



XTREME 8K

More than 66 liters of breakthrough polymer 3D printing.

High-intensity, top-down DLP technology unlocks unprecedented material benefits at incredible speeds.



FOR DIVERSE & DEMANDING APPLICATIONS

Hard & High-Temp Plastics

- Automotive and machine parts
- Aerospace components
- Housings and connectors
- Jigs and fixtures

Elastomers & Foams

- Seals, gaskets, and rubber parts
- Seating and cushioning
- Sporting goods
- Footwear

PRODUCTION-GRADE DLP 3D PRINTING

Proprietary digital light processing technology, including DLP® chips, unlocks unprecedented material properties in polymer 3D printing — at speeds that leave big, slow SLA and FDM systems in the dust.

A flexible standout, the Xtreme 8K offers a can-do build volume of more than 66 liters paired with two proprietary, high-intensity light engines that cure a complete print layer with a single flash of UV light. This powerful package enables production-grade printing for diverse and demanding jobs, from very large parts to lots of smaller components.

Fast in-a-flash print times

Expose a full print layer in a flash with two high-intensity, high-resolution projectors. Positioned side-by-side above the material vat, our custom optical train is optimized for 385 nm UV light and high power densities. That delivers faster print times, lower part costs, and unlocks materials with unique and more durable mechanical properties.

Flexible XL volume production

With the largest DLP build volume on the market, and an incredibly productive overhead print engine, the Xtreme 8K gives you maximum output and throughput flexibility. Print very large parts, thousands of midsized parts, or millions of small parts. Or, mix and match in one build.

Smooth surface finish

The Xtreme 8K delivers the super-smooth surface finish for which DLP printing is known. A heated recoater blade ensures consistent layer thickness, and grayscale techniques further enhance the superior surface finish of DLP technology. The Xtreme 8K can produce parts with a surface roughness of less than 1 μm Ra.

Breakthrough material portfolio

Print plastics with best-in-class properties for rigidity, heat deflection, and ultimate tensile strength. What's more, print our exclusive high-viscosity DuraChain™ elastomers and foams with breakthrough toughness and resiliency. The Xtreme 8K's heated chamber, vat, and wiper blade are optimized for this exclusive portfolio. Enjoy isotropic injection molded part quality without the expense and wait of tooling.

Software-managed workflow

Our innovative and easy-to-use software solutions help customers manage their additive manufacturing workflows for build preparation, support generation, and consistent manufacturing. Users can auto generate and modify support structures to optimize their parts before printing.

Easy-to-use system

An integrated touchscreen extends the easy software experience to the production floor. Material changeovers are also easy with a removable build plate and a vat built for agility. Situated on wheels to roll in and out of the Xtreme 8K, the material vat also features a convenient drain plug.

Higher throughput from faster polymerization

ETEC DLP

13 seconds/layer

150 μm
LAYER HEIGHT

8 mW/cm^2
POWER

COMPETITOR DLP

20.5 seconds/layer

150 μm
LAYER HEIGHT

5 mW/cm^2
POWER

User-friendly touchscreen interface with fold-out mouse and keyboard

Dual overhead projectors deliver the DLP industry's highest energy density for its size, resulting in faster cure times and unlocking new material properties

Top-down printing requires fewer supports and delivers smoother surface finishes

Heated, easy in-and-out rolling vat features a drain plug for easy material changes





BREAKTHROUGH MATERIALS

New levels of energy density from dual projectors and a custom optical train are empowering new material properties with the Xtreme 8K, processing two general categories of resins:

■ DuraChain™ elastomers and foams

Exclusively offered on the Xtreme 8K, DuraChain™ resins deliver tough and strain-resistant two-part material properties in a long-lasting one-part system that's easy to manage. When illuminated during printing, DuraChain's high-viscosity, long-chain photopolymers phase separate at the nano level into material that cures into a durable, resilient, and high-performance network.

■ Tough, rigid plastics

The Xtreme 8K is compatible with popular Henkel LOCTITE® materials such as 3843 and IND 405, with more third-party resins coming soon.

Xtreme 8K materials

Our materials team has exciting new DuraChain resins on our development roadmap, and continuously works with third-party companies to qualify new materials.

- DuraChain™ Elastic ToughRubber™ 70 Black
- DuraChain™ Elastic ToughRubber™ 90 Black
- DuraChain™ Elastic ToughRubber™ 90 White
- DuraChain™ Soft ToughRubber™
- DuraChain™ FreeFoam™ (R&D)
- DuraChain™ Chemical ToughRubber™ (R&D)
- Evonik INFINAM® ST 6100 L
- LOCTITE® 3843 Black
- LOCTITE® IND 405 Black
- LOCTITE® IND 147



DuraChain™ FreeFoam™

Revolutionary, expandable 3D printable resin for production of foam parts

FreeFoam photopolymer resins contain dispersed heat-activated foaming agents that are 3D printed into designs. After printing, FreeFoam parts undergo a brief oven cycle, creating closed cells that expand the part a programmable amount between 2 to 7 times its original size, maintaining tight tolerances in a wide range of Shore hardness values.

