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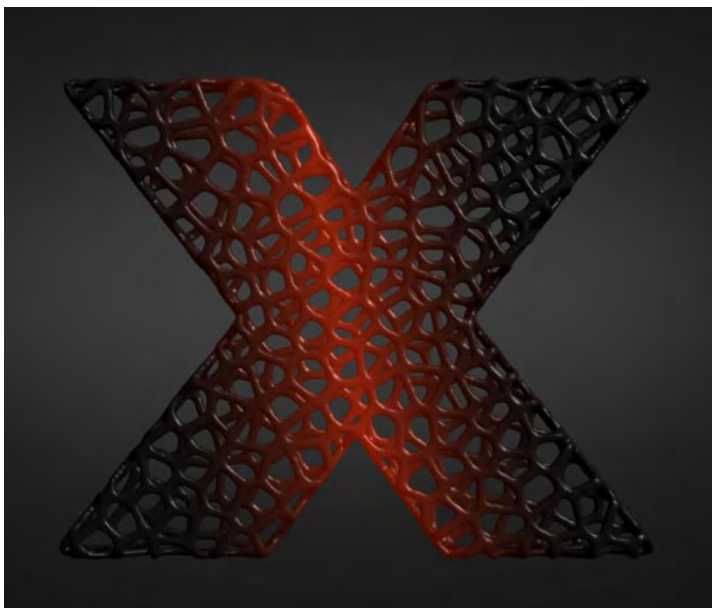
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# XSTRAND™ 3D Printing filaments by Owens Corning: redefining additive manufacturing performance



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# Reinforced materials enabling new performance

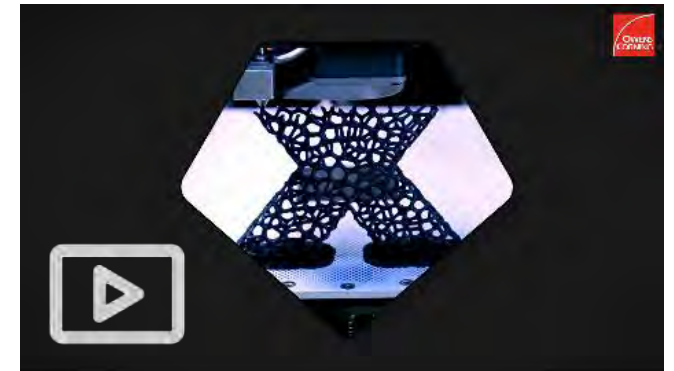


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- ◆ Materials designed for functional prototyping and industrial applications
- ◆ Excellent layer adhesion and reduced warping effect compare to neat materials
- ◆ Very stiff and strong materials
- ◆ Large operational temperature range  
-20°C to 120°C
- ◆ Good chemical and UV resistance
- ◆ Engineered reinforced plastics  
XSTRAND™ GF30-PP  
XSTRAND™ GF30-PA6



Products  
presentation

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# Applications for XSTRAND™ filament in many industries




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**SPORT & LEISURE**




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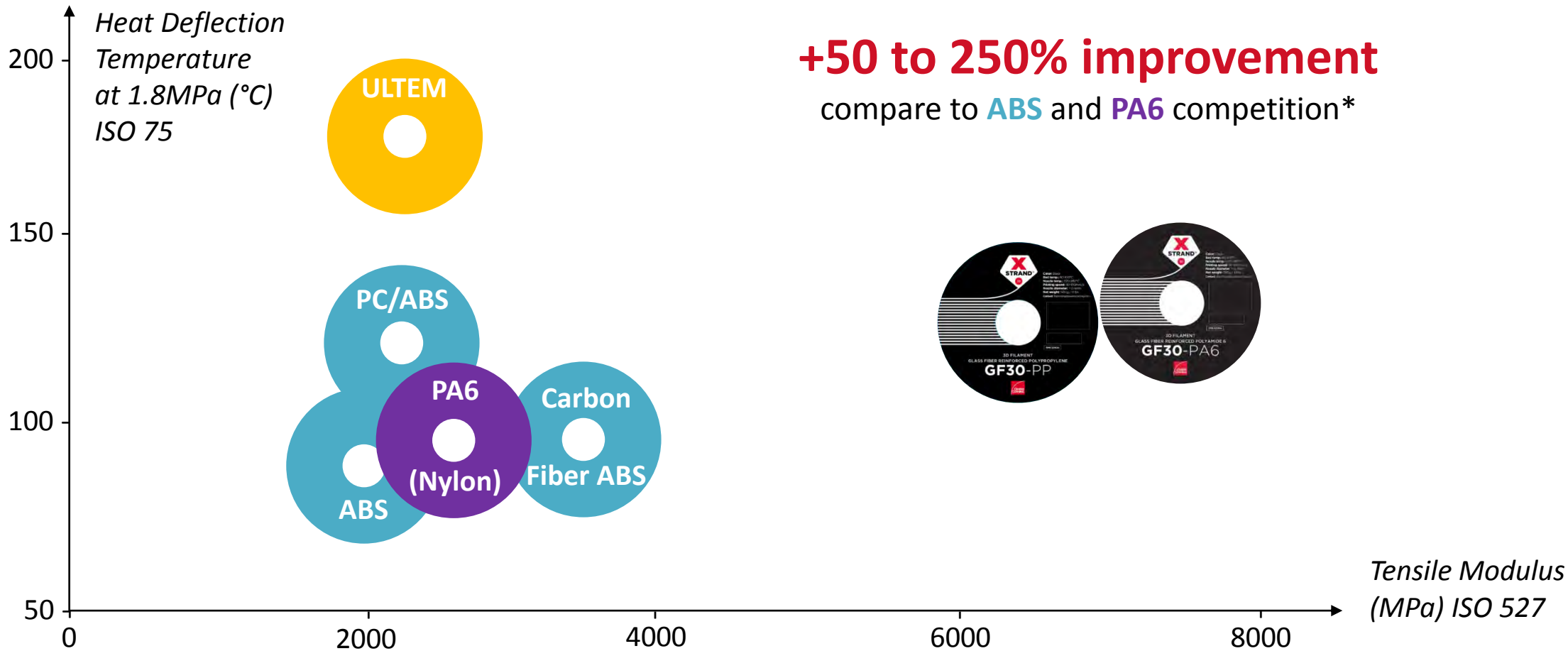


