J5
MediJet

The all-in-one
medical printer.

The economical, compact,
all-in-one medical modeling printer.

J5 MediJet™ sets a new standard for medical modeling. With multiple materials and multicolor capabilities, academic medical centers, hospitals and medical device companies can create brilliantly vivid anatomical models and drilling and cutting guides* that are sterilizable and biocompatible – all in one platform.

Applications

- Patient-specific anatomical models for pre-surgical planning

- Precisely accurate anatomy for training and education

- Surgical guides and tooling*

- Medical device product development

*with approved 3rd party 510k cleared segmentation software

The new standard for
planning, education, and testing.

Multi-material and multicolor capabilities

Create patient specific, brilliantly vivid anatomical models with multiple materials and multicolor capabilities that are biocompatible and can be sterilized.
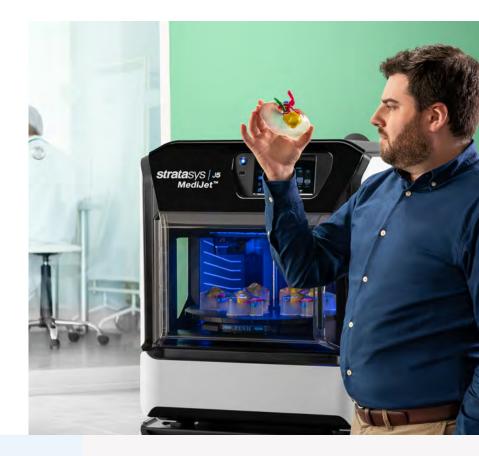
Functional surgical guides and tooling

Create drilling and cutting guides* that are sterilizable and biocompatible

More printing with less handling

Accommodate multiple medical models in a single print with significantly less handling.

Small footprint, big impact

Print exact pathologies on-demand and train physicians, students and medical device field staff from anywhere. MediJet™ is economical and compact enough for small lab spaces.

Hospitals and Academic Medical Centers

Improve point-of-care planning, patient satisfaction, and training and education.

Using patient-specific 3D printed medical models for on-demand training and pre-surgical planning can improve patient outcomes by reducing complications and decreasing OR time and length of hospital stay.
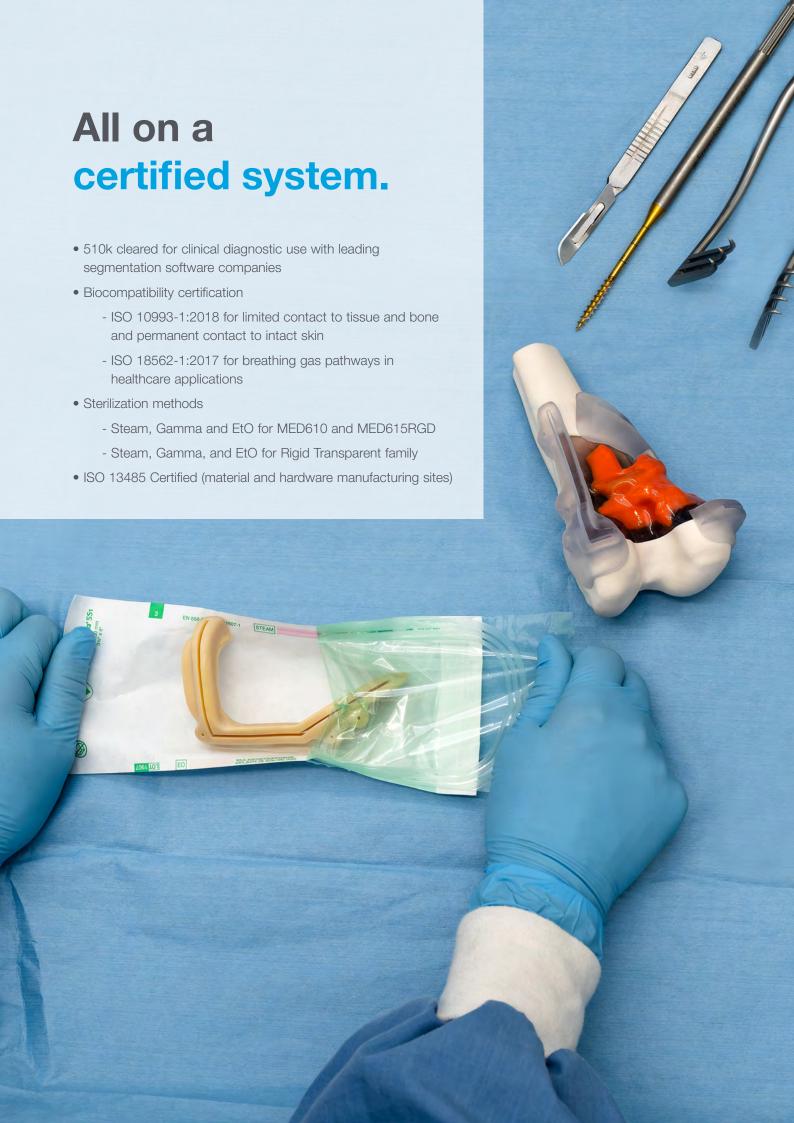
Data demonstrates that patient satisfaction improves when 3D medical models are used as part of education for informed consent.[1, 2, 3]

Medical Device Companies

Enhance training and education programs and improve product quality.

