

Rotatable Magnetron Sputtering Targets



Si-Al (Silicon Aluminum)

KEY FEATURES

Saint-Gobain sputtering targets are produced using a proprietary process, which brings a unique set of features to the market. Our SiAl Targets provide a safe operation with strongly reduced risk of cracking and a reduced probability of micro-arcs. Our targets exhibit continuous surface (no joints) up to 3.9 meters long (12.75 feet) and are available even in a customized Dog-Bone shape enabling the best material usage. The strong bond on the backing tubes (Stainless steel or Titanium) is Indium-free and allows safe operation down to the last mm of sputtering.

Nominal Composition	SiAl (90/10 wt%)
Target Thickness	Up to 16 mm
Thickness profile	Straight or Dog-bone (without joints)
Target maximum length	Up to 3.9 meters (12.75 feet)
Target density	$2.25 \pm 0.05 \text{ g/cm}^3$
Purity (metals)	>99.8%
Oxygen content	< 500 ppm
Surface finish (Ra)	< 1.2 μm
Surface finish (R Max)	< 10 μm

APPLICATIONS

Our High purity Metal Si Targets can allow the magnetron sputtering deposition of either:

- Oxide SiO_2 (Al-doped) thin film when running in reactive sputtering with pO_2
- Nitride Si_3N_4 (Al-doped) thin film when running in reactive sputtering with pN_2

For the most demanding applications such as:

- Flat Glass on large areas
- Automotive glass
- Solar PV Thin-film and solar PV cover glass
- Web Coating (Si-based barrier layers on polymer films)

BENEFITS

- Safe and Stable operation with reduced risk of cracking
- Lower cost of ownership thanks to the customized “dog-bone” shape option

SPECIAL REQUESTS :

We can easily tune the composition (Si/Al ratio or adding of a 3rd phase), so please contact us to submit your special requests.

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