

Grindwell Norton Limited - PCR, India

Document Name	Product specifications – Cryston TW	Rev. No.	01
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I. Product Description: Cryston TW

Cryston TW is the latest evolution in silicon nitride bonded silicon carbide from Saint-Gobain Ceramic Materials. Its superior oxidation resistance means longer life while its strength and low mass creates more efficient kiln furniture design that increase overall kiln efficiency

It can be used to manufacture a variety of unique and standard kiln furniture shapes including beam, slab and plates and supports and posts and pins and also used for manufacturing Wear Resistant Component

II. Typical Physical Properties (measured on test samples):

Sl. No.	Properties	Unit	Spec.	Typical Values
1	Bulk Density	g/cc	>2.75	2.80
2	Apparent Porosity	%	<12	8
3	Abrasion Resistance (at 90 Deg) Losses in cc (Internal Test Method)	Cc	<2.5	2.1
4	Cold Modulus of Rupture (At room temperature)	MPa	>150	170
5	Hot Modulus of Rupture (At 1400°C)	MPa	>140	165
6	Modulus of Elasticity	GPa		235
7	Thermal Conductivity (at 1000°C)	W/m.K		20
8	Co-efficient of thermal Expansion	/°C		4.4X10 ⁻⁶
9	Maximum Service Temperature	°C		1450

III. Chemical Properties (typical):

Sl. No.	Components	Unit	Typical Values
1	SiC	%	70
2	Si ₃ N ₄	%	25
3	Oxides	%	5

IV. Storage: Store in a cool and dry place and handle with care as these are brittle in nature

V. Shelf Life: Not applicable.

Note: The physical & chemical properties and specification of the product represents typical average results obtained in accordance with generally accepted Indian Standards test methods conducted under controlled lab conditions, and are subject to normal manufacturing variations.