Vertical Sputtering Systems

Kenosistec designed the vertical sputtering systems of the KS-V family to enhance HIGH THROUGHPUT, IMPROVED FILM UNIFORMITY and PROCESS VERSATILITY as required by a demanding production environment.

The vertical sputtering configuration typically minimizes particulate contamination (pinholes) and is therefore preferred in process development and in any production environment where the application needs targets producing an high level of particulate.

Vertical sputtering model KS 80 V

Vertical sputtering model KS 40 V
GENERAL FEATURES

Configuration
Vertical Sputtering System

Substrate handling
All the KS....V models include automatic handling of the substrate holder. Optional devices for substrate heating or cooling are available. Planetary rotation of the pallet can be added as well as an optional load-lock chamber. A complete set of carefully engineered options is also available for matching special requirements.

Co-sputtering
Sequential with Rectangular cathodes up to 36°

Gas & Pressure
Up to 5 independent MFC’s with individual shut off valve.
Upstream and Downstream pressure control.

Process controller
PC-PLC system. Fully automatic and manual operation with safety interlocks. Advanced editing functions. Remote assistance

TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>KS 40 V</th>
<th>KS 80 V</th>
<th>KS 120 V</th>
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<tbody>
<tr>
<td>Ø 500, h 400</td>
<td>Ø 1000, h 800</td>
<td>Ø 1000, h 1200</td>
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<tr>
<td>6 x up to 12° long</td>
<td>6 x up to 22° long</td>
<td>6 x up to 36° long</td>
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<tr>
<td>Up to 5 kW</td>
<td>Up to 10 kW</td>
<td>Up to 10 kW</td>
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<tr>
<td>Up to 1500 W</td>
<td>Up to 5000 W</td>
<td>Up to 5000 W</td>
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<tr>
<td>Up to 10”</td>
<td>Up to 20”</td>
<td>Up to 34”</td>
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</tbody>
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Standard 350° C - Optional up to 800° C
Water or LN
5 x 10^-7 mbar
10^-9 mbar range
Cryo or turbomolecular