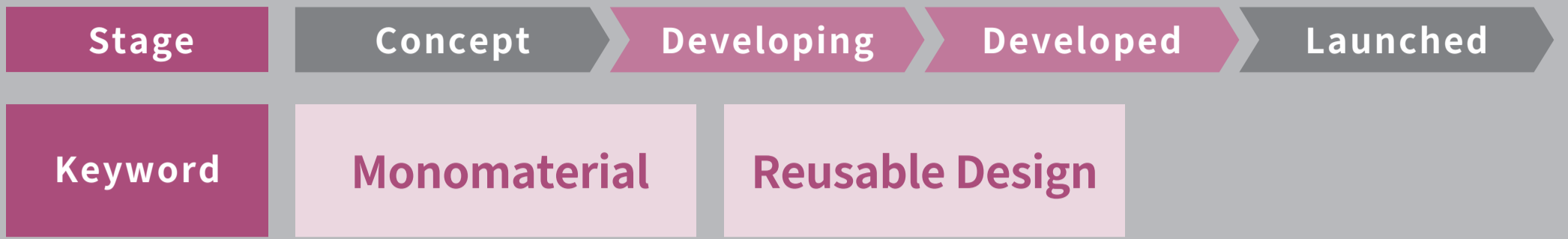


Polypropylene for Additive Manufacturing



Use **MEX (Material Extrusion) Additive Manufacturing**

- Background**
- Conventional Polypropylene shrinks during additive manufacturing.
 - Reducing the environmental impact of plastics is important for a sustainable society.
 - MEX-02, MEX-05 offer well printability, less shrinkage, and high stiffness.

Recyclability

Tensile Speed: 5 cm/min

Recycle Times	MEX-02 (Tensile Stress @Yield)	conv.PP(no recycled) (Tensile Stress @Yield)
0	~7.5	~4.0
1	~6.5	~4.0
2	~7.5	~4.0
3	~6.5	~4.0

Interlayer adhesion strength can be maintained even after repeated extrusion.

Eco-friendly Recycled Filler

The use of recycled carbon fiber recovered from discarded parts contributes to waste reduction.

Printing Conditions and Properties

Material grade			MEX-02	MEX-05	Conventional PP
Filler			Talc	Recycled Carbon Fiber	-
Printing Temperature	Nozzle	°C	170	220	195
	Stage	°C	80	80	80
3DP Object Properties	Shrinkage	mm	0.5	0	7.0
	Tensile Stress @Yield	%	8	2	4
Injection Properties	Density	g/cm ³	1.03	1.06	0.90
	Flexural Modulus	MPa	950	9,500	1,500

Application Examples: Furniture, Office Supplies (Book Stands), Flower Beds, etc.