

Welcome

Applied Multilayers offers "next generation" optical coating technology to produce precision optical coating systems. Closed field reactive sputtering is set to be the dominant optical coating technology worldwide.

Applied Multilayers launch compact batch magnetron sputter system

Appplied Multilayers LLC (www.applied-multilayers.com) based in Battle Ground, Washington, USA, have secured from Edwards Vacuum Ltd, UK, the exclusive rights to patents and manufacturing for the PlasmaCoat, a magnetron sputtering system for small batch high throughput production, targeted at the ophthalmic and precision optics markets. PlasmaCoat was previously manufactured by Applied Vision Ltd, Coalville, Leicestershire, UK, prior to acquisition by Edwards Vacuum Ltd.

PlasmaCoat uses patented reactive magnetron sputtering processes to produce dense optical coatings with outstanding durability. Coatings can be applied to mineral, glass, III-V substrates, as well as to a variety of plastics, including hard coated CR39 and polycarbonate.

The machine is usually supplied for deposition of multilayers of two materials. However, it can be provided with additional targets as an option. Materials are ideal for applications in ophthalmic, precision optics, photonic devices, photovoltaic and sensor applications.



Substrate carousel mounted within loadlock with door open



Substrate carousel

Compact and highly automated, the machine is simple to operate, staff needing only a few hours training. The machine is controlled via a simple keypad display. Once the substrates are loaded, subsequent operation is completely automatic. The machine employs a vacuum load lock to maximise coating throughput with minimal maintenance. Substrates are mounted on a vertical rotor which has up to six positions for substrates.

Pictured is a standard configuration, a substrate carousel and substrate carousel mounted within loadlock with door open.

All processes are at room temperature, however substrate heating may be optionally added. Customised versions are also available for increased substrate diameter and loading. In addition to the standard patented configuration utilising metal targets and a plasma source, Applied Multilayers also offer a version incorporating their patented closed field magnetron (CFM) technology.