



FC GENESIS

FIBER LASER METAL CUTTER

DESIGNED · ENGINEERED & MANUFACTURED IN THE U.S.A.



Manufactured in the USA. Engineered to Perform. Supported for the Future.

The Boss FC Genesis is a new generation of American-manufactured fiber laser cutting technology, designed from the ground up by Boss Laser for the needs of modern fabricators. Combining power sources up to 40 kW, American developed controls, precision driven material handling, and heavy-duty industrial construction, FC Genesis delivers the performance, reliability, and control manufacturers need to produce more with direct support from a U.S.-based team.

American-built confidence – Designed, engineered, manufactured, and supported by Boss Laser in the United States, providing greater accountability, responsive domestic support, and stronger long-term product ownership.

More capability as production grows – Scalable from 3 kW to 40 kW, FC Genesis supports applications ranging from light-gauge fabrication to demanding, high-throughput plate processing.

Consistent precision and repeatability – Its isolated material handling architecture and ACME screw jack driven exchange table help reduce vibration and structural loading effects during table changes.

Simpler, more secure operation – American-developed control software and advanced EtherCAT motion architecture provide operators with an intuitive interface, responsive machine control, enhanced security, and reliable domestic support.

Industrial strength built for demanding workloads – A heavy-duty steel structure, 7,400-pound material capacity, and large viewing windows provide durability, production flexibility, and clear visibility into the cutting process.

True 5' x 10' Cutting Capacity – Processes full 5' x 10' sheets without trimming, repositioning, or sacrificing usable material.

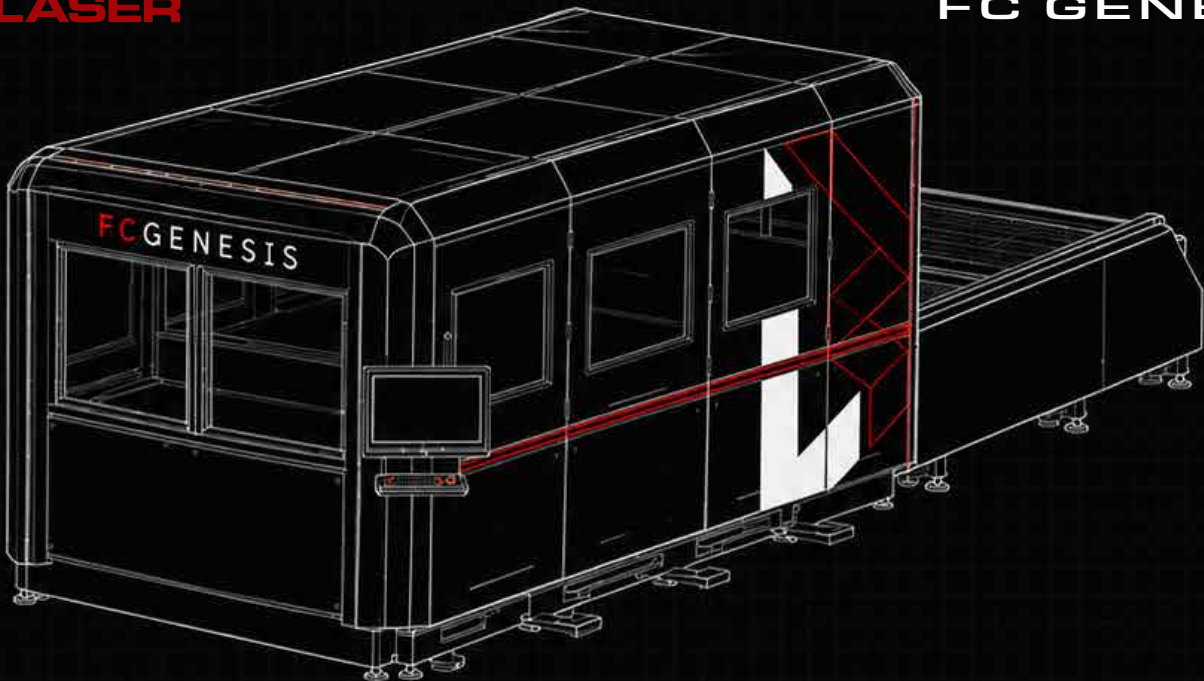
Custom-Designed High-Speed AC Servo Motors – Deliver up to 5G acceleration, responsive motion, and precise positioning for faster production and consistent cut quality.