# XSTRAND™ outperforms ABS and PA6 competition



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\*Values based on Owens Corning's internal tests

Products presentation	Products applications	<b>Value proposition</b>	Products references	3D Printer settings	Storage and safety	Customer testimonial	Owens Corning	Contact & Orders
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# XSTRAND™ references meet industry needs



## ◆ GF30-PP references available in black color:

XSTRAND™ GF30-PP	1,75mm	500g spool
XSTRAND™ GF30-PP	2,85mm	500g spool
XSTRAND™ GF30-PP	1,75mm	2200g spool
XSTRAND™ GF30-PP	2,85mm	2200g spool



## ◆ GF30-PA6 references available in black color:

XSTRAND™ GF30-PA6	1,75mm	500g spool
XSTRAND™ GF30-PA6	2,85mm	500g spool
XSTRAND™ GF30-PA6	1,75mm	2200g spool
XSTRAND™ GF30-PA6	2,85mm	2200g spool



# Best settings for FFF 3D printers



- ◆ Designed to be compatible with most of open Fused Filament Fabrication 3D printers available on the market



## Warning:

When melted, XSTRAND™ filament can be abrasive due to its glass reinforcement. Printing with XSTRAND™ may reduce brass nozzles and extruder driving wheels lifetime. For a better experience, using hardened steel nozzles and extruder driving wheels is advised.

## Recommended printing parameters:



Nozzle temperature:  
**220-280°C**  
Bed temperature:  
**80-110°C**



Printing speed:  
**30-100mm/s**



Nozzle diameter:  
**> 0.4mm**



Products presentation	Products applications	Value proposition	Products references	<b>3D Printer settings</b>	Storage and safety	Customer testimonial	Owens Corning	Contact & Orders
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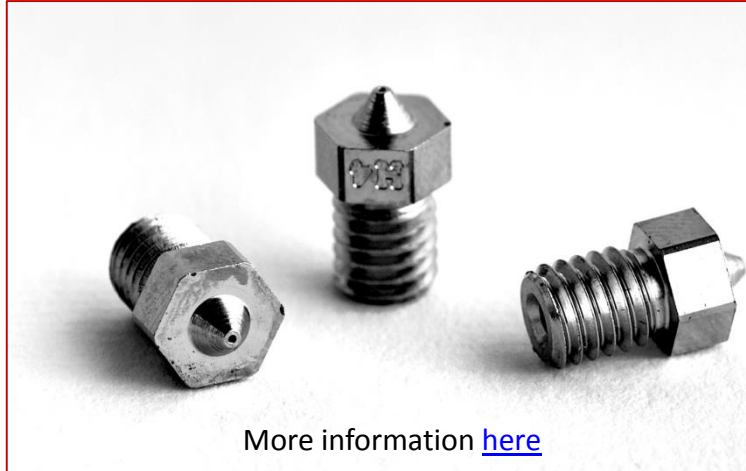
# Recommended 3D printer components for XSTRAND™ GF30-PP tested by Owens Corning



