

WINDFORM[®] PRO

CLASS OF MATERIAL : Composite Polyamide

TECHNOLOGY: Selective Laser Sintering

WindForm[®] PRO Light Grey coloured composite polyamide based material, with added aluminium and glass, with improved heat deflection temperature (HDT) and superior stiffness, excellent surface finish, wear resistance and first-rate detail reproduction.

WindForm[®] PRO improves the already excellent mechanical and thermal properties of WindForm[™] GF. WindForm[™] PRO is more stiff compared to WindForm[®] GF even at high temperatures, and offers an attractive metallic look, appreciable in varied applications. Medium price.

APPLICATIONS:

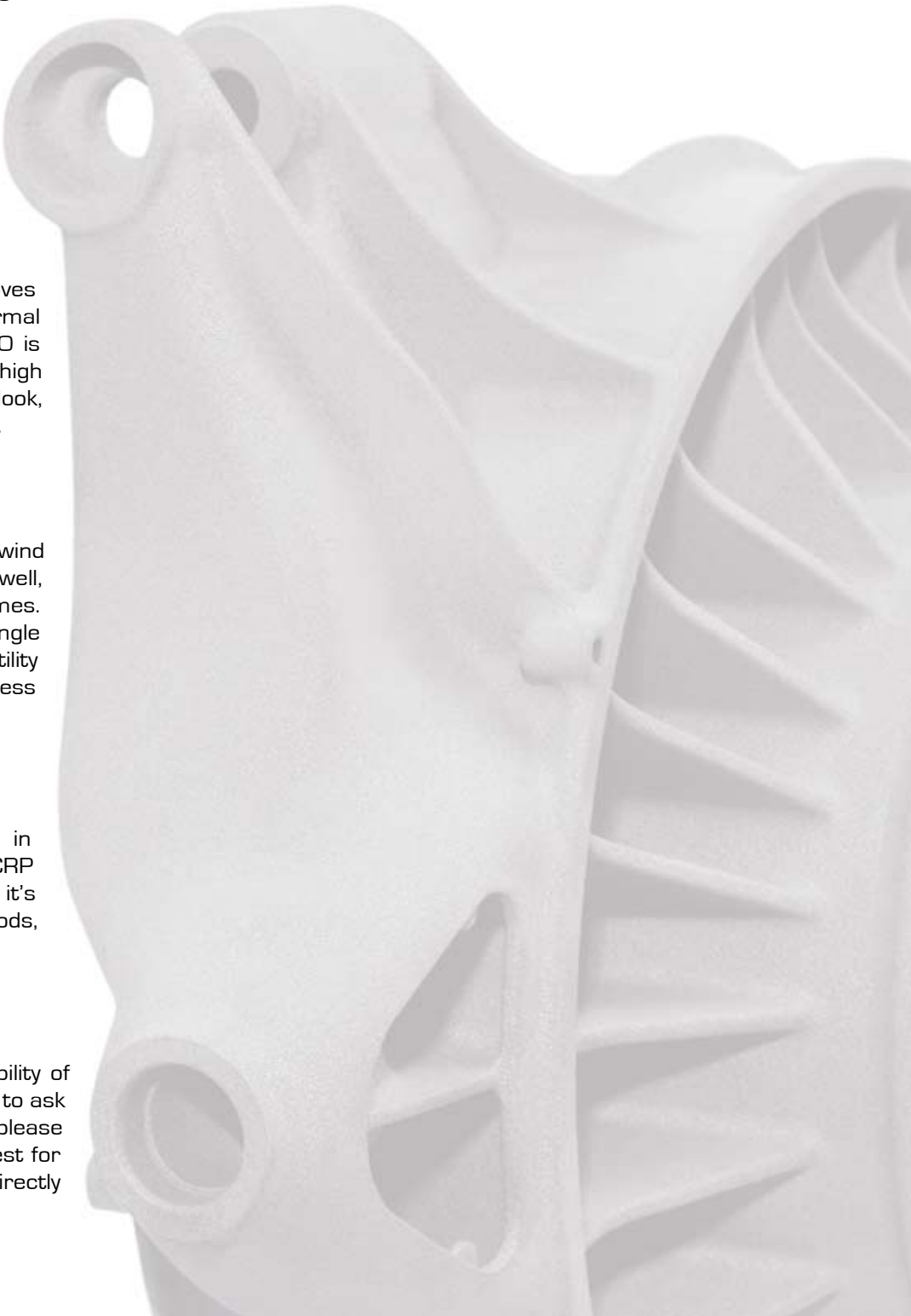
Termoforming, aerodynamic applications, in wind tunnel and on the racetrack and on road as well, functional prototypes for case and sumps, frames. All the uses which we have indicated for each single product are only an example. The product's versatility together with the technology used allow countless possibilities of utilization.

WHERE YOU WILL FIND WINDFORM[®]

CRP Technology operates with Windform[®] in the following markets: USA, Europe, Japan. CRP Technology proposes a personalised plan to it's clients for times and product delivery methods, according to the demands of the client.

WHERE AND HOW TO FIND WINDFORM[®]

If you require ulterior information on the availability of our product, the closest distributor, or would like to ask for an estimate or verify delivery time availability, please visit our site www.windform.it and send a request for information. It will be our pleasure to contact you directly and provide you with all requested information.



WINDFORM[®] PRO

PROPERTIES WINDFORM[®] PRO	Test Method	SI Unity	Windform [®] PRO
GENERAL PROPERTIES			
Density (20° C)		g/cm ³	1,42
Colour			DARK GRAY
THERMAL PROPERTIES			
Melting Point	ASTM D 3418	°C	180
HDT, 1.82 Mpa	ASTM D 648	°C	140
Vicat 10N	ASTM D 1252	°C	176,7
MECHANICAL PROPERTIES			
Tensile Strength	UNI EN ISO 527-1(97) UNI EN ISO 527-2(97)	Mpa	52,56
Tensile Modulus	UNI EN ISO 527-1(97) UNI EN ISO 527-2(97)	Mpa	4964,8
Elongation at break	UNI EN ISO 527-1(97) UNI EN ISO 527-2(97)	%	2,92
Flexural Strength	UNI EN ISO 14125: 2000	Mpa	79,13
Flexural Modulus	UNI EN ISO 14125: 2000	Mpa	4299,7
Impact Stength - Charpy Unnotched (23°C)	ASTM D 256 - UNI EN ISO 179:1998	KJ/m ²	17,75
Impact Stength - Charpy Notched (23°C)	ASTM D 256 - UNI EN ISO 179:1998	KJ/m ²	3,81
Impact Stength - Charpy Notched -30°C	ASTM D 256 - UNI EN ISO 179:1998	KJ/m ²	3,04
SURFACE FINISH			
After SLS Process		Ra µm	6,0
After finishing		Ra µm	1,8
ELECTRICAL PROPERTIES			
Resistivity, Volume	ASTM D257-93	ohm x cm	8,4E+12
Resistivity, Surface	ASTM D257-93	ohm x cm	3,7E+13

Note: These are all indicative values, data were generated from the testing of parts produced with the Windform[®] PRO materials under optimal processing conditions.

Standard Technical Details for Accuracy versus Tolerance:

For parts up to 6" (150 mm) the standard tolerance is: +/- 0.012 inch (0,3 mm)

For parts more then 6" (150 mm) the standard tolerance is: +/- 0.002 inch per inch (0.05 mm per 25 mm)