

NEW INFINITY 9.3 μm HS LASER ACHIEVES #1



Infinity 9.3 μm HS Laser has the fastest rise/fall times and power stability in its class.

Iradion Laser, Inc., Uxbridge, MA is pleased to announce the product release of its new Infinity 9.3 μm HS model that features the fastest rise/fall times and power stability of any CO₂ laser in its class. It exceeds other CO₂ lasers in all key specifications.

Iradion Booth #5178 will display its latest technology innovation as well as all its patented ceramic core CO₂ laser products at Photonics West, San Francisco, CA from February 4-6, 2020.

The Infinity 9.3 μm HS Laser also has other exclusive feature/benefits that translates to higher production rates and improved part quality.....continued on page 2

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BOSSLASER: A LEADER IN THE INDUSTRY



Boss Laser has a modern 43,000 square foot facility in Sanford, Florida

BOSSLASER, Sanford, FL is truly a leader among OEM laser equipment suppliers offering a wide range of laser work stations, cutting machines and equipment solutions. By integrating reputable fiber and CO₂ laser sources ranging from 20 watts to 3000 watts into a variety of platforms, Boss Lasers has assembled an impressive product offering for cutting, engraving, marking and etching all types of materials such as metals, plastics, acrylics, wood, paper, glass, fabrics and ceramics.

Whether etching small 3D parts or cutting 5' x 10' metal plates, Boss Laser has an application solution for your needs. In addition, the company offers superior service and support programs to guarantee maximum uptime and production throughput.

A closer look at Boss Laser explains their success.....continued on page 3

Special points of interest:

- Philippe Brak, CEO and President
- New Iradion Infinity 9.3 μm HS Laser
- Boss Laser News

SPIE. PHOTONICS WEST

February 4-6, 2020
San Francisco, CA
Iradion Booth #5178

“MESSAGE FROM THE CEO/PRESIDENT”... Philippe Brak



As CEO and President of Iradion, and on behalf of our Iradion team, I want to thank our customers for your valued business. With your support, Iradion continued to expand its facility, hire new employees, make technology improvements and initiate exciting new product development projects.

Providing the highest quality CO₂ laser products and superior services to our customers continue to be our #1 focus and goal. As the use of CO₂ lasers expands into existing applications as well as new processes, the performance and reliability of CO₂ lasers are crucial. We believe that our patented ceramic core technology holds the key!

In 2019, Iradion Laser Inc implemented the following steps to support our customers: 1) recruited new engineers, manufacturing and service technicians, 2) expanded the manufacturing area and offices with new equipment, 3) implemented additional QC testing, 4) released new products, and 5) initiated new product development. For example, our new Infinity 9.3 μm HS Laser achieved a technology breakthrough.

Finally, our booths at Photonics West 2019 in San Francisco and Laser World 2019 in Munich attracted a record number of International customers and industry specialists that expanded our global business and market visibility.

In closing, the Iradion Team looks forward to helping our customers make 2020 a successful year!

NEW INFINITY 9.3 μm HS LASER ...continued from page 1

Utilizing the patented and proven ceramic core CO₂ laser technology, the Infinity 9.3 μm HS model incorporates a proprietary laser core architecture that efficiently produces a 9.3 μm wavelength.

Compare the Infinity 9.3 μm HS Laser's typical performance versus traditional CO₂ laser designs:

- **Rated full power levels** versus power levels that are typically de-rated by 20% for 9.3 μm
- **Fastest pulse rise/full times: < 50 μs** versus slower rise/fall times of < 60 to 100 μs
- **Highest power stability: < 1.5% water-cooled and < 4% fan-cooled** versus stabilities of < 4 to 7%
- **Stable power range from full power to 1 watt** versus a loss of stability under 10% full power
- **Laser gas is hermetically sealed in ceramic core** versus glass or metal lasers that require gas refills

The benefits of the Infinity 9.3 μm HS Laser equates to superior performance and reliability of laser equipment: higher production rates, lower operating costs, better part quality, more uptime and greater throughput.

Beta site testing in demanding production environments have demonstrated that the Infinity 9.3 μm HS Laser excels in all CO₂ laser applications. However processing optical films and other PET polymers are dramatically enhanced, because these materials readily absorb 9.3 μm wavelengths. Part production displayed a significant increase in comparison to traditional CO₂ laser technologies.

Lastly, Iradion Laser Inc offers the Infinity 9.3 μm HS Laser in both water-cooled and fan-cooled versions for all power levels: 50, 60, 80 and 100 watt models. Note that most major CO₂ laser companies limit their laser models to water-cooled or fan-cooled, rarely offering both versions.

BOSSLASER : A LEADER IN THE INDUSTRY...continued from page 1

Boss Laser was founded in 2012, and initially produced small and medium size CO₂ laser work stations. The company rapidly responded to its customers needs and industry trends to expand its product lines. Today, Boss Laser offers CO₂ and Fiber laser machines with both gantry/flatbed and galvo scanner configurations.