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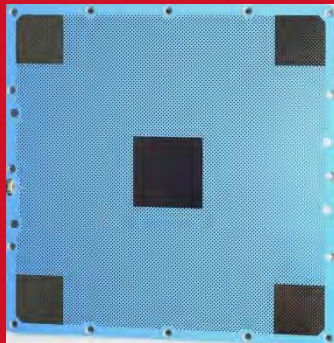
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## ◆ Hardened steel Hercules™



More information [here](#)

### Dedicated perforated plate (Zortrax)



### HDPE sheet



### PP adhesive



### Solution for glass plate



Products presentation	Products applications	Value proposition	Products references	<b>3D Printer settings</b>	Storage and safety	Customer testimonial	Owens Corning	Contact & Orders
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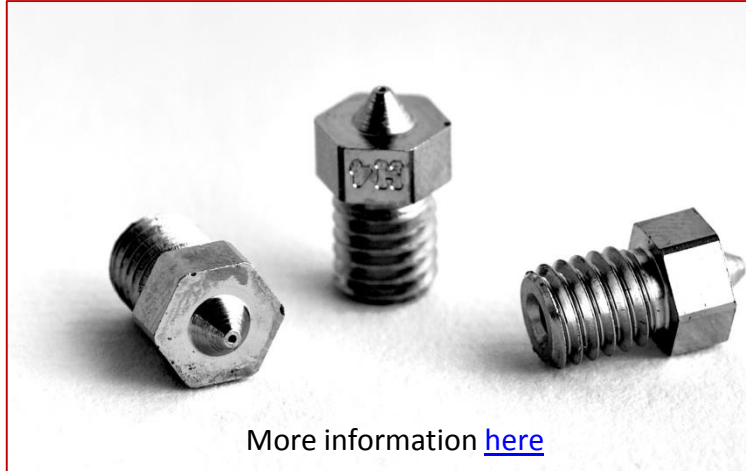
# Recommended 3D printer components for XSTRAND™ GF30-PA6 tested by Owens Corning



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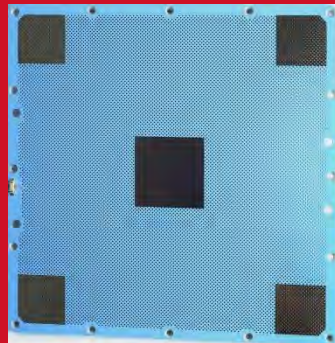
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## ◆ Hardened steel Hercules™



More information [here](#)

### Dedicated perforated plate (Zortrax)



### PEI sheet



### PI (Kapton) adhesive



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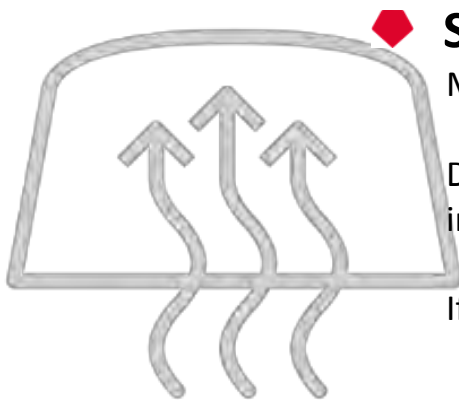




## STORAGE

XSTRAND™ filaments must be stored in a dry and temperate location. The product should remain in its original packaging, preferably closed, until beginning of use.

- **GF30-PP** product is not very sensitive to moisture and does not require to be unclosed in a dry environment during printing.
- **GF30-PA6** is very sensitive to moisture and must be dried at least 4h in the oven at 80°C prior to use to allow optimal printing results. The spool needs to be stored in a dry case (Pelican type) even during printing.



## SAFETY

Material Safety Data Sheet available [here](#).

During use of the products, extrusion fumes may be released. Ensure sufficient ventilation and air extraction to avoid inhalation. In case of insufficient ventilation, wear suitable respiratory equipment.

If you apply a sand process after printing your part, make sure you wear safety gloves and appropriate dust mask.

