

innovatiQ

MEMBER OF THE ARBURG FAMILY

TiQ 8

THE HIGH-END HIGH TEMPERATURE
ALL-ROUNDER FOR ADDITIVE MANUFACTURING.



EXTENSIVE STANDARD FEATURES.

The TiQ 8 comes with all necessary functions for successful additive manufacturing.

Standard features include:

- GestiQ-Pro: intuitive CNC control with integrated Smart-Functions.
- QuadDrive: innovatiQ's new print head sets the standard for preciseness and collision-free operation
- 440° C twin extruder for flexibility in polymer cross-linking
- Vacuum printing plate
- SmartStart, the automatic levelling and nozzle calibration
- Integrated material drykeeping unit

HIGH TEMPERATURE.

The TiQ 8 is a 3D production machine for XL components. With its open material platform, it is versatile. Whether hard or soft material, fibre-reinforced or high-temperature plastics – an all-round talent with vacuum pressure bed and active heating chamber for reliability - even with long print jobs.



MULTIPLE COMBINATIONS.

At innovatiQ we offer you a large pre-selection of filaments. You prefer to process your own filament? No problem! The TiQ 8 is equipped with slicer software as standard, so you can combine as many material, print or geometry techniques as you like.



The large variety of materials: from fibre-reinforced to high temperature resistant.

INTEGRATED MATERIAL DRYKEEPING.

Quality is our top priority!

With the integrated drykeeping unit (active dehumidification up to 55° C), we ensure that the filament is in an optimal condition before extrusion. This increases process reliability in 3D printing and prevents the so-called „oozing effect“ on the surface. The drykeeping unit is also used for the storage of high-performance polymers and increases the usage time of the material. Always perfect starting conditions for your daily print jobs.

EFFICIENT SERVICE CONCEPT.

We are here for you. With our service we promise to help you quickly. Whether remote diagnosis for troubleshooting or service checklists for your maintenance Team. Our scope of services is tailored to your needs.

If your machine breaks down, we offer a quick solution with our service program. This minimizes downtime in your production.

HIGHLIGHT FEATURES TiQ 8.

Robust and solid
Motion drive
technology

Own-developed
QuadDrive extruders with
tungsten-copper nozzles

Compact
Industrial design

Integrated
Material drykeeping &
Material storage



Powerful &
precise industrial
motors

CNC control
GestiQ-Pro –
with SmartFunctions

Large build chamber
for components up to
500 x 400 x 450 mm

Active controlled build
temperature for stable &
homogeneous printing conditions
up to 165 °C

GESTIQ-PRO: THE HMI FROM INNOVATIQ.

The TiQ 8 is operated intuitively via the proprietary „GestiQ-Pro“ control and a 12-inch touch display. GestiQ-Pro supports the operator with integrated SmartFunctions. These make daily operation more intuitive and faster.

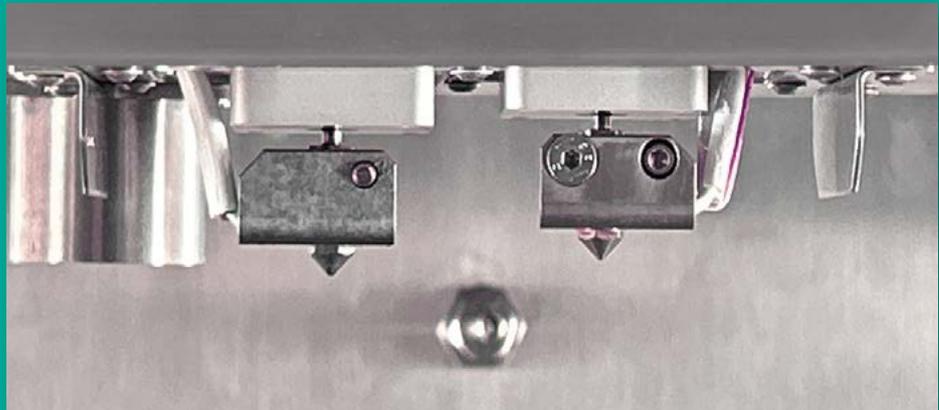
SAFETY FIRST.

