

innovatiQ

MEMBER OF THE ARBURG FAMILY

# LiQ 5

ADDITIVE MANUFACTURING FROM LSR SILICONE  
IN THE 3. MACHINE GENERATION



## EXTENSIVE STANDARD FEATURES.

The LiQ 5 comes with all functions and accessories for successful Liquid Additive Manufacturing (LAM) as standard.

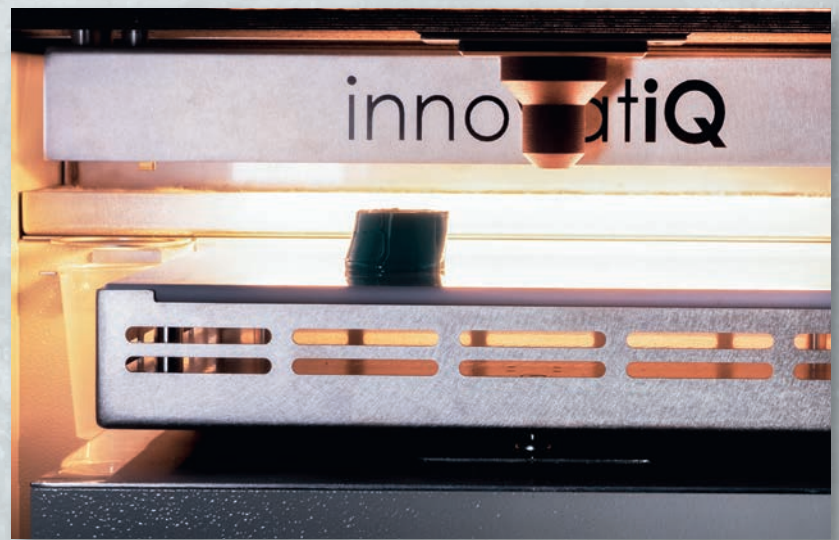
### Standard features include:

- GestiQ-Pro: intuitive CNC control with integrated SmartFunctions
- Active build chamber heating up to 80 °C
- **Integrated thermal material crosslinking**
- Automatic print bed leveling and nozzle calibration
- Integrated SmartColoring System – without ink cartridge



## SILICONE 3D PRINTING AS A GAMECHANGER.

The LiQ 5 is suitable for additive manufacturing of all types of components. The LAM process used ensures exact metering of the material during application. The amount of material can be defined so that the component structure can be built individually depending on the area of application. This is not possible with conventional injection molding technologies.



## CAREFREE DUE TO FREEDOM OF FORM!

With the LiQ 5, a wide range of geometric shapes can be created without the need for an injection mold - regardless of whether they have a cross, grid or honeycomb structure. There are even no limits to the complexity of the components with this manufacturing technology. The object structure can be created at the molecular level using the LAM process. Decide for yourself how the silicone is to be applied to achieve accurate crosslinking of the material.



### MULTIPLE APPLICATION AREAS.

The LiQ 5 is suitable for any application where standard silicone (LSR) material is used. Depending on the setting, either soft, pliable or firm and less flexible printed objects are produced. Your values: Immediately end-use-parts without a tool for injection molding.

## LOW COST, STRONG BENEFIT.

Our patented LAM process and all necessary process parameters are integrated in one printing system. The LiQ 5 is ready for use immediately after unboxing. Thanks to its compact design, it requires little space. This means that the components reach your customers more quickly and you are on the market faster.

## EFFICIENT SERVICE CONCEPT.

**We are here for you.** With our service promise, we will help you quickly in a case of. Whether remote diagnostics for troubleshooting or maintenance checklists for your team. We tailor our service concept to your needs. In the event of a repair, we take over request-related print jobs - so that you don't miss a single opportunity.

## HIGHLIGHT FEATURES LiQ 5.

Motion drive technology from milled metal

Built chamber for prints up to 250 x 320 x 150 mm

Patented LAM process with integrated thermal crosslinking

High quality Design housing according to industry Standard



Easily accessible material supply

With integrated SmartColoring Dosage

Intuitive GestiQ-Pro control with SmartFunctions

Automatic nozzle cleaning station

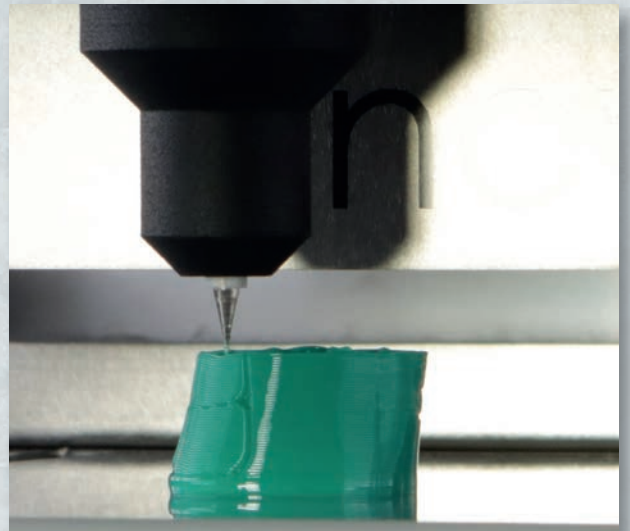
Built chamber actively heated up to 80°C

