Vacuum ▶ PVD Thin films ▶ Leak testing ▶ Plasma

Very large surface PVD thin film deposition

LINE 20000

by

alliance concept

Thin film products : very large surface deposition system.

Spearhead of our thin film deposition equipment future vision, the LINE20000 system is based on the LINE440 process principle. In such machines, deposition is achieved with **substrate horizontal movement under rectangular magnetron sources**. To develop such a very large system, we received OSEO funds which have contributed to the development of magnetron cathodes.

Equipped with up to eight 2.5 m length cathodes, it offers a multitude of possibilities for the realization of complex multilayers stacks on surfaces up to 2 m x 2 m and substrate weight 1,5 tons max. In the load lock chamber a glow discharge device is set up in order to get the best film quality.

Some magnetrons are adapted to a DC, Mid Frequency (MF) or Radio Frequency (RF) operation, which allows the deposition of metals and also dielectric oxides under reactive atmosphere. The first system is installed in France and is dedicated for large optics coating. This leading edge technology system demonstrates our ability to develop turn-key system with specific technical requirements.

Main features

Substrate size capability :	2,0 x 2,1 m^2
Substrate thickness :	400 mm max
Substrate weight :	1500 kg
Surface activation :	Glow discharge
Thin film deposition uniformity :	< +/- 5%[1]
Target polarization :	DC, DC pulsed, RF, MF
Ultimate vacuum in deposition chamber :	5.10^{-7} mbar[1]
Substrate speed :	1 to 500 cm/mn
Fully automatic system controller :	- Process management - Traceability

[1] *These values have been measured on equipment we have delivered and should be handled as information only. The features of a system depend on its final configuration.*

ALLIANCE CONCEPT
4 avenue du Pont de Tasset 74960 CRAN GEVRIER FRANCE
lat : 45.9109512 - long : 6.0984011
tel. : +33 (0)4 50 57 93 85 fax : +33 (0)4 50 57 93 74
http://www.alliance-concept.com
contact@alliance-concept.com