

Technical Specification

Parylene Lab Coating System

Overview

Our Parylene lab coating system offers users a range of standard feature and options that will meet all needs.

The standard small scale Parylene system provides a practical set up developed from years of experience.

These systems are currently being used in our coating services and have been proven to be highly cost-effective at producing quality Parylene coating.



Machine Parameters

Chamber

Chamber configuration: Standard chamber is electro-polished stainless steel.

Optional Configuration: Aluminum is available upon request

Nominal Chamber Size: 12" dia. x 12" H (30.5 cm diameter, 30.5 cm H)

Effective/Usable Space: 8.75" dia. x 11.188" H (22.2 cm diameter, 28.4 cm H)

Note: The chamber is not coated in standard configuration as it is constructed of electro-polished stainless steel. A micro-soap is utilized to prevent adhesion of Parylene to the chamber surfaces.

Pyrolysis tube

Standard: quartz

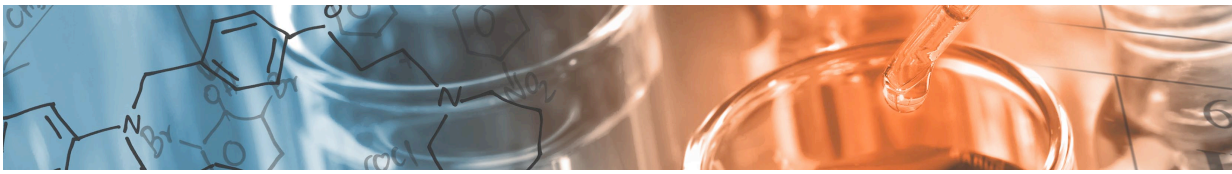
An alternative pyrolysis tube is available in stainless steel.

Chiller

Mechanical Refrigerated Probe type Colt Trap System, -100°C

Vacuum Pump

Standard configuration is an Edwards model RV8 (an equivalent model may be utilized/substituted in lieu of). Optional motors are available.



Baffles

Polished 304 Stainless Steel Flute Baffle is standard, additional options are available. (Options vary with chamber size and configuration, call for model specific options).

Electrical Parameters

Electrical Controls

The unit is automated and controlled by a PLC in standard configuration.

Electrical Configuration

- Single phase 100-125 Vac (110)
- Single phase 200 Vac
- Single phase 208-240 Vac (220)
- 2-phase 100-125/200-240

Field Selectable/Switchable: 100-125 Vac, 208-240Vac, 100-125/200-240Vac (110, 220, 110/220)

The unit is available in 3-phase arrangement upon request (special order, please call for pricing).

System Parameters

Combined System Foot Print: 24" L x 36" W x ~52" H (61 cm L, 91.5 cm W, 132.1cm)

Parylene Deposition System and Mechanical Chiller combined dimensions as installed.

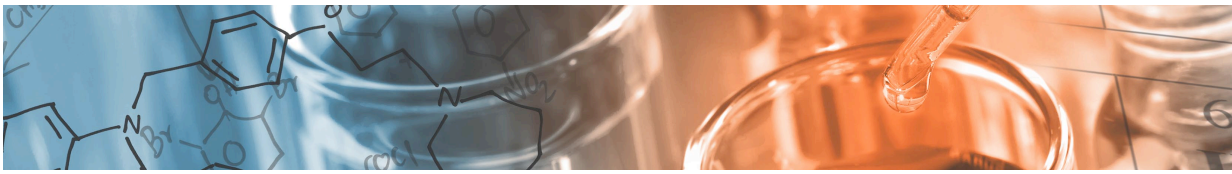
Combined System Weight: 273 lbs. (124.1 kg)

Minimum and Recommended Clearances:

- Rear Spacing: 12" minimum / 18" recommended
- Left Side Spacing: 6" minimum / 18" recommended
- Right Side Spacing: 6" minimum / 18" recommended
- Front Spacing: 36" minimum / ≥ 36 " recommended

Swappable chambers

Swappable chambers are a standard configuration with all chamber options. They can be swapped with like size chambers, and some models, including the standard configuration allow for swapping of various chamber sizes.



Additional chambers

Additional chambers can be ordered with any system. (Please call for model specific options)

Larger chamber sizes are available upon request:

- 15" x 15" nominal chamber size [Note: Requires Base Plate Upgrade]
- 18" x 18" nominal chamber size [Note: Requires Base Plate Upgrade]

Smaller chambers are available as options.

Price on application

Shipping

Shipping Dimensions (Crated/Palletized): 42" L x 42" W x 46" H (106.7 cm L x 106.7 cm W x 116.9 cm H)

Shipping Weight: 600 lbs. (272.75kg)

Miscellaneous

Standard service kit

Available for O-rings etc., and additional kits or items can be supplied as needed/required.

Chamber extensions & collars

Chamber extensions are available. Extension options vary with configuration/models. (Please call for model specific options)

Options

Vapor Phase Silane (VPS) Option

Vapor phase silane adhesion promotion is an option.

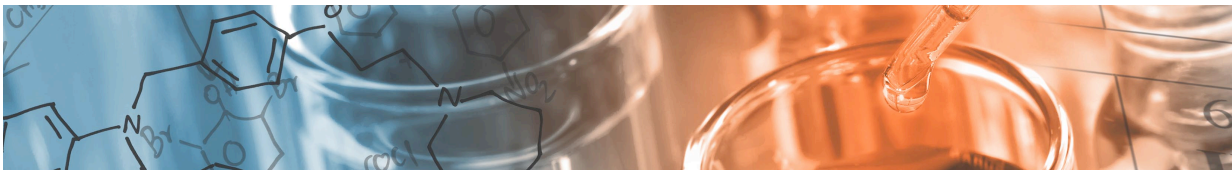
All units are prepared for the feature that is factory or field installable and offered as an upgrade to existing lab coaters.

Additionally the VPS system is of quick change out design allowing for fast turn around and online or off-line maintenance flexibility.

Price on application

Manuals

Operator and maintenance manuals are available.



Training

System operation and process development training modules are available both online and onsite upon request.

Trouble-shooting support is available on request.

Consumables and dimers

All consumable and maintenance items are available including Parylene Dimer, types C, N, D, and AF4 (upon special request).

Warranty

In general the Warranty covers the system components and workmanship excluding consumable materials and items damaged, misused, neglected, mistreated, altered, etc.