

Iradion's New Eternity Series: Small Size And Big Performance



The Eternity models E30 and E40 feature Iradion's Patented Ceramic Core CO₂ laser design.

Iradion Laser Inc., Uxbridge, MA. Reporting a successful Iradion product release, the compact **Eternity Laser** delivers big on performance.

New **Eternity Series** represents major improvement over the previous generation; Z-Series. Component and manufacturing process changes have insured performance, while greatly improving reliability. The footprint is identical and compatible to the Z-Series that it replaces.

Over one year of comprehensive engineering analysis and extensive testing concluded with Iradion shipment of hundreds of E-Series lasers in 2020 and early 2021. E30 and E40 lasers have been operating successfully in a variety of applications where 30 or 40-watt power levels are required.

The **Eternity Series** is an excellent candidate for marking, cutting and engraving work stations, wire stripping modules, packaging and converting systems, fiber optic splicing stations, surface modification units and more.

The **Eternity Series** is the best value in the industry, because of exclusive feature/benefits, competitive pricing and a two-year warranty including customer support, the **Iradion Rapid Response Service Program**. See more info on page 4.

Trotec Puts Iradion Technology To Work

Trotec Laser Inc., Plymouth, MI. Industry-leading laser manufacturer, **Trotec Laser** has expanded its use of **Iradion's Ceramic Core CO₂ laser tubes** with the recent release of its updated Speedy 100 and 300 laser models. **Ceramicore Technology**, which was already standard for higher power Speedy laser systems, is now available with 30 and 40-watts as well. Speedy models were already the fastest flat-bed CO₂ lasers on the market, and with the updates, are all now equipped with **OptiMotion™** motion control to boost productivity by maximizing cutting speed at highest cutting quality. **Trotec's Speedy Product Line** of CO₂, fiber and dual-source lasers can mark, cut and engrave a wide array of materials and are available with several options, accessories and bed sizes from 24"x12" to 40"x24".



Trotec Speedy 100, 300, 360 and 400 models

Call Trotec for more information:

866-226-8505 or visit www.troteclaser.com.

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- Philippe Brak, CEO and President
- Iradion Ceramic Core CO₂ Lasers
- Eternity Series
- Systems Featuring Iradion Lasers

“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 their valued business and relationships, and our employees for their exceptional dedication, teamwork, and performance during the challenges of the COVID lockdowns. Also, thanks to our suppliers and support personnel who provide the highest quality materials and services insuring our product integrity during the pandemic.

The past year has been unreal in so many ways, but as an essential business, we continued to manufacture our **Patented Ceramic Core CO₂ Lasers** and we continued to support our valued customers with the **Iradion Rapid Response Service Program**.

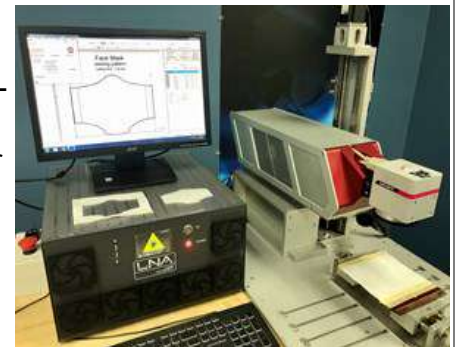
It required an aggressive CDC Recommended COVID Prevention Plan that included employee testing, sanitation procedures during the day as well as after hours, mandatory masks and lockdown of our facility to visitors. The action plan represented a large investment of time and money, but our employees health, our ability to produce lasers and service our customers was optimized to the benefit of all.

Though our 2020 sales goals were slightly below forecast, we did not stop investing in our customers as well as our company to prepare for 2021:

1. The product release of the **Eternity Series** represents a major project to improve the performance and reliability of our 30 and 40-watt lasers. Hundreds of units were shipped in 2020 as well as early 2021 with excellent results.
2. The recruitment and training of new employees improved our Iradion Team. **Mike Esser** joined our Sales and Marketing group to assist **Bob Kloczkowski** with sales coverage and our growing customer base. **Scott Oppenheim** took over as Production Manager freeing **Bob Milkowski** to focus on other tasks. New engineers and staff personnel were added to accommodate the expected increase in sales volume, **and as a result, Iradion achieved its highest quarterly sales volume in Q1 2021.**

OEM CO₂ Laser/Scanners from LNA Laser Technology

LNA Laser Technology, Pawtucket RI. Celebrating their 20th anniversary this year, **LNA** is a global supplier of industrial laser processing equipment. LNA Manufactures OEM marking packages for system integration or turnkey systems to support applications from marking and engraving to welding and cutting, standard Class I workstations for CO₂ and fiber lasers including manual benchtop and 2 position rotary table configurations, to fully programmable XYZ motion package systems. LNA also offers custom tailored solutions to satisfy whatever your application needs may be. In their Pawtucket HQ, LNA houses a complete laser process evaluation lab where customers can send materials for sample trials.



