

Polypropylene for Additive Manufacturing

Stage

R&D

Introduction consideration

Practical stage

Keyword

Lightweighting

Use

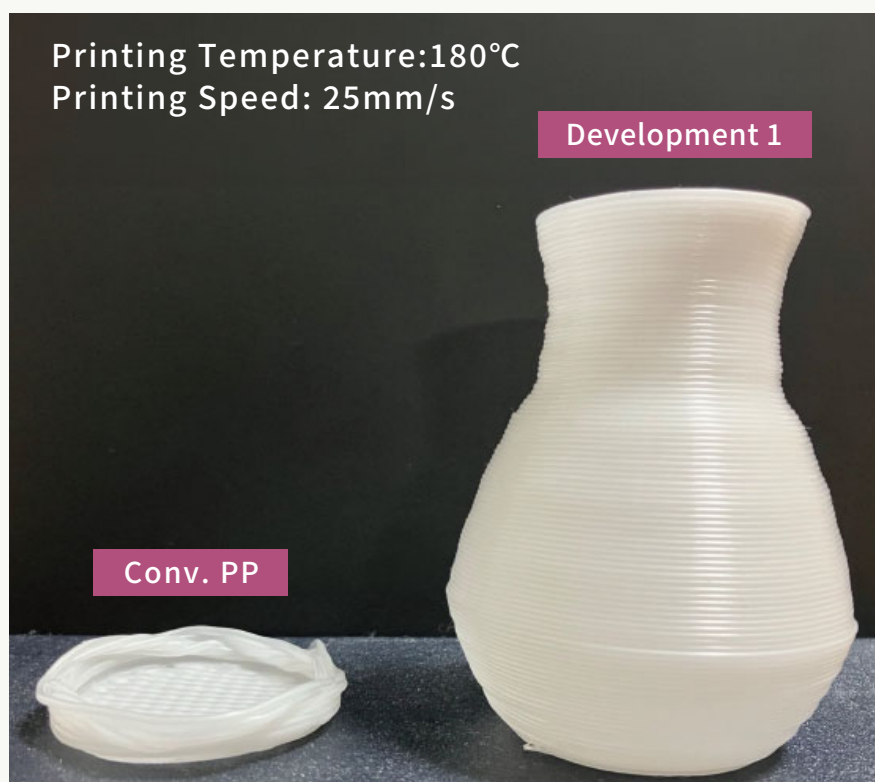
Additive Manufacturing / Furniture/
Structural components

Challenge

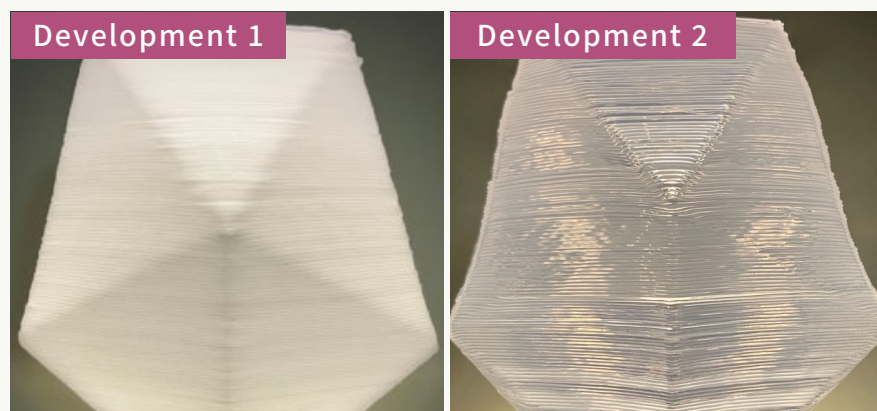
- Conventional Polypropylene warps during additive manufacturing.
- The material does not meet the required performance due to insufficient stiffness and transparency.
- When the printing speed is increased, the appearance of the printed object is compromised.

Solution

- Development 1 :
Support high speed printing speed



- Development 2 :
Enhanced transparency with excellent
appearance and color reproduction



- MEX05 (Developed Grade) : Combines low density
with high stiffness

	Conv. PP	MEX05
Density	0.9	1.0
Flexural Modulus (MPa)	1,500	9,500

Benefit

- Lightweight parts enabled by polypropylene's low density.
 - + Reduced printing time for higher productivity and lower costs
 - + Suitable for applications requiring high stiffness
 - + Superior transparency and colorability

Contact |  Japan Polypropylene Corporation

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