Rectangular magnetron

Industry-leading high performance planar magnetrons

Gencoa planar rectangular magnetrons combine low ownership cost, robust design and highly-optimized magnetics to produce a reliable product delivering high performance.
Gencoa have a well-established track record of providing critical components and technology for coating flexible substrates, architectural glass, solar cells, displays, touch screens and semiconductor wafers. Careful attention is given to ensuring a long-life, trouble-free operation and excellent target use.

The integrated gas delivery system acts as a powerful mechanism for tuning deposition uniformity by employing single or multi-zone control. All cathodes are fitted with a diaphragm type cooling for high power operation without breaking a water seal during target changeover. Direct cooling is achievable with removal of the diaphragm.

Gencoa sources are configured with various power options such as DC, pulsed-DC, RF (up to 30kW) and HiPIMS.

A unique design incorporating zero-height anodes prevent short circuits during processes and reduce dust and defects in the coatings. All sources incorporate flange plate cooling as standard.

Depending on the application, Gencoa can configure individual cathodes to meet specific process requirements and limitations. An OEM proprietary magnetron design and manufacture service is also offered.

**Compact cathode**

To serve markets requiring a simpler and smaller cathode design, Gencoa have introduced the compact range. Compact cathodes are significantly smaller than standard cathodes, with target lengths typically up to 1m, and have fewer available features. The range is supplied with direct or indirect cooling, with or without anodes and can be used in simpler DC and AC applications.

**Mounting options**

- Externally mounted with a single or double cathode configuration
- Single and double internal with optional cantilever mount
- Angled dual internal or external

**Magnetic options**

**High Yield (HY)** range achieve 40% target utilization and are recommended for applications where increased machine up-time or reduced material costs are required.

**Metallizer (MZ)** range is designed for high-rate metallizing of webs, car parts and decorative applications. Using specially-designed thick profiled targets and high water flows, the MZ range can increase the machine up-time by 100%.

**Vtech (VT-ER)** range is dedicated to ion assisted deposition processes, where the degree of plasma impact on the growing film can be automatically varied by in-situ changing of the magnetic field.

**Ferromagnetic (HS) and (Loop)** sputtering options for up to 6mm Nickel and 2mm Iron by (HS) magnetics or custom magnetic arrangement to suit ferromagnetic materials in Gencoa (Loop) magnetics.

**High Uniformity (HU)** magnetics for optimised magnetic field uniformity for demanding applications. This is beyond Gencoa standard magnetic field scanning and QC and can provide magnetic field uniformities of less than 1%.