

# 3D Digital Printing Solution

Simplified, validated workflow





# A complete digital workflow solution from DMG: Innovations in 3D printing

Our dedication to streamlining the dental professionals' daily routines drives us to continuously improve our product offerings. As leaders in restorative materials and prosthetics, we offer a complete 3D printing solution.

Discover the state-of-the-art 3D digital printing solution that enables a more simplified, validated digital workflow.

Featuring advanced 3D technology and resin materials exclusively from DMG, our integrated solution includes: the new 3Demax 3D printer, 3Dewash and 3Decure units with optimized LuxaPrint resins and accessories.

Our comprehensive line of hardware, software and resin materials provide:

- Unprecedented quality
- Increased production
- Reproducible precision
- Coordinated processes
- Intuitive operability
- Predictable outcomes
- Guaranteed regulatory compliance



The 3Demax printer is extremely fast, versatile, and accurate. The "Force Feedback" technology delivers on the printing speed without compromising accuracy. The complete solution facilitates our digital production with its ease of use and the integrated and validated workflow. The small footprint and ability to stack devices adds to its versatility and convenience.

- Edmonds Dental Prosthetics







# DMG 3Demax: Maximum reliability, minimal footprint

The 3Demax is a compact, high-precision, high-speed 3D printer that can be used for a wide range of applications using digital light processing (DLP) technology.

### **POSSIBILITIES IN 3D**

With ultra-fine resolution and a generously sized build plate, the 3Demax accurately produces surgical guides, burn-out casting molds, mouth guards, occlusal splints, crowns and bridges, physical models and more.

### **HIGH SPEED**

The patented "Force Feedback" technology accelerates printing by up to 50%. Using a highly sensitive load cell, each layer process is carefully controlled during printing, minimizing the risk of misprints.

### MAXIMUM SAFETY AND RELIABILITY

Radio frequency identification (RFID) technology makes the 3Demax easy to calibrate, eliminating misapplications by ensuring automatic material identification. In addition, process data documentation can be transparently verified and traced at any time, ensuring full compliance of Medical Device Regulation (MDR) safety requirements.



### **FEATURES AND BENEFITS**

- High-speed precision processing
- Easy and user-friendly system
- Large build plate for multiple device production
- Software supported validated workflow
- Indicated for a wide range of 3D dental applications
- Accepts all standard STL files
- RFID technology for automated material identification

# TECHNICAL DATA Size (width/depth/height) 335 x 349 x 541 mm Build area 130 x 75 x 90 mm Max. workpiece height 90 mm Native pixel resolution + / - 34 μm Connections WLAN, TCP/IP, USB Weight approx. 33 kg

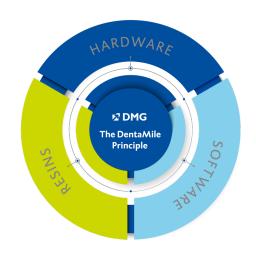






# A complete digital solution for an optimal digital workflow

The following modules are part of the complete DMG 3D digital printing solution:



#### **DMG 3DEWASH**

The DMG 3Dewash is a fully integrated unit that is designed for the washing of 3D printed devices using a DLP process. The pre-set programs systematically wash the remaining non-polymerized resin from the dental application.

#### **DMG 3DECURE**

The DMG 3Decure is a fully integrated curing unit that is used for the curing of 3D resins with 360° illumination. The pre-set programs lock in the printed mechanical properties ensuring proper curing according to individual resin specifications.

	TECHNICAL DATA		
ī	Size (width/depth/height)	230 x 450 x 270 mm	
	Volume	130 x 75 x 60 mm	
	Working time	4-8 minutes, depending on material	
	Cleaning agent	isopropanol or methyl alcohol, depending on material	
	Connections	WLAN/LAN	

TECHNICAL DATA ——————————————————————————————————			
	Size (width/depth/height)	230 x 380 x 270 mm	
	Volume	130 x 75 x 60 mm	
	Working time	depending on material	
	Connections	WLAN/LAN, USB	

### **DENTAMILE CONNECT SOFTWARE**

Leveraging the full potential of 3D printing requires connected and aligned components, as well as a documented fabrication process.

The intuitive DentaMile connect is a cloud-based software solution that makes the entire process and 3D production easier, faster and safer. The medical device workflow is secured and validated, errors are minimized and new applications are made available without additional technical expertise.









# Complete LuxaPrint resins for 3D printing

LuxaPrint products are high-quality, light-cured resins for use with digital light processing printers that work at a wavelength of 385nm. Each material combines fast printing with outstanding accuracy for all your 3D printing needs.



A Class I medical device that is suitable for all types of 3D printed custom impression trays.

- Quick and easy to print
- Extremely stable for distortion-free impressions
- Exact fit



### **LUXAPRINT MODEL**

A 3D printing resin used for the fabrication of highly precise and esthetically demanding 3D printed models. It is suitable for the production of thermoformed splints.

- Fine, smooth surface structure delivers the highest detail
- Dimensionally stable
- Highly precise for esthetically demanding models





7	COLORS
1	

LuxaPrint	Colors
LuxaPrint Crown	Bleach/Light Medium Light Medium Dark
LuxaPrint Ortho Plus	Transparent
LuxaPrint Ortho Flex	Transparent/Cyan
LuxaPrint Ortho	Transparent
LuxaPrint Base	Pink/Dark Pink
LuxaPrint Model	Beige, Grey
LuxaPrint Gingiva	Pink
LuxaPrint Tray	Turquoise
LuxaPrint Cast	Dark Red

### **LUXAPRINT ORTHO**

A light-cured 3D printer resin that is indicated for the fabrication of highly precise surgical guides and splints.

