

microSTRUCT™ C

Highly Versatile Laser Micromachining System

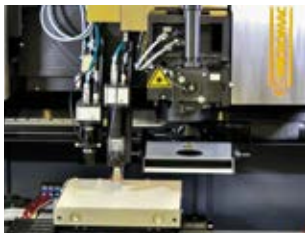
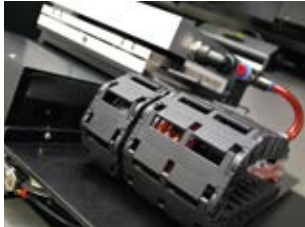
3D-Micromac's microSTRUCT™ C is a highly flexible laser micromachining system predominantly used in product development and applied research. Superior flexibility makes the system ideally suited for laser structuring, cutting, drilling and welding applications on a variety of substrates, e.g. metals, alloys, transparent and biological material, ceramics and thin film compound systems.

microSTRUCT™ C offers:

- Two independent and free configurable working areas
- Integration of up to two different laser sources
- Various optical setups
- Quick changing of work piece clamping unit
- User-friendly, flexible, upgradeable system control



microSTRUCT™ C - System Configuration



Configuration packages

Basic

- One working area
- Prepared for one laser source with one wavelength
- Upgrade ready

Advanced

- Two working areas
- Prepared for one laser source with up to three wavelengths

Superior

- Two working areas
- Prepared for two laser sources with up to three wavelengths
- Incl. high accuracy vision system, scanner upgrade and preinstalled process gas package

Options

- Different option packages available on request, e.g. high accuracy package, cylindrical work piece package, etc.

Laser sources	<ul style="list-style-type: none"> • The system is prepared for integration of one ps laser source (basic) • Up to two simultaneous laser sources • Available laser types: ps, ns, fs
Beam delivery unit	<ul style="list-style-type: none"> • Up to four beam paths for different wavelengths (1064, 532, 355 nm) • 2D and 3D galvo scanner models or fixed optics available • Power measurement at work piece level
Positioning system	<ul style="list-style-type: none"> • Direct-driven XY positioning system • Travel distance 600 mm x 300 mm • Positioning accuracy ± 0.002 mm • Repeatability ± 0.001 mm
Working area	<ul style="list-style-type: none"> • Up to two separate working areas • Max. substrate size 250 x 275 x 40 mm³ (bigger sizes on request)
Alignment	<ul style="list-style-type: none"> • Manual, semi-automated or fully-automated work piece alignment with XY system and optical measurement system available • Automatic Z positioning
Software microMMI	<ul style="list-style-type: none"> • Control and supervise of all hardware components and machining parameters • Different user levels (administrator, supervisor, operator) • Data input file types: DXF, CSV, Gerber, CLI, others on request
Safety	<ul style="list-style-type: none"> • Laser class 1 housing with integrated control panel • Certified laser window or overview camera (webcam) • Active exhaust system included
Dimensions	<ul style="list-style-type: none"> • 2540 x 1600 x 1960 mm³ (L x W x H) • Approx. 3.5 t

Changes in accordance to technical progress are reserved.