## MAXIMUM PRODUCTIVITY.

With the powerful stepper motors, precise application of the material is guaranteed from the first second. The process-controlled volumetric extrusion enables high dynamics with optimum material density.

Intelligent SmartFunctions, such as automatic calibration of the nozzle after each print job or leveling of the print bed, make the operator's daily work easier.

The interaction of all components guarantees maximum productivity.



## INTUITIVE CONTROL CONCEPT.



Our CNC-based control „GestiQPro“ comes with a 12-inch touchscreen. The operator has all functions and parameters in scope. Users can easily interact with the system via the user-friendly control panel.

The LiQ 5 works independently in stand-alone mode. You can also conveniently start your print jobs via remote access, using a tablet or computer.

## COLORFUL FABRICATION.

The silicone printing of the LiQ 5 takes steps into new dimensions. SmartColoring allows the production of colored LSR components. The color density can be individually controlled using an intelligent color mixing system.

The result: colored and beautifully shaped components. SmartColoring is available as standard in your new LiQ 5. You only need to choose the color in the ink cartridge.



# OPTIMAL PERFORMANCE THROUGH SMARTFUNCTIONS IN LiQ 5

The SmartFunctions available in GestiQ-Pro support the LiQ 5 throughout the printing process. They operate as programmed sequences that link different functional steps together and thus increase effective use.

## ALWAYS PRINT OPTIMALLY.

**SmartNozzle** is the calibration of the nozzle, which takes place automatically after a nozzle change. Pneumatic nozzle cleaning is also smart. This ensures that your nozzle always remains optimal during the printing process and that the components can be created in a beautifully shaped manner.

## REDUCED SETUP TIME.

**SmartStart** reduces your workload efforts and your setup time. SmartStart works with a laser-assisted three-point process, which guarantees optimum adjustment of the print bed and thus exact adaptation to the component. Your designed component can be produced within a very short time, thanks to fully automated print bed leveling.



## READY TO USE.

**SmartCuring** is innovatiQ's patented process for curing the LSR material. After the printing process, the components can be used immediately.

## THE „EVERYTHING IN SCOPE“ OPTION.

**SmartMonitoring** is used at your desk to keep track of all your innovatiQ printing systems. All operating states are recorded and reported to the monitoring workstation in real time. As an additional option, SmartMonitoring is also available for connection to the Arburg ALS system.

## SAFETY UNDER CONTROL.

**SmartOperating** allows the operating concept of the LiQ 5 to be user-based. This enables different levels of access rights to be firmly personally. Particularly smart when safety areas can be separated from operating groups.

**SmartFunctions are the solution for reliable and-safe 3D prints.**



## TECHNICAL DATA OVERVIEW.

Built chamber (X/Y/Z):	250 x 320 x 150 mm
HMI:	GestiQ-Pro with 12-inch-Touch-Display
Print speed*:	70 mm/s
Traversing speed*:	70 mm/s
Repeat accuracy* (X/Y):	+/- 0,05 mm
Layer thickness* (min.):	Depending on process
Nozzle diameter:	0,2 mm / 0,40 mm
Material*:	Liquid Silicone Rubber (LSR), Shore 30 / 40 / 50
Built chamber temperature:	actively heated up to 80 °C
Temperature material crosslinking:	Depending on process
Data exchange:	Stand-alone printing or network capable
Software-Slicer:	Simplify3D®
Power consumption (max.):	3,5 kW, approx. 30 % in continuous operation
Power Supply:	230 V, 10 A (EU); 110 V, 20 A (US)
Dimensions (B/T/H):	1208 x 940 x 1968 mm
Weight:	approx. 600 kg
Technology:	LAM (Liquid Additive Manufacturing)
SmartColoring:	Incl. metering unit – without ink cartridge
Optional:	Connection to Arburg ALS System



With the LAM process in the LiQ 5, you open up new possibilities in 3D printing from LSR material. Print functional parts that you can't make with conventional injection molding technology and without the time-consuming and costly creation of a mold.

**QR Code: Request sample part now!**

\* Variations depending on equipment/material/process