4-Inch Cutting Clearance – Accommodates thicker materials and expanded applications while providing greater production flexibility.

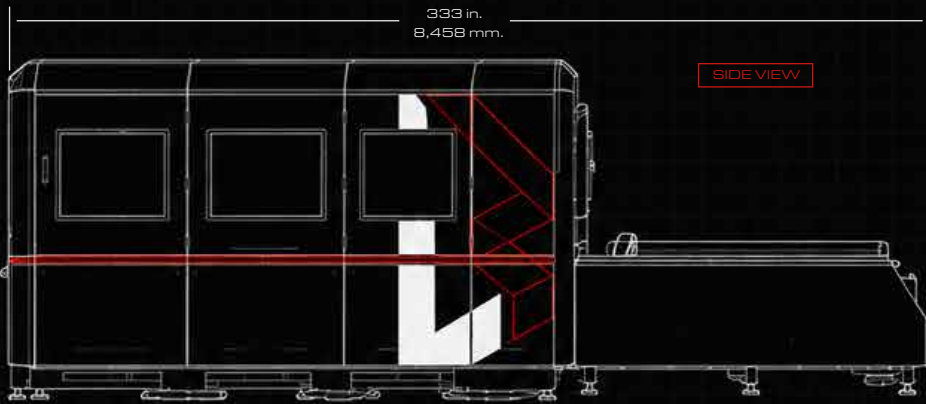
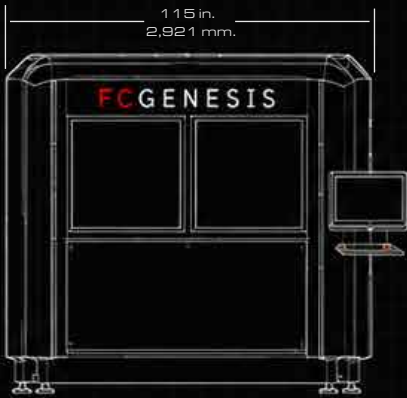
Facility-Matched Power Options – Offers versatile electrical configurations designed to match the available power at your facility, simplifying installation and reducing infrastructure requirements.

Precision Exchange Table System – The Apex Drive Linear Lift Exchange Table maintains a consistent material loading height while supporting faster, smoother, and more precise table changes.

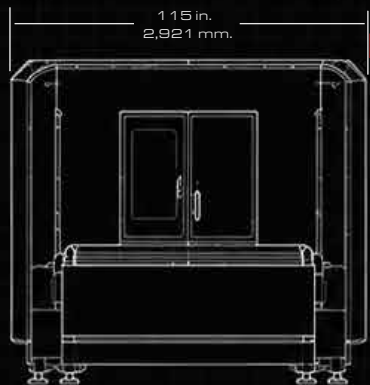
Heavy-Duty Material Capacity – Supports up to 7,400 pounds of material on the exchange table system, delivering the strength and reliability required for demanding industrial production.



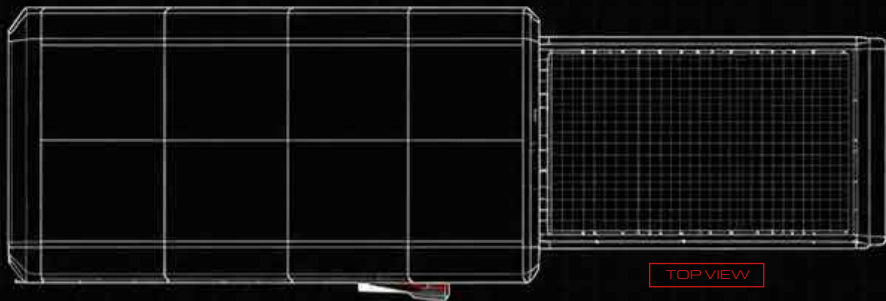
FRONT VIEW



SIDE VIEW



BACK VIEW



TOP VIEW

SPECIFICATIONS

Laser Power	1.5kw - 40kw's
Machine Dimensions	333"(L)x115 (W) x 94"H)
Machine Weight	16,000 lbs.
Maximum Loaded Weight	23,000 lbs.
Cutting Platform Supported Weight	Up To 7,400 lbs.
Electrical Configuration	220 VAC ± 10%
	Three Phase
	60 Hz

- Dedicated branch circuit and proper earth ground required
- EtherCat motion architecture
- FlashCut 11.0 control software
- Designed for modern industrial automation and precision control