Features and Benefits:

- Materials designed for functional prototyping and industrial applications
- Engineered reinforced plastics
- Very stiff and strong
- Large operational temperature range: -20 ˚C to 120 ˚C
- Good chemical and UV resistance
- Excellent layer adhesion
- No warping

Printing Recommendations:

- XSTRAND™ filaments are designed to be compatible with most of open fused filament fabrication 3D printers available on the market.
- **Hardened steel nozzle** is highly recommended to print XSTRAND™. When melted, XSTRAND™ filament can be abrasive due to its glass reinforcement. Using hardened steel nozzles and extruder driving wheels is advised. Hardened steel nozzles can be found at https://www.p3-d.com/collections/duraplat-3d-extruder-nozzles
  or
  https://www.3dxtech.com/e3dv6-hercules-a2-hardened-steel-nozzle/

- **Nozzle diameter**: >0.4mm
- **It's recommended to start with default setting for nylon materials in the slicer software.**
  - Nozzle temperature: 220 – 280˚C
  - Bed temperature: 80-110˚C
- **Better bed adhesion** is achieved using the following components for standard nylon printing.
  - Perforated bed (such as the one on Zortrax machines). If you are using a perforated bed, you don't need kapton tape or glue sticks.
  - If you are printing on glass bed, a regular all-purpose elmer's glue stick is preferred for better bed adhesion.
  - If you are printing on PI Katpon adhesive tape, a glue stick is also recommended.
  - Or you can choose to use a PEI sheet

Case studies:

- Rossignol https://www.youtube.com/watch?v=3FsfPWo7Ngw
- Seair: https://youtu.be/Pg-7HgO7ZfQ

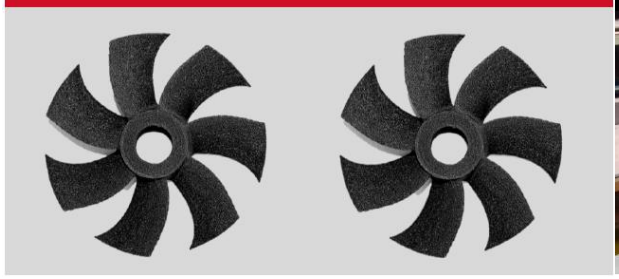
About Owens Corning:

- A world leader in glass fiber composite
- More than 500 researchers in five R&D centers
- $5.7 billion sales (2016)
- 17,000 employees in 33 countries
- 3D Printing labs in Ohio, USA and France

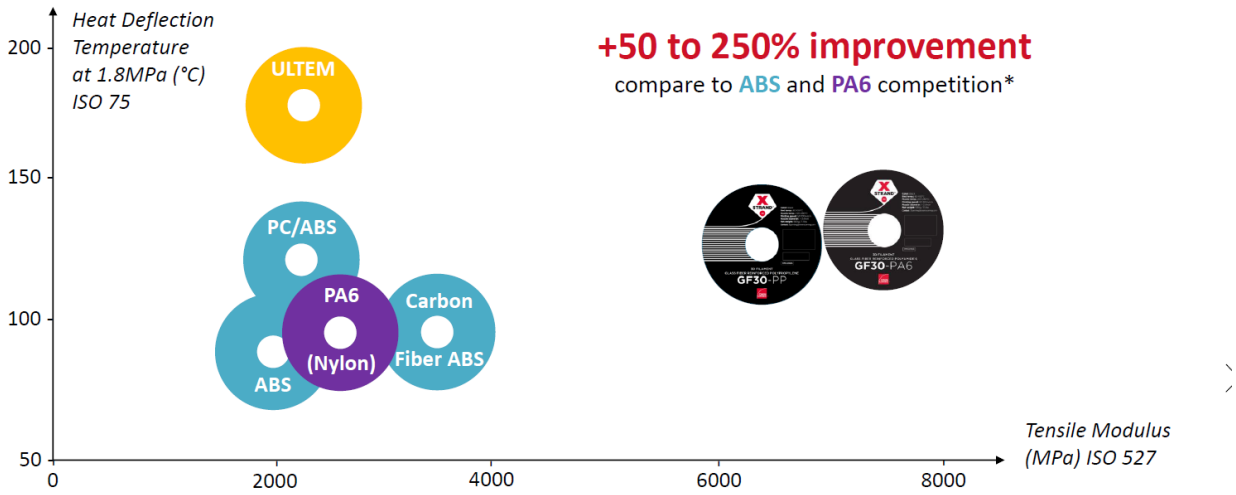
INDUSTRY & TOOLING

TRANSPORTATION

SMALL APPLIANCES & ELECTRONICS



SPORT & LEISURE



+50 to 250% improvement

compare to ABS and PA6 competition*

*Values based on Owens Corning's internal tests