



DWS Company Profile

DWS - Digital Wax Systems, is an innovative Italian company founded in Vicenza in 2007. It already had a long experience in the prototyping sector. It develops hi-tech solutions for prototyping and high-speed production applied to reduce development times for new industrial products.

Today these systems are a strategic resource and a must-have element necessary to increase the competitiveness.

The mission of DWS is to innovate production processes in order to make the production faster and more flexible.

It is currently the only Italian company specialized in the development and application of the stereolithography technology, that provide best quality results combined with a drastic reduction of time to market.

All our systems are fully compatible with all CAD/CAM files in the market. Directly from a .stl 3D file, DWS systems create the best prototypes and finished products, in terms of high definition and accuracy. Completely designed and produced in Italy by DWS, DigitalWax® systems are used in 42 countries worldwide and provide companies with the innovative additive manufacturing technology in the market.

The point of strength of DWS is the perfect merge of high technology and human values that leads to a continuous improvement. Our process is unique of its kind and it is protected by several international patents. Our best distinctive technology and solutions are:

- The innovative BluEdge® laser
- Dedicated software, constantly updated
- The absence of immersive building phase which strongly reduce the consumption of resins and allows a quick material change
- Proprietary photosensitive resins and hybrid materials, differentiated for every kind of applications, in order to give a full range solution for any needs.
- Accuracy and superior surface quality of the final product.

Thanks to all these solutions, DWS systems provides the best performance in terms of high definition and cost reduction. DWS is leader in the gold jewellery sector and also an important player with innovative solutions for the dental sector and industrial applications in general. Our customized solutions aim to meet the highest requirements of today's market and to improve the companies' competitiveness following the main lean manufacturing principles: less waste, more quality and more productivity.

Digital Wax® D Additive Manufacturing Systems for Digital Dentistry

Due to their reduced moving parts and unique user-friendliness, DigitalWax machines are characterised by high reliability and extra-low maintenance. A great flexibility is made possible by the quick material change, the absence of pre-heating and calibration.

The machines are controlled by dedicated software that is perfectly compatible with most 3D CAD systems used in the dental applications.

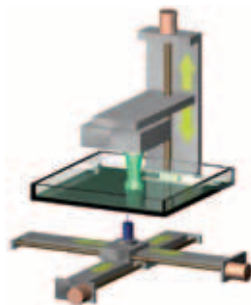
BluEdge® is a Class 3B laser source created by DWS Research & Development Centre that emits ultraviolet rays which solidify layer upon layer of photosensitive resin. By means of a vertical positioning device, the modelling platform base rises up for a measure corresponding to the thickness of the solidified layer. These motion capabilities, together with a synchronised laser allow the creation of exceptionally complex and precise three-dimensional prototypes.

DigitalWax stereolithography machines are characterised by innovations such as a transparent resin tank which allows the laser beam to pass through it, and a laser scanning unit placed directly under the tank. These innovations, in comparison to conventional techniques, make the whole process more flexible and more economical, especially in terms of material consumption.

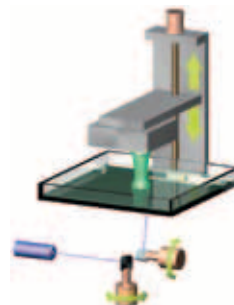
Building process



The object is created layer by layer.



The **Plotter X-Y** scanning method is characterised by **high accuracy and a relatively small productivity**, the main features of the DigitalWax 008D.



The **Galvanometer** type scanning method allows the **highest building speed and accuracy** and is adopted by DigitalWax 020D, 028D, 029D and 030D systems.

DIGITALWAX® 020D

Desktop size system

Working area: 130x130x90 mm (x, y, z)
Productivity: 16 full arches in 4 hours



High productivity and the lowest running cost on the market are the main characteristics of this **innovative rapid manufacturing system for orthodontic applications**.

The high speed and accuracy of the machine mean shorter production times with no manual intervention, ensuring maximum client satisfaction and zero defects.

DigitalWax 020D is fast: combining CAD/CAM design with intraoral scanning, impression scanning or stone model scanning, DWS 3D printers create finished products for orthodontic applications.

Quick material change

BluEdge® laser source

High speed and accuracy

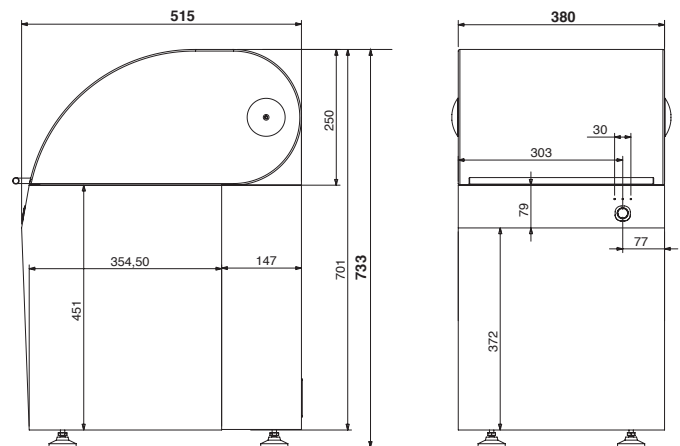
Wide choice of materials

Low running costs

Long life UV laser

No calibration

Provisionals	Models	3D Medical	Surgical	Castables	Partials
-	 RD Series	 DS2000	 DS3000	-	 RF Series



Standard accessories supplied with DigitalWax 020D:

No. 1 Building platform mm 138x138 (working area mm 130x130)

No. 1 Resin tank mod. RT800

No. 1 Set of handling tools

No. 1 DigitalWax 020D Software Suite License

No. 1 User manual

Technical data:

Light source:	Solid State BluEdge® BE-1500C
Working area (x, y, z):	130 x 130 x 90 mm
Slice thickness*:	0,01 – 0,10 mm
Scanning method:	Galvanometer
Laser scanning speed:	0-2000 mm/sec
Software:	DigitalWax 020D Controller
OS:	Windows XP Professional
Input files format:	.stl - .slc
Network interface:	TCP/IP
Machine size:	380x515x810 mm
Weight:	58 Kg
Operating Temperature and Humidity:	22° - 25°C / 60%
Electrical consumption:	400 W
Power supply:	AC 230/115 V / 50-60 Hz

*it depends on the kind of photo-sensitive material used.
Technical specifications subject to changes without notice.