The Tapematic S8++ sputtering system will enable you to sputter 3-Dimensional objects in an efficient, cost-effective and reliable process. Thanks to its unique load-lock concept, it is capable of sputtering 3D items while simultaneously loading and offloading, thereby always maintaining the sputtering chamber in high vacuum. This makes the S8++, using the latest green technology, the most energy efficient machine in the field of thin film metal deposition, guaranteeing low power consumption, with the possibility of sputtering with a 6 second cycle time, at less than 10 Kw.

No dedicated operator is necessary as the system is designed for fully automated loading and off loading. Cathodes for the Tapematic S8++ systems, are fully designed and manufactured in-house. Application dependent, the system’s magnetic field is fine tuned to achieve the best possible performance in terms of reflectivity, uniformity, cycle time, and cost-per-part optimization. The S8++ is without question, the most green and environmentally friendly solution available on the market for metal deposition.
A pioneering spirit that puts innovation at the heart of everything we do.

Built on the ability to draw on the best that the world has to offer, and to develop innovative products with anticipation of market needs, Yamallic has evolved over four decades into a truly global company that creates great value for its customers, and provides a secure future for its employees in every corner of the world where its machinery is installed.

**S8++ configuration workflow examples**

- **hepa 100 Air cleaning system**
- **loading & off-loading**
- **S8++** 3D Sputtering Module
- **handling & transportation system**

**S8++ & in-line decoration module samples**

- **S8++**
- **in-line decoration module**
- **substrate cleaning & treatment**
- **bt coating**
- **top coating**
**S8++ Samples selection**

- Flip-top cosmetic cap
  - Material: PP
  - Al Sputtering
  - Clear glossy top coat
- Whisky closure
  - Material: HD ABS
  - Al Sputtering
  - Clear matt top coat
- Square cosmetic cap
  - Material: PP
  - Brass Sputtering
  - Clear glossy top coat
- Vodka closure
  - Material: ABS
  - Al Sputtering
  - Clear matt top coat
- Elliptical cosmetic cap
  - Material: PP
  - NiCr Sputtering
  - Clear glossy top coat
- Cosmetic cap
  - Material: HDPE
  - Al Sputtering
  - Pigmented & clear glossy top coat
- Cosmetic bottle
  - Material: PP
  - Brass Shaded sputtering
  - Clear glossy top coat

**S8++ Performance & features**

- In-line automated 3D sputtering system
- 3D sputtering of a tray in less than 6 seconds
- Load-lock system to maintain the chamber in high vacuum
- Automatic loading and unloading from the chamber
- Built-in class 100 clean room environment
- Stunning uniformity and reflectivity
- Lowest overall investment, and cost per piece
- Zero start-up time
- Minimal operator involvement
- Intuitive touch screen user interface
- Automatic loading and unloading modules
- Lowest power consumption
- No waste generated
- Minimal reject

**20 years of experience**

The sputtering technology is well established and widely implemented in optical disc manufacturing; an area that Tapematic specializes in, having manufactured stand-alone sputtering and complete production lines for more than 20 years. CD’s, DVD’s and Blu Ray discs are typically sputtered in less than 2 seconds including handling to and from the sputtering chamber.

**S8++ Technical data**

<table>
<thead>
<tr>
<th>Substrate</th>
<th>PE, HDPE, PC, PET, PS, PP, ABS, SAN, Nylon, Glass, Metal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substrate dimension</td>
<td>Ø 104 x 100 h mm (Custom dimension upon request)</td>
</tr>
<tr>
<td>Target material</td>
<td>Aluminum, Silver, Gold, Stainless Steel, Chrome, Titanium</td>
</tr>
<tr>
<td>Handling process</td>
<td>Automated robot sorting system</td>
</tr>
<tr>
<td>Transport</td>
<td>Modular plastic chain conveyor system</td>
</tr>
<tr>
<td>Offloading</td>
<td>Automated discharge, multiple boxes</td>
</tr>
<tr>
<td>Clean room environment</td>
<td>Built in class 100 Hepa filter</td>
</tr>
<tr>
<td>Production</td>
<td>One tray in less than 6 seconds</td>
</tr>
<tr>
<td>Physical</td>
<td></td>
</tr>
<tr>
<td>Dimension</td>
<td>1600 w x 1750 l x 2000 h mm</td>
</tr>
<tr>
<td>Weight</td>
<td>1600 kg</td>
</tr>
<tr>
<td>Utilities</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>400V 3 phase 50/60 Hz 30 kVA</td>
</tr>
<tr>
<td>Air</td>
<td>6 bar 150 N l/min</td>
</tr>
<tr>
<td>Water</td>
<td>5 bar 34 lt/min, 16-18°C, pH 6-8, dH 4-8</td>
</tr>
<tr>
<td>Argon</td>
<td>2 bar, 50 sccm, purity 99.999%</td>
</tr>
<tr>
<td>Environment</td>
<td></td>
</tr>
<tr>
<td>Work area</td>
<td>8 m x 3 m ceiling height minimum 2.5 m</td>
</tr>
<tr>
<td>Temperature</td>
<td>18 - 24 °C</td>
</tr>
<tr>
<td>Relative humidity</td>
<td>35 - 55% non condensing</td>
</tr>
<tr>
<td>Safety</td>
<td>Complies with all current regulations</td>
</tr>
<tr>
<td>CE</td>
<td>Non toxic fumes - no exhaust required</td>
</tr>
</tbody>
</table>

We reserve the right to make modifications without prior notice.

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**S8++ Layout**

![Diagram of S8++ layout](image)
Tapematic Head Office
Via Vimercate 42
20876 Ornago MB Italy
Tel: +39 039 6010145
Fax: +39 039 6010558
italy@tapematic.it

Tapematic USA
6881 Kingspointe Parkway, Suite A-9
Orlando Florida 32819 USA
Tel: +1 407 852 1901
Fax: +1 407 852 1902
america@tapematic.com

Tapematic UK
Hangar 3 Lodge Farm
Nightingale Hall Road
Earls Colne Airfield
Colchester Essex CO6 2NR
Tel.: +44 1787 220266
Fax: +44 1787 224843
uk@tapematic.com

Tapematic Asia
Flat F, 2F. block A
Tung Chun ind. bldg.
9-11 Cheung Wing road, Kwai Chung
New Territories Hong Kong
Tel: +852 2785 8631
Fax: +852 2785 9909
holger@nextek.com.hk