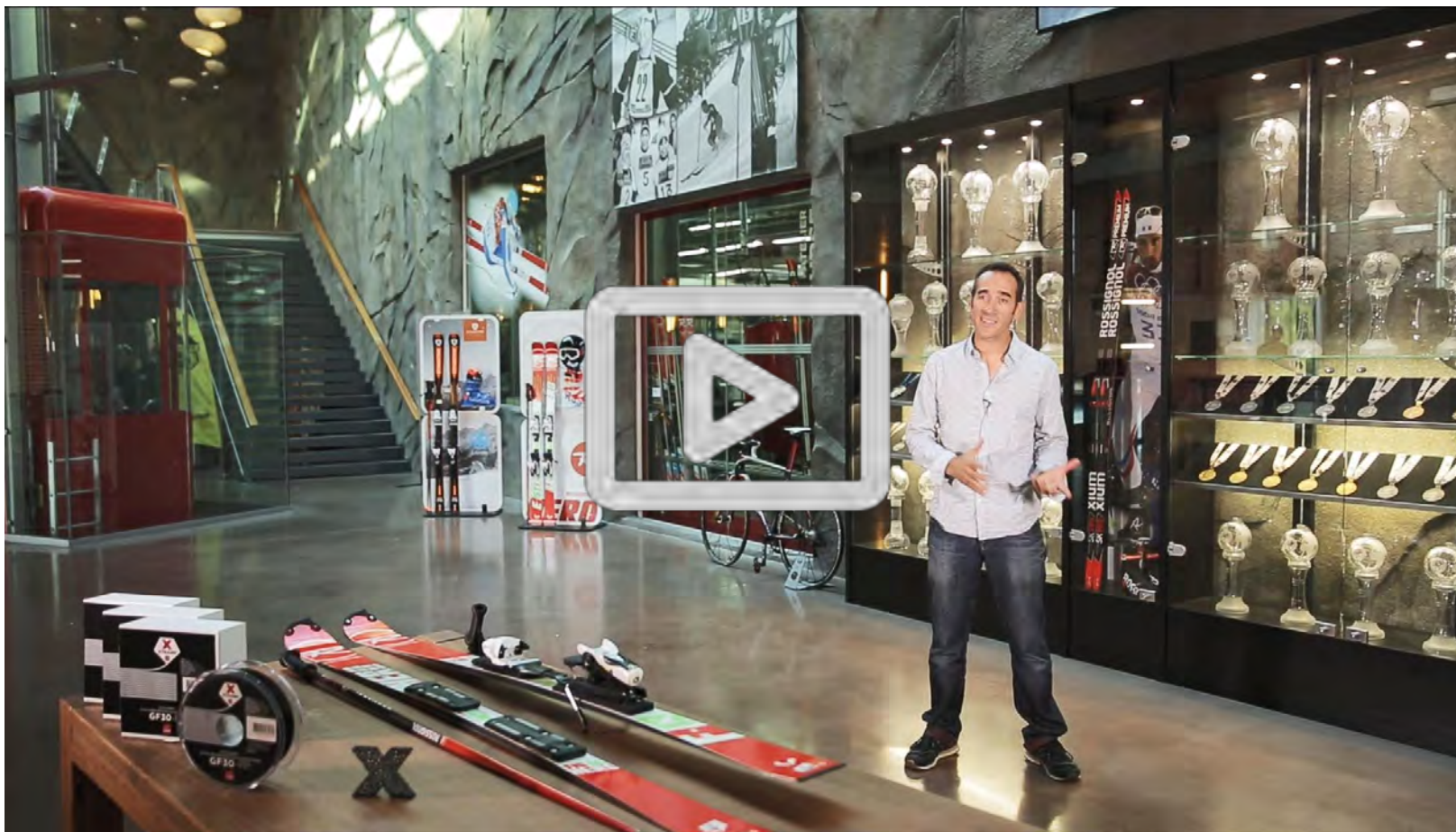


# XSTRAND™ material redefines Rossignol opportunities



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*“Owens Corning's new-generation materials mean we can make functional prototypes of our products.”*

Nicolas Puget  
Advanced Research Manager,  
Rossignol group



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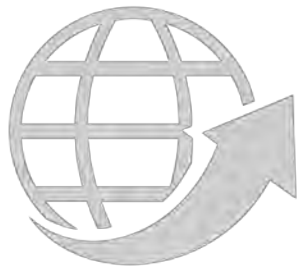


# Owens Corning: Global company founded in 1938



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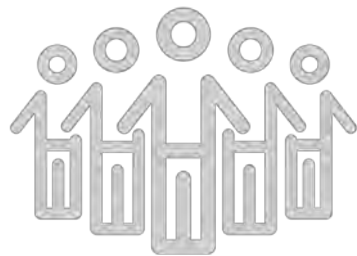
A **world leader** in glass fiber composites



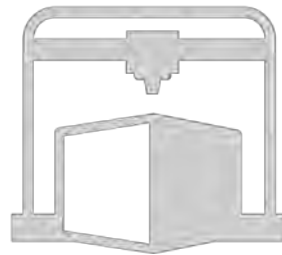
More than **500 researchers** in five **R&D** centers



2016 Sales **\$5.7 billion**



**17,000** Employees in **33** countries



**3D Printing labs** in France and in Ohio, USA



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Revision date: January 22<sup>nd</sup>, 2018

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Products presentation	Products applications	Value proposition	Products references	3D Printer settings	Storage and safety	Customer testimonial	Owens Corning	Contact & Orders
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