

VarioLas

Versatile UV Laser Processing

VarioLas processing systems based on the powerful COMPex excimer laser are flexible tools for high quality UV microprocessing. Superior optics design, rugged mechanics and unmatched pulse-to-pulse stability are the key ingredients to each VarioLas model available at 193 nm, 248 nm, and 308 nm.

FEATURES & BENEFITS

- High resolution optics and mechanics ensure reproducible results
- Modular design with tailored options for flexible use
- Square beam and line beam fields for optimum results
- Supports all COMPex laser models to enable efficient processing

APPLICATIONS

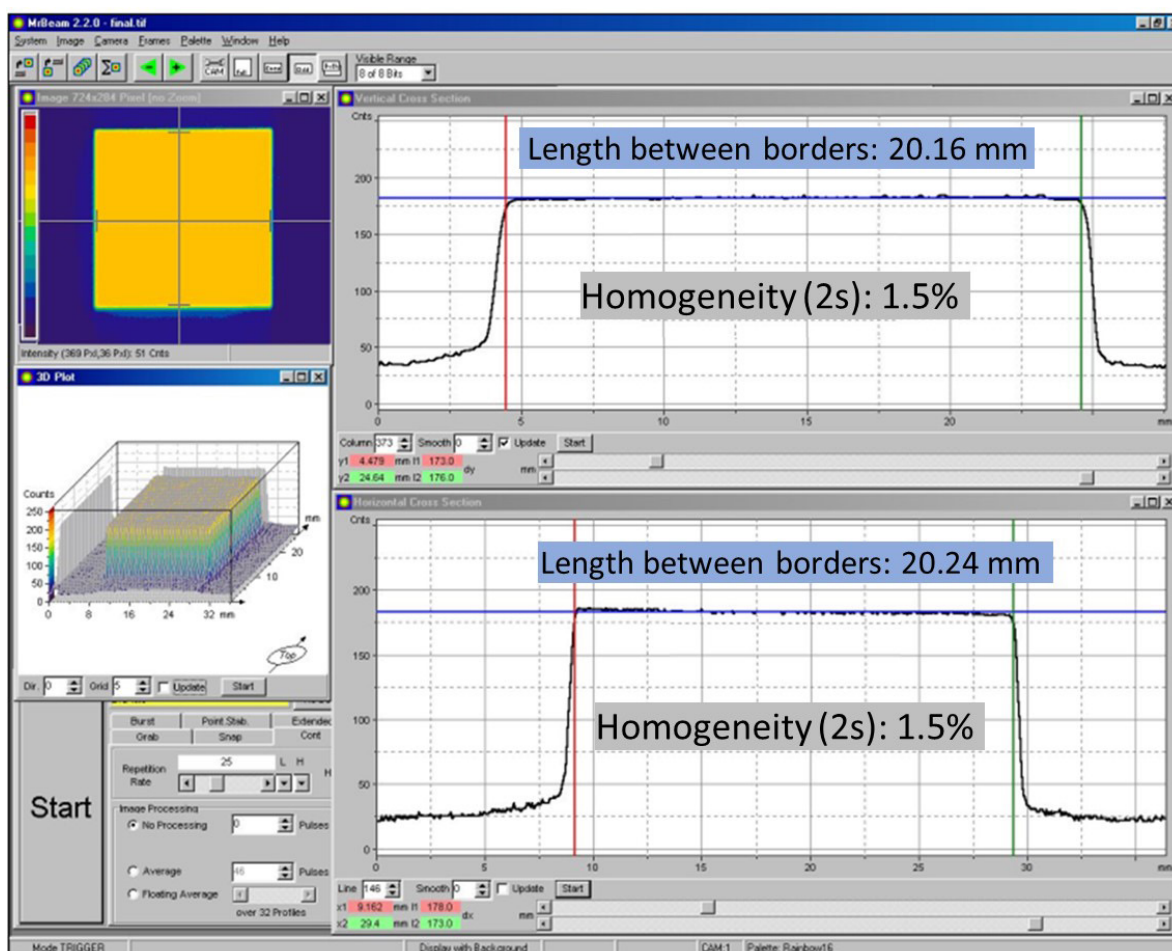
- Laser Lift-Off Separation
- Dopant Ion Activation
- Ablative Patterning
- Excimer Laser Annealing



SPECIFICATIONS	VarioLas Eco	VarioLas Pro	VarioLas Sweep
Field Geometry	Square	Square	Line
Substrate Field Size (mm ²)	2 x 2	2 x 2	50 x 0.6
Optical Resolution (μm)	30	5	-
Working Distance (mm)	50	50	150
Max. Repetition Rate (Hz)	100	100	100
Max. Energy Density (J/cm ²)			
at 193 nm	2.5	2.5	0.5
at 248 nm	7.5	7.5	1.3
at 308 nm	6.0	6.0	1.0
Energy Stability (% , 1 sigma)			
at 193 nm	2	2	2
at 248 nm	1	1	1
at 308 nm	1	1	1

