rack or plate. For enhanced dissolution or incubation it can also provide heating up to 150°C. Both vortexers are equipped with an index stop.



Heavy Duty Vortexer with Vial Rack



Heavy Duty Vortexer with Adaptor for Centrifuge Carriers



Desyre[®]Mix High Speed Vortexer

System Configuration

Platform:	X-, Y-, Z-platform, with 4 independent Z-drives and built-in robotic arm
Balance:	High Quality 4-place balance with automatic door
Barcode Reading:	High resolution CCD-camera for tubes and vials
Liquid Handling:	CALLI LH 4 precision syringe pumps (syringes from 250µl to 5ml) 4 independent probes with variable spacing (8 to 38mm tip to tip) Capacitance level detection on each liquid probe CALLI VARIX ; CALLI ESP 2 precision syringe pumps (syringes from 250µl to 5ml) 2 independent probes with variable spacing (8 to 38mm tip to tip) Capacitance level detection on each liquid probe
Powder Handling:	CALLI VARIX ; CALLI ESP 1 VARIX, variable software controlled powder pipette (10 to 200µl) Vacuum and positive pressure powder cleaning station

Options

Balance:	5-place balance, de-ionisation
Vortexer::	Heavy Duty Vortexer, 20-800 rpm, 2,5 kg payload Desyre [®] Mix, 100-1.800 rpm. 1,5kg payload, heating RT to 150°C
Disposable Tips:	Disposable Tip adaptor for 100, 230 and 1.000ul conductive tips
Barcode Reader 2:	for testplates and racks: high resolution CCD-camera and decoder
REDI:	powder pipettes, fixed volume or manually adjustable tip, disposable tip adapter
Pick-up Tools:	for vial-, tube- and plate transport

Technical data

Power:	90 to 250 Volts AC, 50-60 Hertz, 300 Watts
Dimensions:	Work space: 900 (workbench) + 300mm (balance) x 290 x 150 mm (WxDxH) Overall dimensions: 1200 x 710 x 600 mm (WxDxH)
Weight:	65 Kg

Specifications may change without notice

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