- Highly precise for an exact fit of the surgical guide and splint
- 99% transparency
- Autoclavable









### **LUXAPRINT GINGIVA**

Ideal for the precise replication of gingival masks to help simulate the periodontal status for dental laboratory or master models.

- Optimal elasticity
- Highly tear resistant
- Dimensionally stable
- Minimal shrinkage
- Natural looking



### LUXAPRINT ORTHO PLUS (COMING SOON)

Indicated for the fabrication of orthodontic tooth positioners, retainers and night guards.

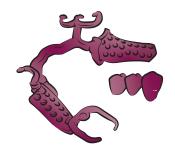
- Transparent
- Exact fit
- Not brittle



### **LUXAPRINT CAST**

Indicated for the fabrication of residue-free burn-out molds (e.g. model and denture framework castings, crowns and bridges).

- **→** Fine surface structure
- Dimensionally stable
- Easy to cast (no cracks)



## LUXAPRINT BASE (COMING SOON)

The perfect material for the production of removable prosthetic bases of all kinds (e.g. full, intermediate and partial dentures).

- Highly precise and esthetic
- Long-term stability







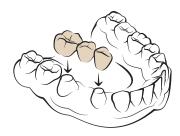




## LUXAPRINT CROWN (COMING SOON)

Used for the additive production of semi-permanent crowns and bridges in a digital workflow. It is indicated for a wide variety of semi-permanent restorative treatments including single crowns, 3-unit bridges, inlays and onlays, partial crowns and occlusal veneers.

- Excellent esthetics
- Highly stable
- Versatile application for semi-permanent treatments
- Biocompatible
- Easy finishing and polishing



## LUXAPRINT ORTHO FLEX (COMING SOON)

LuxaPrint Ortho Flex is a biocompatible material for the additive production of flexible soft splints such as bleaching trays, sports mouth guards and indirect bonding trays.

- Versatile
- Optimal elasticity
- Highly tear resistant and unbreakable
- Near-natural transparency
- Easy to clean









7 7

### **Ordering Information**

3D Printing			
Item#	Product	Contents	
171355	DMG 3Demax (accessories included)	1 3D Digital Printer with Force Feedback Technology, 1 Build Plate, 1 Resin Tank, 1 Resin Tank Cover, 1 Netfabb Slicing Software, 1 USB Thumb Drive, 1 Spatula, 1 Silicon Scraper, 1 UV-Safety Glasses, 1 Tool Set, 1 Box of Gloves, 2 Power Cords (Type F & Type B), 1 ACCS-Calibration Sensor and Sensor Holder, 1 Positioning Aid for ACCS-Calibration Sensor, 1 Positioning Aid for ACCS-Sensor	
171317	DMG 3Decure	1 3D Printing Curing Unit, 1 Power Supply, 2 Power Cords (Type F & Type B)	
171316	DMG 3Dewash	1 3D Printing Washing Unit, 1 Power Supply, 2 Power Cords (Type F & Type B)	
171264	LuxaPrint Model	1-200gm Bottle, Beige (385/405nm)	
171294	LuxaPrint Model	1-200gm Bottle, Grey (385/405nm)	
171200	LuxaPrint Model	1-500gm Bottle, Beige (385/405nm)	
171292	LuxaPrint Model	1-500gm Bottle, Grey (385/405nm)	
171201	LuxaPrint Model	1-1,000gm Bottle, Beige (385/405nm)	
171293	LuxaPrint Model	1-1,000gm Bottle, Grey (385/405nm)	
171266	LuxaPrint Tray	1-200gm Bottle, Turquoise (385/405nm)	
171204	LuxaPrint Tray	1-500gm Bottle, Turquoise (385/405nm)	
171205	LuxaPrint Tray	1-1,000gm Bottle, Turquoise (385/405nm)	
171262	LuxaPrint Cast	1-200gm Bottle, Dark Red (385/405nm)	
171202	LuxaPrint Cast	1-500gm Bottle, Dark Red (385/405nm)	
171203	LuxaPrint Cast	1-1,000gm Bottle, Dark Red (385/405nm)	
171256	LuxaPrint Ortho	1-200gm Bottle, Transparent (385nm)	
171206	LuxaPrint Ortho	1-500gm Bottle, Transparent (385nm)	
171207	LuxaPrint Ortho	1-1,000gm Bottle, Transparent (385nm)	
171278	LuxaPrint Gingiva	1-200gm Bottle, Pink (385nm)	
171240	LuxaPrint Gingiva	1-500gm Bottle, Pink (385nm)	
171241	LuxaPrint Gingiva	1-1,000gm Bottle, Pink (385nm)	
3D Printing Accessories			
170319	DMG 3Demax Resin Reservoir	1 Resin Reservoir	
170320	DMG 3Demax Resin Reservoir Cover	1 Resin Reservoir Cover	
170321	DMG 3Demax Resin Reservoir Storage Cabinet	1 3Demax Resin Reservoir Storage Cabinet	

DMG America, LLC 65 Challenger Road, Suite 340, Ridgefield Park, NJ 07660 tel: 800.662.6383 email: info@dmg-america.com web: www.dmg-america.com

