GENCOA

TARGET POWER DENSITIES

The information below details the recommended maximum power levels that can be applied to Gencoa rectangular magnetrons on a continuous power application, based on the target material and the method of cooling.

Monoblock targets

	Material type	cooled	Indirectly diaphragm cooled (W/cm²)	Example materials
	High thermal conductivity	20-40	15-20	Aluminium, copper
	Moderate thermal conductivity	15	10	Titanium, chromium

Bonded targets (indium bond type)

Material type	Directly cooled (W/cm²)	Direct maximum (W/cm²)	Indirectly cooled (W/cm²)	Indirect maximum (W/cm²)	Example materials
High thermal conductivity	10	20	10	15	Aluminium, copper
Moderate thermal conductivity	10	15	8	12	Titanium, chromium
Conductive oxide	6	8	2	5	ITO, AZO
Ceramic insulator	3	10	1-5	2	Silicon oxide, HfO2
Low melting point	2	4	1	3	Indium, tin

Notes

Higher flow options are available on request.

Intermittent power cycling allows higher levels, with the above figures representing the average recommended.

Target power should be ramped up slowly to avoid cracking by thermal shocks.