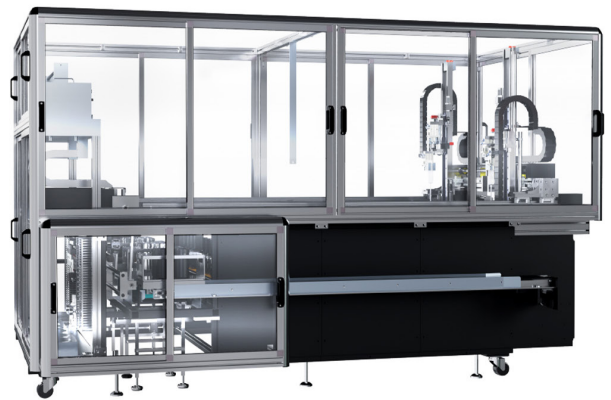# Datacolor® Autolab TFD - Duo Arm Dispenser

Advancements in speed and precision for color laboratory dispensing

Automate Your Recipe Creation with Datacolor Autolab® Dispensing System

Designed for the color lab where speed, accuracy, and repeatability are the primary focus, the Datacolor Autolab TFD automated dispensing system dispenses a wide range of solutions for textile exhaust and continuous dyeing, textile printing, floor covering, pigment industries and more.

The Datacolor Autolab TFD efficiently dispenses dye formulations, enhancing laboratory productivity while reducing the financial impact of re-dyeing due to operational mistakes.

The companion solution preparation system – Autolab SPS ensures that dye solutions used in the lab and the dispenser are prepared accurately and consistently.

Key Benefits

Boosted Productivity: Dual-arm design and dual auxiliary stations for enhanced throughput.

Trusted Accuracy: Precision two-scales and smart gravimetric technology for reliable measurement.

Enhanced Reliability: Duo-arm dispense upgrade minimizes human operation impact, reducing calibration needs and downtime for consistent performance.

Full Formulation Traceability: Automated data recording for every component dispensed.

Continuous Workflow: Output batches upon completion to support ongoing production.

Seamless Connectivity: User-friendly software with ERP integration support.

Safe Workspace: Enclosed area ensures safety and cleanliness.

Datacolor Autolab: What you get

Autolab TFD includes a complete dispenser system, solution bottles, dispense injectors, dispense scale, dyepot trays, Autolab dispense software, installation and user manuals, installation hardware kit, and ready spare parts kit.

Autolab TFD Hardware	Datacolor Autolab DP Software
• Dual arm controlled by robotic X-Y-Z axis mechanism • A tray-feeding conveyor system for continuous dispensing. • Available in 120 or 160 solution bottles • 8 self-refilling chemical auxiliary bottles. • Individual Dispense Injectors for each solution • The recipe dispensing speed has increased by a factor of 1.3 to over 2. • Full Gravimetric Dispensing System • Two scales with a range of 0-4.0 kg • Precise electronic scales with 0.01 gr readability • Accuracy of dispense (gravimetric) ± 0.02 gr • Dyepot quantity per tray is 4(max. 500mL) or 2(max. 1L) or 1 • Dispenses recipes/dyepots quantity at a time: 28 recipes (7 trays) • Auto-Dilution Feature to make lower concentration of same dyestuffs • Automatic solution bottle agitation, with speed, interval and direction control • PC/PLC controlled	• User friendly Windows based software • Graphical data information display, easy to read and understand • User-definable fields • Stock solution management (including life time and stock levels) • Full Recipe Management (including multiple recipe dispense trials, blend recipe handling, master recipe storage and completion function) • Job queuing, including emergency recipe priority dispense function • Capability of automatic pre-programmed advanced start dispense function • Full batch tracking, providing total traceability of results • Full function hardware diagnostics – easy to diagnose and locate any potential problems • Real-time status display – the current status and operating conditions of the system is displayed on screen at all times • Integration with DCIMatch™, TLM, ITMProcess™ and ERP for automatic transfer of recipes to lab dispenser • Multi-format data import/export capabilities • Software available in different languages

Features Comparison per Model (with conveyor)

	Autolab TF-88	Autolab TF-128	Autolab TFD-130	Autolab TF-168	Autolab TFD-170
Solution bottles Qty	80	120	**60(A area) 60(B area)**	160	**80(A area) 80(B area)**
Measuring method	Gravimetric	Gravimetric	Gravimetric	Gravimetric	Gravimetric
Scales Brands	Mettler Toledo	Mettler Toledo	Mettler Toledo	Mettler Toledo	Mettler Toledo
Robots Qty	Single-Arm	Single-Arm	**Duo-Arm**	Single-Arm	**Duo-Arm**
Scales Qty	1	1	**2**	1	**2**
Syringe Capacity	60ml	60ml	60ml	60ml	60ml
Independent Chemicals area	YES	YES	YES	YES	YES
Auto-Refill Chemical Qty	7	7	**4(A area) 4(B area)**	7	**4(A area) 4(B area)**
Water lines Qty	2	2	**2(A area) 2(B area)**	2	**2(A area) 2(B area)**
Auto Tray Conveyor	YES	YES	YES	YES	YES
Glass Safety Shield	YES	YES	YES	YES	YES

Technical System Requirements

Preferred/Advised Environment	
Room temperature	18 to 26 °C
Humidity	40% to 80% RH
Power	220 V, +/- 10 %, 50/60 Hz. Single phase, 3 wire
Water Supply	1 to 2 kg/cm² (13-26 psi)
Air Supply	4.5-6.0 kg/ cm² (60-80 psi)
PC Requirements	
Processor	Intel Core i5 2.0 GHz or faster; Celeron CPUs are not supported.
Hard Disk	Min. 256GB 7200 RPM HDD or SSD
Memory	Min. 8GB RAM (DDR3 or higher generation)
Display Resolution	1024x768 or higher
Operation System	Windows Operating System (Min. Win 7 PRO; Win 11 is supported.)
Others	Network Card USB port RS232 com port required

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