Who we are

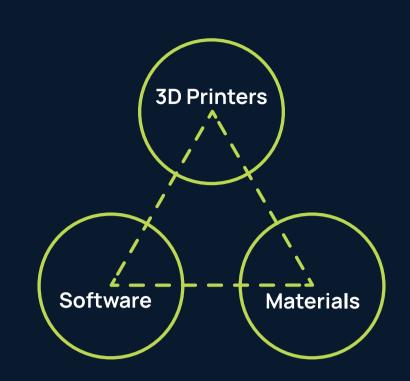
DWS Systems is an Italian company offering a comprehensive suite of 3D printing solutions, from cutting-edge printers to high-quality materials and intuitive software.

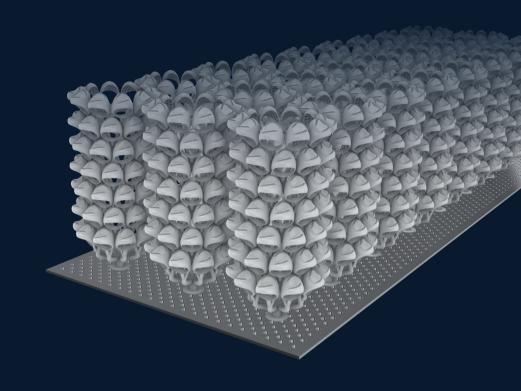
Evolving to large-scale production

Evolve your manufacture.

Jewelry & Fashion









Sixth generation stereolithography

The XCELL project was created to evolve DWS's stereolithography towards large-scale production.

A novel, scalable technology platform enables the development of printers with varying build volumes, allowing us to meet any customer needs with a tailor-made approach.

XCELL is light engine-agnostic: different irradiation solutions are available to meet any manufacturing requirement.

Smart Coating, a proprietary DWS technology, optimizes material viscosity, quantity, and displacement within the printing area.











DW 029 MKIII **Professional 3D printers**





The third generation of the best-selling DigitalWax 029.

With a print size of 170x170x200 mm, the DW 029MKIII represents the professional solution for prototyping and the production of small parts with high accuracy requirements.

A radically simplified user experience, thanks to:

- New film-based tank system
- Easy tank positioning and simplified platform locking
- Automatic zero setting
- HTT (Heat Transfer Technology) improves material viscosity
- BluEdge standard laser engine, with an optional High Resolution version

XCELL 300

The XCELL 300 offers an industry-standard print size of 300x300x550 mm, making it the ideal solution for mid-volume production of both small and large parts.

The XCELL 300 is available in two versions:

- XCELL 300S, equipped with a single-laser light engine, ideal for applications in Fashion Accessories and Footwear.
- XCELL 300Q, featuring DWS's proprietary quad-laser light engine, offering the highest resolution available for Jewelry and Eyewear applications.

XCELL 900

The XCELL 900 offers a print size of 900x300x550 mm, providing a unique solution with an ultra-wide build volume for large-scale production needs.

The XCELL 900 is available in two versions:

- XCELL 900S, equipped with a triple-laser light engine, ideal for applications in Fashion Accessories and Footwear.
- XCELL 900Q, featuring DWS's unique twelve-laser light engine, offering the highest resolution available for Jewelry and Eyewear applications.

Discover more about XCELL line



DW 028 XLHR

Professional desktop 3D printers





For more than 15 years, the DW 028 has represented the highest quality standard in 3D printing for jewelry manufacturing, used by hundreds of customers worldwide.

The DW 028XLHR is the latest version of the iconic DigitalWax028, perfected with the latest electronics and equipped with the legendary HR laser engine.

With an expanded print size of 100x100x100 mm, the DW 028XLHR is the best solution for prototyping and small-batch production with the highest accuracy requirements:

- New film-based tank system (coming soon)
- Easy tank positioning and locking
- HTT (Heat Transfer Technology) for improved material viscosity control
- BluEdge High Resolution laser engine

Industrial-grade 3D printers

The XPRO line includes a full range of industrial printers for prototyping and the production of products in Jewelry, Fashion Accessories, Eyewear, and Footwear.



XPRO printers play a key role in every stage of the industrial process, from design verification to the production of finished products.

A portfolio of over 100 proprietary materials, along with a quick material change concept, provides XPRO with the highest versatility and the broadest application range.