[▶ Watch FreeFoam expand: TeamDM.com/FreeFoam](https://www.teamdm.com/freefoam)

DuraChain™ ToughRubber™

Durability and resiliency with a new chemistry approach

Whether you're looking to produce soft, flexible parts or need the performance of the toughest additive manufacturing elastomer on the market, ToughRubber materials unlock new 3D printing possibilities. These proprietary materials deliver two-part material properties but in a single, long-lasting pot with high-throughput print speeds.

[▶ See ToughRubber in action: TeamDM.com/ToughRubber](https://www.teamdm.com/toughrubber)

TECHNICAL SPECIFICATIONS

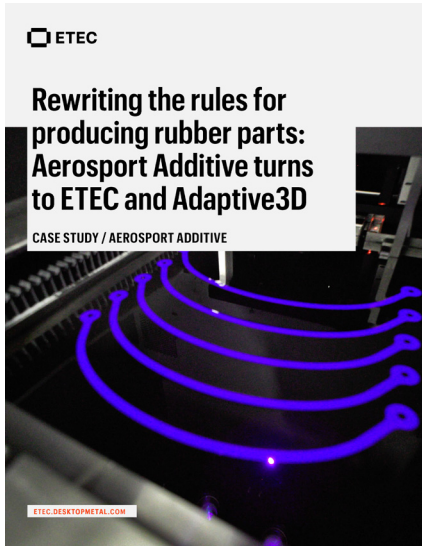


Build envelope (L x W x H)	450 x 371 x 399 mm (17.72 x 14.61 x 15.71 in)
Top-down light engine	Two custom 385 nm projectors
Power density	8 mW/cm ²
Native XY resolution	150 μm
Enhanced XY Resolution	100 μm
Z Resolution	100–175 μm (material dependent)
Footprint (L x W x H)	1,420 x 1,052 x 2,083 mm (55.9 x 41.42 x 82 in)
Weight	907.18 kg (2,000 lbs)
Electrical requirements	208V VAC, Three Phase, 20A

We can produce up to 1,000 parts a day on one Xtreme 8K that are high-quality with dimensional accuracy close to, if not better than, injection-grade quality.

— Jason Anderson
Operations Manager at Aerosport Additive

XTREME 8K IN ACTION

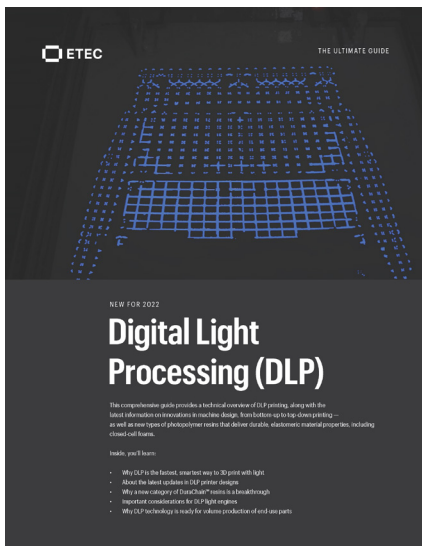


CUSTOMER SUCCESS STORY

Rewriting the rules for producing rubber parts

Aerosport Additive 3D prints prototypes, working models, and volume applications to shorten lead times and reduce per part costs in Elastic ToughRubber, a tough yet pliable material available exclusively on the ETEC Xtreme 8K.

TeamDM.com/Aerosport



WHITE PAPER

Ultimate Guide to DLP

A comprehensive technical overview of DLP 3D printing covering innovations in machine design, from bottom-up to top-down printing, as well as new types of photopolymer resins that deliver durable, elastomeric material properties.

TeamDM.com/DLPGuide

Learn more about digital light processing and find more customer success stories at

TeamDM.com/DLPSuccess

Additive Manufacturing 2.0

Metal | Polymer | Ceramic | Composite | Wood

[ETEC.DESKTOPMETAL.COM](https://www.ETEC.DESKTOPMETAL.COM)

Desktop Metal (NYSE:DM) is driving Additive Manufacturing 2.0, a new era of on-demand, digital mass production of industrial, medical, and consumer products. Our innovative 3D printers, materials, and software deliver the speed, cost, and part quality required for this transformation. We're the original inventors and world leaders of the 3D printing methods we believe will empower this shift, binder jetting and digital light processing. Today, our systems print metal, polymer, sand and other ceramics, as well as foam and recycled wood. Manufacturers use our technology worldwide to save time and money, reduce waste, increase flexibility, and produce designs that solve the world's toughest problems and enable once-impossible innovations. Learn more about Desktop Metal and our #TeamDM brands at [DesktopMetal.com](https://www.DesktopMetal.com)

Printer platforms



Desktop Health™



Materials



Applications and more



Desktop Labs