



### A different approach to additive manufacturing

The IROPRINT™ additive manufacturing platform is a family of innovative, urethane-based elastomers, designed to address the need for flexible and elastic yet hard-wearing materials for 3D printing applications.

Featuring both polyurethane (PU) and thermoplastic polyurethane (TPU) materials, the IROPRINT™ portfolio includes solutions for various 3D printing techniques such as stereolithography (SLA); selective laser sintering (SLS); high speed sintering (HSS) and fused filament fabrication (FFF).

### Extensive application possibilities

The IROPRINT™ additive manufacturing range was originally created for use in the global footwear and sports industry – where decision makers are fastidious about material quality and performance, and where the use of 3D printing to make both customized and mass manufactured shoes is quickly gathering pace.

But outside of footwear, the materials can be used to create other products that need to possess rubber-like characteristics such as seals and gaskets, consumer wearables, flexible ducts, grommets, bushings and vibration dampening.

### Committed to collaboration

Our additive manufacturing experts are committed to building long-lasting relationships with hardware and software providers throughout the 3D printing ecosystem, by pooling our knowledge, sharing our ideas, and working on open innovation projects together.



## About Huntsman

Work with Huntsman and you'll be building a partnership with an entrepreneurial, agile, in-house innovation team that has the autonomy to act quickly with the support and economies of scale that come from being part of a global chemical company.

Our PU and TPU elastomers can be used for casting, compounding, extruding, injection molding, laminating – and now 3D printing. They can also help product designers and manufacturers take their ideas from concept to commercialization, quickly and efficiently.

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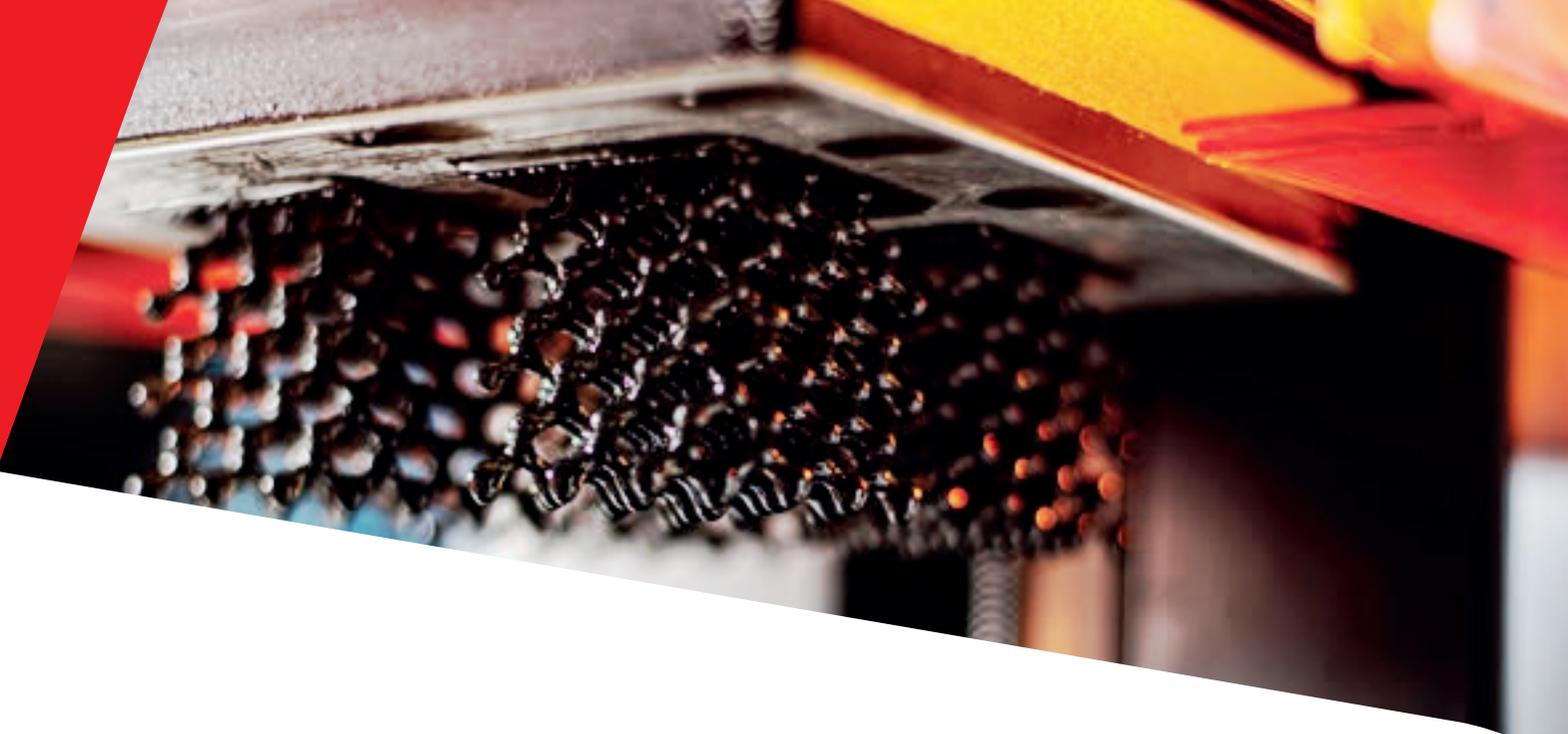


## Additive Manufacturing Materials

A new dimension in urethanes technology for 3D printing



# Flexible and elastic, yet tough 3D printing materials



## IROPRINT™ R resins

IROPRINT™ R resins are one-component (1K), polyurethane-based liquids which can be 3D printed using SLA and digital light processing (DLP) additive manufacturing methods.

Using our 1K UV curable IROPRINT™ R resins you can expect:

- Results that are flexible and elastic, yet tough and strong
- Easy and consistent printing
- A constant viscosity
- Very good surface quality
- Very good chemical, weathering and abrasion resistance
- Low temperature performance due to a low Tg
- Reduced and simplified post curing: UV only

IROPRINT™ R resins are reusable.



## IROPRINT™ P powders

IROPRINT™ P powders are a line of high performance, cost effective TPU powders designed for use with HSS and SLS printing techniques.

Working with our IROPRINT™ P powders you can expect:

- Results that are flexible and elastic, yet tough and strong due to full fusibility
- Easy printing due to a wide sintering window and good powder flowability
- Consistent performance on both industrial printers and desktop printers
- Very good surface finish
- Very good chemical, weathering and abrasion resistance
- Low temperature performance due to low Tg



## IROPRINT™ F filaments

IROPRINT™ F filaments are a collection of cost effective, high performance TPU filaments that have been designed for processing via FFF forms of 3D printing.

Opt to print using our IROPRINT™ F filaments and you can expect:

- End products that are flexible and elastic, yet tough and strong
- Easy printing due to consistently high filament quality
- A fast outcome due to low friction and fast recrystallization
- Very good chemical, weathering and abrasion resistance
- Low temperature performance
- Low warping