GestiQ-Pro has the additional safety features of a modern production machine. The role-based access system protects the TiQ 8 from unauthorised users. By assigning defined authorisations (department, user, expert or admin mode), the 3D printing system can be accessed across the board without any security risk. In addition to the sharp split of the security areas from the application areas, GestiQ-Pro thus also expands the functional possibilities.



QUAD DRIVE DUAL HEAD - THE PRECISE ENDURANCE RUNNER.

The TiQ 8 has a specially developed print head that is ideally suited for abrasive materials, even in continuous use.



The self-developed dual print head with Quad Drive processing & the special Control system increase both precision and process reliability. In principle, the Quad drives of the TiQ 8 allow the processing of materials with different degrees of hardness and temperature. This allows a high range of possibilities in

processing various materials. Quad Drive needs low-maintenance and its selected components ensure high process reliability for time-intensive, large print jobs.

A cost advantage for you!

OPTIMAL PERFORMANCE THROUGH SMARTFUNCTIONS IN TiQ 8.

The SmartFunctions available in GestiQ-Pro support the TiQ 8 throughout the printing process. They operate as programmed Apps that link different functional steps together to increase effective use.



MAXI-OPTI PRINCIPLE.

SmartSpeed is the unique adaptive adjustment of the printing speed without compromising the quality of the print result. SmartSpeed automatically adjusts the print speed (V_{max}) depending on how optimal the extrusion is. This is done by an algorithm which processes the previously collected data of the filament feeder and the extrusion-head. The printing process can thus be dynamically controlled. The result of the Maxi-Opti principle: In maximum printing speed with optimal feeding.

REDUCED SETUP TIME.

SmartStart enables fully automatic mesh bed levelling. Additionally nozzle leveling is as easy as pushing a button. The best combination for a quick set-up time and reliable 3D printing.

PROCESS-SAFE MATERIAL FEED.

SmartTrack measures the filament feed rate with the help of sensors. The material demand is continuously tracked and the feed rate data is sent to the controller.

PROGRAMMABLE PAUSE.

SmartInsert puts the TiQ 8 into a programmed pause mode after a defined layer height. This allows fasteners to be added to the part. The TiQ 8 waits and, for example, a threaded nut can be inserted into the 3D component. After the insertion process, the TiQ 8 completes the print job.

THE „EVERYTHING IN VIEW“ OPTION.

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



INVISIBLE MATERIAL CHANGEOVER.

SmartChange plans the material change on an infill structure, thus avoiding any surface blemishes. The result is high-quality, consistent surfaces.

SmartFunctions are the solution for process-safe 3D prints.

TECHNICAL DATA OVERVIEW.

Print space (X/Y/Z):	500 x 400 x 450 mm
HMI:	GestiQ-Pro with 12 inch Touchdisplay
Print speed*:	10 – 250 mm/s
Traversing speed*:	10 – 400 mm/s
Positioning accuracy (X/Y):	+/- 0,02 mm
Layer thickness*:	0,1 – 0,6 mm, depending on nozzle
Filament diameter:	1,75 mm
Nozzle options:	0,25 mm / 0,40 mm / 0,60 mm / 0,80 mm
Extruder:	QuadDrive Technology up to 440° C
Build chamber temperature:	actively heated up to 165 °C
Printing plate:	Vacuum printing bed heatable up to 165 °C
Nozzle calibration:	yes
Mesh-Bed Leveling:	yes, automaticly
Data connection:	Stand-alone printing or network capable
Slicer-Software:	included
Power consumption (max.):	9 kW
Power supply:	400 V, 16 A (EU) 50/60 Hz; CEE Stecker 16 A
Status lamp:	integrated light bar with message status
Dimensions (B/T/H):	1480 x 1091 x 1875 mm
Weight:	approx. 800 kg
Technology:	FFF (Fused Filament Fabrication)
Drykeeping unit:	2 storage places + 2 processing places (with active dehumidification up to 55° C)
Material:	Open material platform, e.g. PEKK, PC, PEEK CF, ABS
Optional:	SmartMonitoring-System and connection to Arburg ALS System



The TiQ 8 is a flexible 3D production machine for XL components. With its open material platform, it is versatile. Whether hard material, fibre-reinforced or high-temperature plastics – it can produce all your orders, even from a lot size 1.

* Deviations depending on geometry/material/process