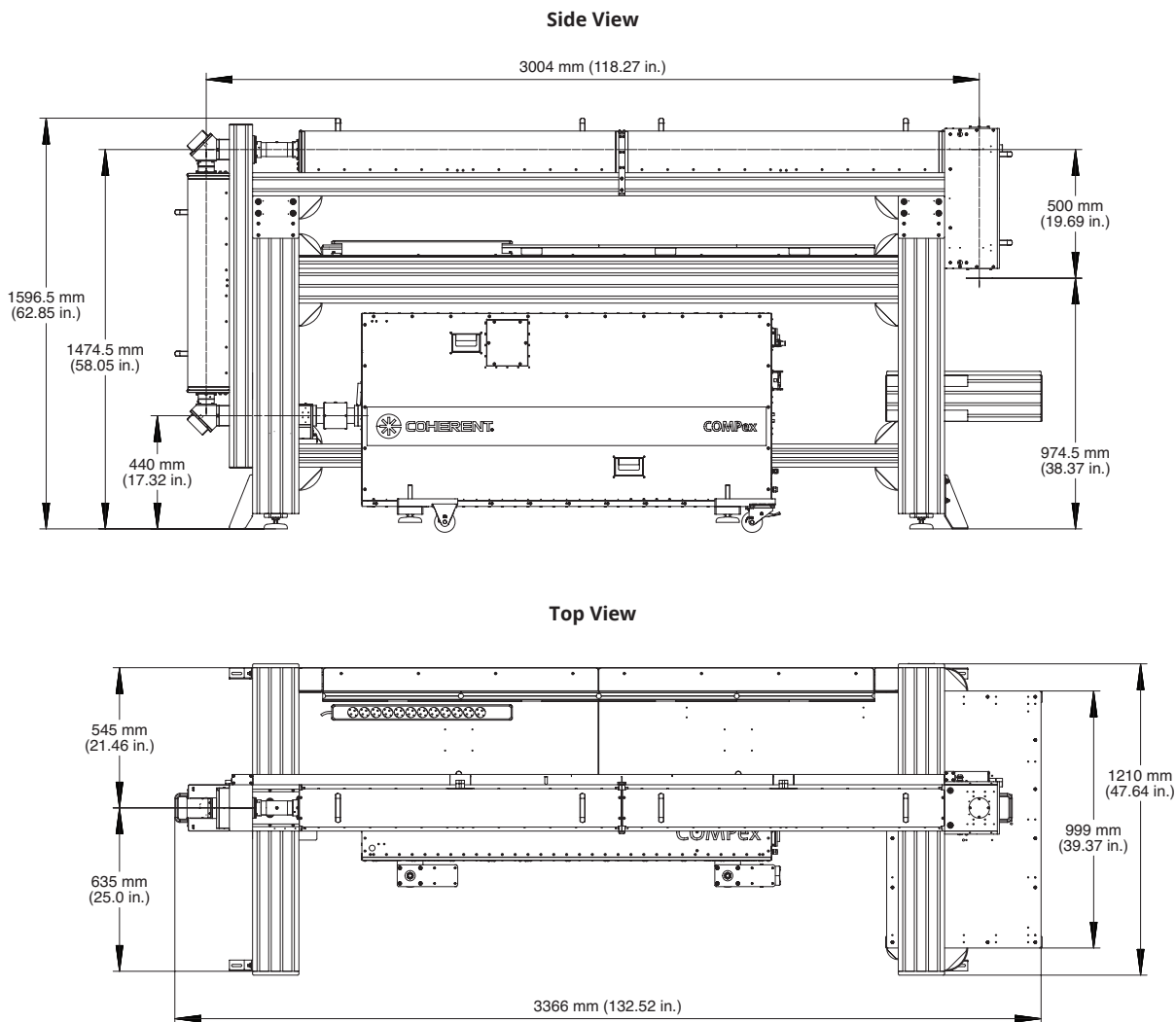
VarioLas Performance

2D-mask plane image of VarioLasPro with cross sections along x- and y-axis.



MECHANICAL SPECIFICATIONS

VarioLas




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Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice. Coherent's scientific and industrial lasers are certified to comply with the Federal Regulations (21 CFR Subchapter J) as administered by the Center for Devices and Radiological Health on all systems ordered for shipment after August 2, 1976.

Coherent offers a limited warranty for all VarioLas Systems. For full details of this warranty coverage, please refer to the Service section at www.coherent.com or contact your local Sales or Service Representative. MC-011-18-0M1219Rev.A Copyright ©2019 Coherent, Inc.





VISIBLE AND INVISIBLE LASER RADIATION.
 AVOID EYE OR SKIN EXPOSURE TO
 DIRECT OR SCATTERED RADIATION.
 CLASS IV LASER RADIATION PRODUCT
 PER EN/IEC 60825-1 (2014)

MAX. OUTPUT POWER: 5400 W
 MAX. OUTPUT ENERGY: 9 J/pulse
 PULSE DURATION: 10 to 50 ns
 WAVELENGTH: 308 nm