As an ISO 9001:2015 registered company, Boss Laser is dedicated to providing the highest quality products and support programs. With over 43,000 square feet of operational facilities, they have the capability to meet any customer's needs. More than 1000 5-star customer reviews across the internet are testimonies of the company's excellence in products, service and support.

Boss Laser's compact CO₂ **LS-Series** work stations and the CO₂ **HP-Series** cutting tables represent examples of its customer focus:



LS-Series



HP-Series

These machines launched the company's success and continue to be a major % of its business. Proven 10.6 μm CO₂ laser sources are offered in power levels ranging from 30 to 250 watts. Work areas are available from 16" x 14" to 60" x 120". The machines can address many applications and processes such as cutting, marking, etching and engraving for both metal and non-metal materials such as wood, leather, paper, plastics, acrylics and fabrics.

Boss Laser is excited about their new partnership with Iradion Laser and their ceramic core CO₂ laser technology. Combining the Iradion 1625 250-watt model with the high output cutting technology of Boss Laser's HP series will result in a system that will be unparalleled in both price and performance.

Boss Laser's Fiber laser product lines are another example of its response to its customers' needs. The **ACCU-CUT** and the **FC6012EXT** represent popular models:



ACCU-CUT



FC6012EXT

They utilize 1 μm Fiber lasers such as IPG, and include different platforms from compact models to large cutting tables. Power options from 500-3000 watts and work zones from 51" x 36" to 60" x 120" are for cutting metals: stainless, aluminum, steel, copper and brass as well as exotic metals.

Finally, Boss Laser offers **FMS** Marking Systems and a hybrid laser/milling system that combines the benefits of both operations. The **LSR HYBRID** uses a gantry mounted CO₂ laser and high speed spindle for unique applications.



FMS Marking



LSR HYBRID

"The secret to our success is our clients," says **Dan Fox, President**. "Taking care of customers is not about spreadsheets, meetings, or KPI's. It is about caring. Our client's success will determine our success."

Boss Laser looks forward to expanding its leadership in the industry providing customers the best!

Contact Boss Laser for more info:

Email: sales@bosslaser.com

Phone: 407.878.0880

Iradiion's Ceramic Core CO₂ Lasers represent a new technology that was developed to meet a stringent military contract specification for a leak proof design.



Iradiion's patented ceramic core CO₂ lasers offer superior performance with "no gas refill" reliability.

The ceramic chamber hermetically seals the laser gas mixture away from the metal RF electrodes. This eliminates the risk of contamination insuring the longest gas life in the industry. In addition, the ceramic excitation chamber's low coefficient of expansion insures long term power stability, beam quality and reliability.



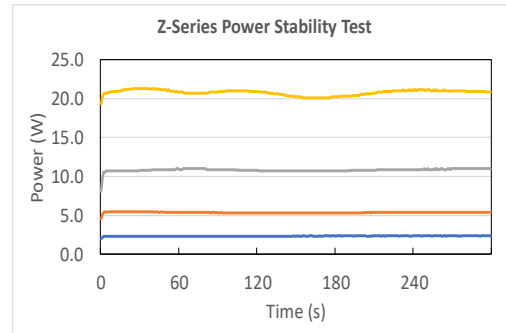
Iradiion's new home features an environmental friendly operation and ISO 9001:2015 Certification.

Iradiion lasers are produced in its new production clean room. The "state of the art" facility insures the highest quality manufacturing standards, while increasing production volumes and achieving product mix flexibility. With OEM companies and integrators needing "just in time" shipments, Iradiion has improved its responsiveness and has shorten lead times.



Rapid Production Logistics are achieved by a skilled production team and efficient QC operation.

Before shipping, Iradiion lasers undergo comprehensive QC testing: power and pointing stability, pulsing, and other checks insuring that each laser will meet or exceed specifications, performance and reliability.



Iradiion lasers maintain excellent Power Stability from under 1 watt through maximum rated wattage.

Unlike typical CO₂ lasers that lose their power stability under 10% of their rated wattage, Iradiion lasers maintain excellent power stability from under 1 watt to maximum rated wattage. This unique feature equates to precision results over a wide range of applications.

Remarkably, Iradiion's innovative ceramic core design and architecture requires fewer components thereby reducing the laser size and weight. It also lowers manufacturing costs which results in competitive dollar per watt pricing. Iradiion offers power levels from 25 watts to 250 watts in 10.6, 10.2 and 9.3 μm wavelengths. to optimize marking, etching, cutting, perforating, ablating, fusing and many other processes.



New E-Series (25-40 watts), Infinity (50-120 watts) and the 1620/1625 (200-250 watts) are offered by Iradiion.

**Contact Iradiion for more info:
Email: sales@iradiion.com
Phone: 401-762-5100**