Create consistency in new medical device development and testing to enhance product quality, reduce costs and accelerate time to market.

Scale up product demonstrations when training field staff and physicians on a new medical device by providing models that replicate the disease state your device is intended to treat—no storage requirements or ethical concerns associated with animal and cadaver models.

All on a
certified system.

- 510k cleared for clinical diagnostic use with leading segmentation software companies

- Biocompatibility certification
    - ISO 10993-1:2018 for limited contact to tissue and bone and permanent contact to intact skin
    - ISO 18562-1:2017 for breathing gas pathways in healthcare applications

- Sterilization methods
    - Steam, Gamma and EtO for MED610 and MED615RGD
    - Steam, Gamma, and EtO for Rigid Transparent family

- ISO 13485 Certified (material and hardware manufacturing sites)

3D printing workflow, simplified.

MediJet's large tray accommodates multiple medical models in a single print and requires significantly less handling.

GrabCAD Print software makes it easy:

- Automatically corrects files and reduces print time with automatic tray arrangement.
- Calculate the time and material resources needed for production before printing.
- 3MF file supported – significantly simplifies color assignment in your workflow
- New feature alerts the user if there has been cross contamination with a biocompatible material.
- Schedule and monitor the print job remotely from your mobile device or browser.
- Get automatic alerts remotely when the job is printing and finished.

30%

faster print time than comparable printing solutions**

**Compared to six types of anatomical models printed with Formlabs Form3, Projet 3600, Projet 6000, and Mimaki 3DUJ-553

Lower total cost of ownership.

With less upfront investment and a lower total cost of ownership, MediJet is designed to maximize your investment in 3D printing. All application needs can be met with one platform–no need for multiple printers.

30%

lower cost per part compared to outsourcing

Economical DraftWhite Material

Significantly lower the cost of single material applications and bulk color models

See the specs

Product Specifications

Model Materials	**Biocompatible materials:** ☐ Biocompatible rigid transparent (MED610) ■ Biocompatible Opaque (MED615RGD™ IV) **Rubber like:** ☐ Elastico Clear (FLX934) **Rigid Transparent Colors:** ■ VeroCyan™V ■ VeroMagenta™V ■ VeroYellow™V ☐ VeroUltra™ClearS ■ VeroBlackPlus™ ☐ DraftWhite (MED837)
Supported Sterilization Processes	Steam (4 minutes at 132 °C), Gamma (25 – 50 kGy), EtO (specifications available upon request)
Digital Model Materials	Unlimited number of composite materials including over 500,000 colors
Support Materials	SUP710™ (Water Jet removable)
Build Tray	Printing area: 1,174cm^2 Max Part Size: Up to 140 x 200 x 190mm (5.51 x 7.87 x 7.48 in.)
Layer Thickness	Horizontal build layers down to 18 microns (0.0007 in.)
Accuracy	Deviation from STL dimensions with rigid materials,based on size: under 100 mm – ±150µ; above 100 mm – ±0.15% of part length.* * true for 67% (1 sigma) models printed for future information can be found in the spec sheet
Network Connectivity	LAN – TCP/IP
System Size and Weight	651 x 661 x 1511mm (25.63 x 26.02 x 59.49 in.); 228 kg (503 lbs.)
Operating Conditions	Temperature 18 – 25 °C (64 – 77 °F); relative humidity 30 – 70% (non-condensing)
Power Requirements	100 – 240 VAC, 50 – 60 HZ, 10A, 1 phase
Regulatory Compliance	CE, FCC, EAC
Software	GrabCAD Print
Build Modes	High Quality Speed (HQS) – 18.75µm

References:

1 Yang, T., Tan, T., Yang, J., Pan, J., Hu, C., Li, J., & Zou, Y. (2018). The impact of using three-dimensional printed liver models for patient education. The Journal of International Medical Research, 46(4), 1570-1578, https://doi.org/10.1177/0300060518755267.

2 Diment, L.E., Thompson, M. S., & Bergmann, J. (2017). Clinical efficacy and effectiveness of 3D printing: a systematic review. BMJ open, 7(12), e016891. https://doi.org/10.1136/bmjopen-2017-016891.

3 Kim, P. S., Choi, C. H., Han, I. H, Lee, J. H., Choi, H. J., & Lee, J. I. (2019). Obtaining informed consent using patient-specific 3D printing cerebral aneurysm model. Journal of Korean Neurosurgical Society, 62(4), 398-404, https://doi.org/10.3340/jkns.2019.0092.