NAUTA X CLUSTER

Fully digital workflow for casting applications





Nauta+ software XCluster Chain plug-in

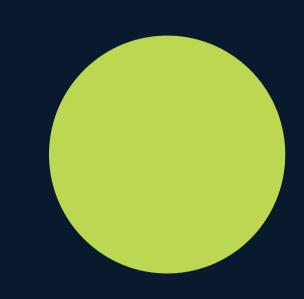
Nauta+ software XCluster plug-in

A paradigm shift in lost wax casting.

Thanks to the absence of central core elements, DWS's proprietary XCluster technology enables full automation of the casting process, delivering the highest productivity along with perfect quality and repeatability.

By using XCluster, our customers benefit from unique advantages:

- Fully digital and automated workflow
- Elimination of conventional tree preparation processes
- Increased productivity
- Total scalability in both quantity and variety
- Optimization of thicknesses and weights
- Unparalleled cost reduction



The main applications





TUNGSTEN

Irix Tungsten is an advanced material used to create high-quality products, renowned for its hardness and impact resistance due to its high ceramic content. This makes it exceptionally durable and ideal for intricate designs that require both strength and style.

The surface can be treated to achieve various finishes, such as a sandblasted matte texture or a glossy painted finish, while always maintaining a smooth, metal-like feel to the touch.

The combination of aesthetic versatility, toughness, and tactile smoothness makes Irix Tungsten the perfect material for luxury products, offering both beauty and functionality.

The linked bracelet is produced using XCluster Chain technology, which enables the creation of pre-linked chains without the need for assembly.





Courtesy of Crocs

EV025

The sabot is made of the new Ultralight EV025 material.

Ultralight EV025 is an innovative 3D printing material that stands out for its lightweight and high performance. Thanks to its advanced formulation, it enables the creation of functional prototypes and small customized batches with such exceptional quality that it can even be used in fashion shows.

Compared to other materials in the 3D printing market, products made with Ultralight EV025 offer a better fit and a more refined visual appearance, while reducing costs and production time by up to 80%, eliminating the need for traditional pre-production molds.

This material represents a true revolution in the footwear industry and rapid prototyping, with performance that meets the highest demands in both design and functionality.

FASHION ACCESSORIES





2020

Fashion accessories can be created using various types of surface treatments, including gold plating or metal sputtering.

The image shows bracelets produced using 3D printing with Invicta 2020 material, which, together with the DW029MKIII 3D printer, enables the creation of objects with very high aesthetic quality, allowing for geometries that cannot be achieved with other methods.

The use of 3D printing offers numerous advantages, including:

- Geometries with no limits in complexity
- Highly detailed featuresLow production costs
- Reduced time to market

EYEWEAR





PA55

The world of eyewear is constantly evolving, and, like in fashion, the market demands new products in ever-tighter timeframes.

3D printing is working alongside eyewear companies to support the development and design of new products, even extending to the pre-production of small, limited-edition series.

Endpieces and temples can be 3D printed with housings to precisely embed hinges and cores, making the assembly phase simpler and more functional.

The materials can withstand typical treatments such as hypoallergenic clear coatings or sputtering. Invicta Digital PA55 is specially designed to resist impact, making it ideal for products that require both strength and flexibility.

LOST-WAX CASTING





445

FUSIA 445 is a castable material suitable for the production of jewelry and fashion accessories, designed to be cast in various metal alloys.

Although FUSIA 445 is renowned as a general-purpose material, it is often preferred for manufacturing large cross-sections and designs with wide surfaces.

Smooth surface quality, excellent castability, and elasticity for preset stones are among the most appreciated features of this best-selling material.

LOST-WAX CASTING



dwssystems.com



DC905

Fusia DC905 is a castable and precise material with very high performance for jewelry castings.

It is recommended for the production of jewelry requiring high detail and tight tolerances between elements, including tennisstyle diamond chains and special links.

It is also recommended for the production of ultra-thin pieces and filigrees and is suitable for pre-set stone applications.

JIGS & FIXTURES



PA60

Invicta Digital PA60 is a stiff and tough material, comparable to standard ABS. It is particularly suitable for replacing CNC-machined steel or aluminum, making it ideal for the manufacture of strong and durable parts that require high impact strength and stiffness, such as tools, jigs, and fixtures.

Assembly lines for watches, jewelry, and fashion products can benefit from significant cost reductions, unparalleled flexibility, and unique anti-scratch properties.



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MADE IN ITALY