Hitachi High-Tech
HITACHI

Hitachi Ion Sputter
MC1000

Specimen damage has been minimized through adoption of the magnetron type electrode.

Features

LCD touch panel makes it easy to set the processing conditions.

Thick or large specimens can be processed. (Option)

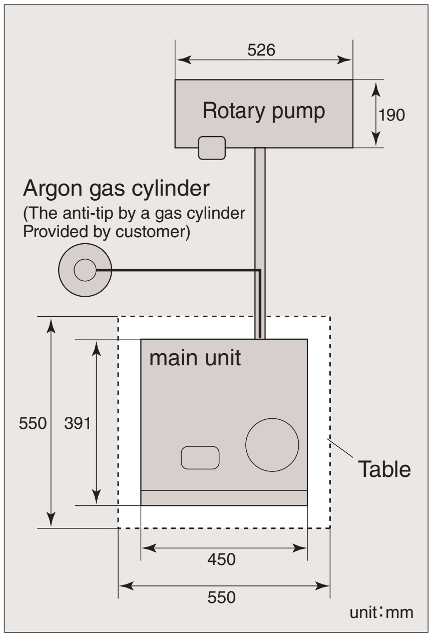
Recipe functions to store commonly used processing conditions.

Specifications

Item		Description
Discharge	Type	Diode discharge magnetron type (electric field perpendicular to magnetic field)
	Electrode form	Opposed parallel disk (magnet embedded)
	Voltage	0.4 kV DC max. (variable through phase control)
	Current	40 mA DC max.
Coating rate (max.) [*1][*2] <Conditions> Pressure：7 Pa Discharge current：40 mA Distance between target and specimen surface：30 mm		Pt target (option) 15 nm / min Pt-Pd target (option) 20 nm / min Au target (option) 35 nm / min Au-Pd target (option) 25 nm / min
Specimen	Max. diameter	Φ60 mm
	Max. height	20 mm
Rotary pump		135 / 162 l / min (50 / 60 Hz)
Target[*2]		Pt, Pt-Pd (8：2) , Au, Au-Pd (6：4)
Power supply requirements		Single phase, AC 100 V (±10 %) 15 A, (50 / 60 Hz) , 3-Pin plug code (3 m)
Dimension	Width	450 mm
	Depth	391 mm
	Height	390 mm
Weight		Main unit：Approx.25 kg Rotary pump：Approx.28 kg

*1: Coating rate is reference only.
*2: Target is not included in the main body. Please choose from the options.(Pt, Pt-Pd, Au, Au-Pd)

Optional Accessories



Optional Accessories

Item	Description
Layer Thickness Measurement & cooling control Unit[*3]	Layer Thickness Measurement setting range：1.0 to 30.0 nm Cooling temperature control range：Room temperature to (room temperature -25) ℃
Evaporation unit	Evaporation material C (use of lead for Mechanical pencil)
Large chamber[*4]	Max.diameter:Φ150 mm Max.height:20 mm
Auto-transformer	Corresponded Voltage：115, 200, 208, 220, 230, 240 V. CE is not confirmed.

*3: It should be ordered with main body simultaneously. It cannot be mounted to the large chamber.
*4: It should be ordered with main body simultaneously.

Installation Requirement / Items to be prepared by customer

Item	Description
Room temperature	15 to 30 ℃
Humidity	45 to 85 % or less
Power supply[*5]	AC100 V (±10 %), 50/60 Hz, 1.25 kVA
Grounding	100 Ω or less
Argon gas cylinder	Pure gas (99.99 % or more)
Pressure regulator	Secondary pressure regulation range 0.03 to 0.05 Mpa
Argon gas connecting pipe[*6]	¼-inch SUS pipe, Length within 2 m
Argon gas joint	¼-inch Swagelok type pipe
Oximeter[*7]	18 % or more oxygen concentration capability
Recommend table	550 mm (W) × 550 mm (D) × 700 mm (H) or more, Withstand load : 30 kg or more

*5: MC1000 is equipped with a power cord with 3-pin plug or with M6 crimp contact terminal.
*6: Piping and pressure regulator have to be prepared locally.
*7: Ar gas is suffocative, please prepare ventilation system in the installation room. Please follow any applicable law or regulations for your safety.

NOTICE: For correct operation, follow the instruction manual when using the instrument.

Specifications in this catalog are subject to change with or without notice, as Hitachi High-Technologies Corporation continues to develop the latest technologies and products for our customers.

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