

# SPI Supplies Module Sputter and Carbon Coating Systems



SPI Supplies  
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## Choosing the Right System for your Needs

The SPI Supplies Module Sputter and Carbon coater systems are available in a number of configurations that will meet the needs of your facility. Choose from three basic configurations:

[Sputter Coating System](#)

[Carbon Coating System](#)

[Sputter/Carbon \(Combination\) Coating System](#)

Within each category you may find the following options:

Voltage (110V/220V):

As we offer our systems around the world, they are available in 110V and 220V. For the US, a standard 110V line cord plug is used; for 220V, the line cord will need to be fitted with the plug of your choice (not supplied). The vacuum base outlet is also dependent of the voltage selected.

[Pump:](#)

We offer the [Pfeiffer Vacuum Model DUO 3 Rotary Vane Pump](#) along with the system if selected. The hydrocarbon filled pump comes with the same selected voltage as the system (110V/220V) and includes the hardware to attach to the system. An [oil mist filter](#) is not included and needs to be purchased separately [link].

Etch Module:

This built-in option on the [Sputter Module](#) provides the means to etch away surface layer contaminants from the sample, then sputter gold onto it without breaking vacuum. However, it is important to understand that the etch mode essentially reverses the polarity of the system, so that one is then sputtering off of the sample instead of sputtering onto the sample.

[Quartz Crystal Thickness Module \(QCTM\):](#)

This [module](#) is built right into the SPI-MODULE™ Vacuum Control Base and features a highly accurate control for setting deposition thickness. The monitor functions on the basis that a built in quartz crystal oscillator has the characteristic of changing its frequency of oscillation as its mass changes from the evaporation of either a metal or carbon onto the quartz crystal. The change is more or less linear and it can be easily calibrated in terms of frequency vs. deposition thickness.

Options:

**Rod Head** [Option for Carbon Coater Module]:

The Carbon Coater System comes with a Carbon Fiber Head. An optional **Carbon Rod Head** is available for this system. It takes ¼” rods such as our **pre-sharpened carbon rods**.

**Oil mist filter:**

For use with the **Pfeiffer Vacuum Model DUO 3 Rotary Vane Pump**, the optional oil mist filter is used when venting into a room to help reduce oil mist during the operation

**Foreline trap:**

Our foreline trap is designed to minimize any backstreaming of vapors from the oil in a mechanical pump, and is put in place between the pump and system.

**Second Pyrex Chamber:**

In multiuser facilities, when both the carbon and sputter module systems are used, a second chamber may be desired to keep the sputter and carbon coatings separate. This is helpful to reduce potential cross contamination if the chambers are not cleaned after each use.

## Sputter System Selection Guide

Sputter Module	Voltage		Pump	Etch Mode	QCTM Module	SPI Supplies P/N
	110V	220V				
✓	✓		✓			<a href="#">12150-AB</a>
✓		✓	✓			<a href="#">12150-AX</a>
✓	✓		✓	✓		<a href="#">12150E-AB</a>
✓		✓	✓	✓		<a href="#">12150E-AX</a>
✓	✓		✓	✓	✓	<a href="#">12150EQ-AB</a>
✓		✓	✓	✓	✓	<a href="#">12150EQ-AX</a>
✓	✓		✓		✓	<a href="#">12150Q-AB</a>
✓		✓	✓		✓	<a href="#">12150Q-AX</a>
✓	✓					<a href="#">12151-AB</a>
✓		✓				<a href="#">12151-AX</a>
✓	✓			✓		<a href="#">12151E-AB</a>
✓		✓		✓		<a href="#">12151E-AX</a>
✓	✓			✓	✓	<a href="#">12151EQ-AB</a>
✓		✓		✓	✓	<a href="#">12151EQ-AX</a>
✓	✓				✓	<a href="#">12151Q-AB</a>
✓		✓			✓	<a href="#">12151Q-AX</a>

## Carbon System Selection Guide

Carbon Module	Voltage		Pump	SPI Supplies P/N
	110V	220V		
✓	✓		✓	11429-AB
✓		✓	✓	11429-AX
✓	✓			11427-AB
✓		✓		11427-AX

## Sputter-Carbon System Selection Guide

Sputter Module	Carbon Module	Voltage		Pump	Etch Mode	QCTM Module	SPI Supplies P/N
		110V	220V				
✓	✓	✓		✓			12157-AB
✓	✓		✓	✓			12157-AX
✓	✓	✓		✓	✓		12157E-AB
✓	✓		✓	✓	✓		12157E-AX
✓	✓	✓		✓	✓	✓	12157EQ-AB
✓	✓		✓	✓	✓	✓	12157EQ-AX
✓	✓	✓		✓		✓	12157Q-AB
✓	✓		✓	✓		✓	12157Q-AX
✓	✓	✓					12155-AB
✓	✓		✓				12155-AX
✓	✓	✓			✓		12155E-AB
✓	✓		✓		✓		12155E-AX
✓	✓	✓			✓	✓	12155EQ-AB
✓	✓		✓		✓	✓	12155EQ-AX
✓	✓	✓				✓	12155Q-AB
✓	✓		✓			✓	12155Q-AX

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