

Constant Temperature Dip Coating Machine

Item Number: TB28



Introduction

Constant temperature dip coating machine provides programmable withdrawal speeds, controlled heating, timed immersion and drying cycles for repeatable thin-film preparation on compact specimens in battery research, materials science, ceramic laboratories, and academic coating development workflows with consistent process control.

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Application	Description	Key Benefit
Battery electrode materials research	Supports controlled coating trials on small specimens during battery-material and electrode-development work. Programmable lifting, thermal control, and timed steps provide a defined experimental process.	Repeatable control of withdrawal speed, immersion time, drying time, and cycle count.
Thin-film process development	Enables laboratory evaluation of dip-coating conditions for compact flat substrates within the specified specimen dimensions. Operators can vary movement and time settings as part of structured process studies.	Adjustable 1 mm/min to 200 mm/min lifting-speed range for comparative trials.
Ceramic coating research	Supports immersion and drying studies for small ceramic test pieces where a controlled immersion length and timed process sequence are required.	Defined 60 mm effective immersion length and 1 to 999 second timing range.
Surface-treatment experiments	Provides a controlled platform for studying coated surfaces using repeated lifting cycles and temperature-managed processing conditions.	Up to 20 lifting cycles can be configured for multi-step coating work.
Materials science laboratories	Supports research teams preparing coated specimens for subsequent characterization, comparison, or materials evaluation.	Stated sample dimensions and lifting-load limit establish a clear operating boundary.
Academic teaching laboratories	Provides a structured laboratory tool for demonstrating the relationship between withdrawal speed, immersion duration, drying duration, cycle count, and temperature.	Programmable settings make process variables explicit and easy to document.
Research coating-method optimization	Helps teams establish and compare operating recipes using controlled values for temperature, speed, timing, and number of lifting operations.	Multiple adjustable parameters support organized experimental design.

Parameter	Specification
Product identifier	TB28
Product type	Constant temperature dip coating machine
Rated voltage and power	220V 850W
Power supply requirement	AC220V 50Hz, must have good grounding
Lifting speed	1 mm/min-200mm/min
Temperature	RT-100 degrees C
Effective immersion length	60 mm
Immersion and drying time setting	1-999s
Number of lifting cycles	1-20 times
Lifting load	Less than or equal to 100g
Sample size	75mm x 25mm x 2.5mm

Parameter	Specification
Main unit dimensions	450mm x 500mm x 970mm
Temperature-controlled enclosure temperature range	Room temperature +5~100 degrees C
Temperature-controlled enclosure temperature fluctuation	Plus or minus 1.5 degrees C
Temperature-controlled enclosure external dimensions	460 x 510 x 695
Installation altitude	Below 1000m
Installation ambient temperature	25 degrees C plus or minus 15 degrees C
Installation ambient humidity	55%Rh plus or minus 10%Rh
Water requirement	Not required
Gas requirement	Not required
Ventilation requirement	Not required
Required workbench size	800mm x 600mm x 700mm
Required workbench load capacity	More than 200kg