



**COMING
SOON**

STAY TUNED

Pushing the Boundaries of 3D Printing

Injection Molding with Ultracur3D® RG 3280 for DLP

3D printed mold inserts are mainly used in prototype toolmaking (rapid tooling) but can produce near-series functional parts of low to medium quantities (approx. 100-1000) as well. This is especially useful to quickly identify critical part geometries during mold and end use part development.

Forward AM has partnered with DREIGEIST and SKZ to explore the potentials and limitations of DLP printed molds with Ultracur3D® RG 3280 in combination with selected range of common thermoplastic injection compounds. The resulting data is used to derive best-practice guidelines and recommendations for both tool production and use (AM/IM).

Material: Ultracur3D® RG 3280

Technology: DLP

Partners: **DREIGEIST**
Additive Intelligence



Find out more:



Injection Molding -
Processing Guideline

Pictures Source: DREIGEIST

Pushing the Boundaries of 3D Printing

Injection Molding with Ultracur3D® RG 3280 for DLP

Proof of Printability:

Ultracur3D® RG 3280 proves to be a very good option to produce solid/massive tooling geometries. Printing results demonstrate very high accuracies in the parts produced and are highly repeatable.

Proof of Applicability:

Ultracur3D® RG 3280 is generally machinable and suitable for mechanical processing by lathe or mill. Due to the excellent dimensional accuracies achievable in DLP processing, fitting the tool inserts to the mother pockets works well. Tools printed in Ultracur3D® RG 3280 survive the harsh mechanical loads associated with tool clampdown.

Proof of Work:

Full testing results will be available soon.



Faster printing



Lower cost compared to SLA



Easy to handle

Ultracur3D® RG 3280

Ceramic-filled resin with exceptionally high stiffness and temperature resistance

- ✓ Superior stiffness
- ✓ Superior temperature performance
- ✓ High suspension stability
- ✓ Very fast and easy to print
- ✓ TPO-free
- ✓ Biocompatible
- ✓ Exceptionally chemical resistant
- ✓ Advanced thermal properties available*

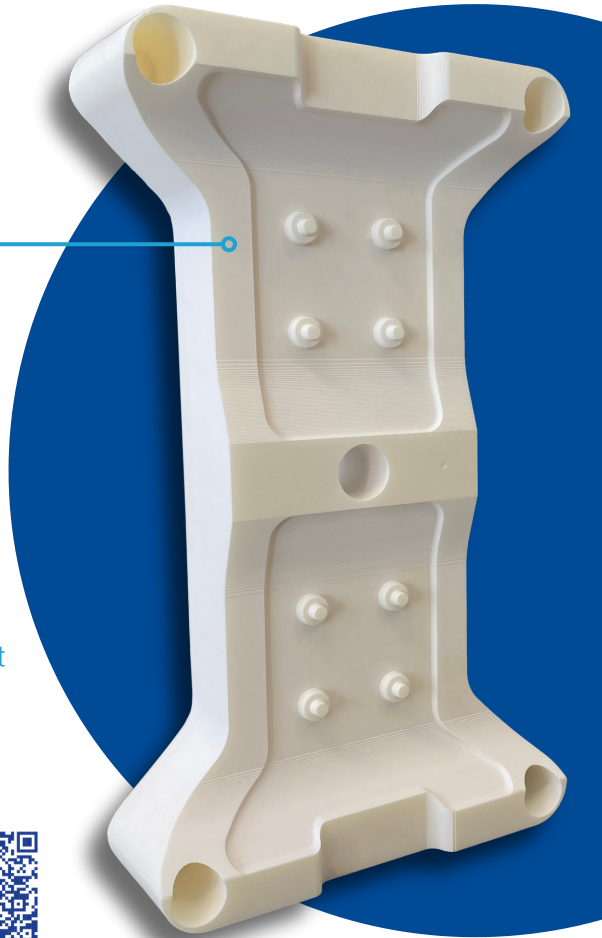
Find out more:



*Extended TDS



Printer
Compatibility



Picture Source: DREIGEIST

Durable Molds for Rapid Tooling

Driving Injection Molding into the Future with Ultracur3D® RG 3280

When updating products or changing technologies, companies often require prototypes or small batch sizes, a process that can often be hindered by the high costs and long lead times associated with traditional injection molding. Through the collaboration with Forward AM, DREIGEIST is pushing the boundaries of 3D printing through the creation of injection molds using Ultracur3D® RG 3280 and Digital Light Processing (DLP) technology creating 3D printed molds that are both cost-effective and have significantly reduced lead times.

Material: Ultracur3D® RG 3280

Technology: DLP

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Find out more:



Full Use Case

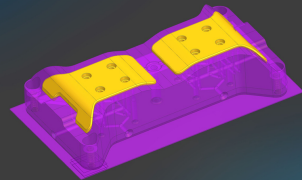


Reduced cost by 88% compared to traditional molds



CAD design to first injection molded part in less than 24 hours

Pictures Source: DREIGEIST





Coming Soon

- Whitepaper - Application Study AM for IM
- Use Cases - Proof of industrial use of inserts for IM
- Webinar

Stay Tuned!

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