

PA 2200 CarbonReduced (Matrix PA12 CR)

PA 2200 CarbonReduced is a polyamide 12-based SLS material with a well-balanced property profile suited to a wide range of applications.

Processed at 100µm layer thickness, it delivers a practical combination of mechanical performance, surface quality and dimensional accuracy across varying part geometries and production requirements.



Applications

- ▶ Production equipment like grippers, jigs and fixtures
- ▶ Surgery cutting guides and bone models for the medical industry
- ▶ Eyewear in the consumer goods industry
- ▶ Spare parts like brackets or covers, e.g., in the automotive industry
- ▶ Functional parts for prototyping that include hinges or threads

Features

- ▶ 100% proven quality and 45% less CO₂e than PA Nylon 12
- ▶ Balanced property profile
- ▶ Multipurpose material

MECHANICAL PROPERTIES	VALUE	UNIT	TEST STANDARD
Tensile Modulus	1700	MPa	ISO 527-1/-2
Tensile Strength	50	MPa	ISO 527-1/-2
Strain at break	20	%	ISO 527-1/-2
Charpy impact strength (+23°C)	53	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	4.8	kJ/m ²	ISO 179/1eA
Flexural Modulus (+23°C)	1500	MPa	ISO 178
Izod Impact notched (+23°C)	4.4	kJ/m ²	ISO 180/1A
Shore D hardness	75	-	ISO 7619-1
Density (laser sintered)	930	kg/m ³	ISO
Melting temperature (20°C/min)	176	°C	ISO
Vicat softening temperature (50°C/h 50N)	163	°C	ISO

The properties of parts manufactured using additive manufacturing technology are, due to their layer-by-layer production, to some extent direction dependent. This has to be considered when designing the part and defining the build orientation.

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