Featured here is **LNA's LASC-40**, a high performance CO₂ OEM package based on **Iradion's Eternity E40 40-watt sealed CO₂ laser source**. The LASC-40 is a turnkey OEM Marker package that ships complete with integrated control hardware, high speed, high precision galvo scanning head, red beam pointer, LNA's intuitive laser marking software. It has its own text editor and the ability to generate one-D or two-D barcodes with serialization. The system can be manually operated or integrated into factory automation.

Contact LNA for more information

401-724-0076

www.lnalaser.com

CMS Laser Offers Custom Solutions With Iradion Lasers

Control Micro Systems, Winter Park, FL. CMS Laser is a global developer and manufacturer of laser-based marking, cutting, welding and drilling systems. With more than 35 years of operational excellence, it continues to provide a variety of laser types, wavelengths and custom solutions for automotive, aerospace, medical device, semiconductor, electronics and commercial product industries.

Their **Laser-Focused Engineering™** allows them to design and build a system around the best laser for the job. The use of **Iradion Ceramic Core CO₂ Lasers** has enhanced their ability to provide the best CO₂ lasers for integration into their systems. The patented ceramic core laser tube design that hermetically seals the laser gas provides major performance and reliability benefits.



Contact CMS Laser for more Information:

407-679-9716

www.cmslaser.com

Vytek's CO2Cab Powered By Iradion Lasers



Vytek Laser, Fitchburg, MA is a premiere OEM builder of laser processing equipment utilizing CO₂, Fiber and other wavelengths. It's new **CO₂Cab Series** offer fully integrated 2 and 3-axis CO₂ galvo solutions unlike any other system on the market. The **CO₂Cab** can **cut, mark and engrave** most organic and many inorganic materials. Vytek's selection of enclosure styles in Class-1 and Class-4 configurations expands customer choices. It even offers rack mounted OEM solutions for user integration into production lines. Vytek selected **Iradion's Patented Ceramic Core CO₂ Lasers**, because of their exclusive features, so it uses Iradion lasers for 30 to 250 watts applications. For higher power jobs, Vytek uses sealed CO₂ lasers to over 1000 watts. Available options include load/unload fixtures, robotic automation, rotary tables and indexing and more. The **CO₂Cab** is compact, lightweight, affordable, and easy to set up...truly the most flexible work station available and **MADE IN THE USA!**

Contact Vytek Laser for more information:

978-342-9800

www.vy-tek.com

PerfoTec Keeps Things Fresh With Iradion Lasers

PerfoTec B.V., Woerden, Netherlands. The **PerfoTec Laser System** has perfected a way to extend freshness of fresh produce by optimizing the permeability of the packaging. By precise control of air circulation, the quality and shelf life of fresh produce is guaranteed, and this is achieved by microperforating the packaging. Using **Iradion CO₂ Lasers**, the system produces very small diameter holes that are consistent in size and numbers to create the **Active Modified Atmosphere Packaging** for fruits, vegetables and even flowers.

The **PerfoTec Laser System** has a patented closed-loop-feedback-camera-system. The integrated camera inspects each hole, if necessary, the lasers are automatically adjusted 'on the fly' to compensate for packaging film thickness.

Iradion Ceramic Core CO₂ Technology provides the pulsing characteristics and power stability as well as the performance and reliability to support the packaging perfection that PerfoTec systems produce.



Contact PerfoTec for more info:

+31 (0)297 25 55 54

www.perfotec.com



Iradion's 34,000 sq ft facility is a 'state of the art' operation.

Iradion Laser Inc., Uxbridge, MA. The exclusive benefits of Ceramic Core CO₂ technology are proven:

- 1) typical rise /fall times: < 75 μsecond
- 2) excellent beam quality: M² < 1.2
- 3) power stability range: 1 watt to max power
- 4) laser gas sealed in core: no gas refills

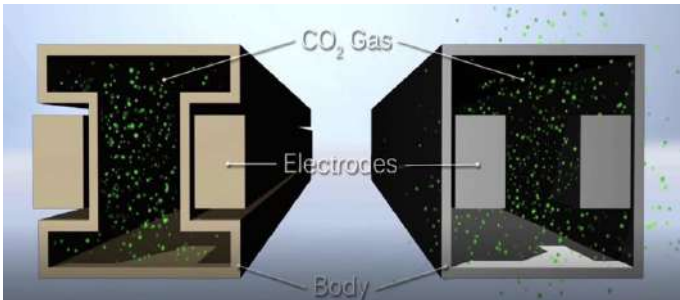


Iradion's Patented Ceramic Core CO₂ Lasers offer superior performance and reliability.

Iradion's CO₂ Lasers are produced in the factory's production clean room. The CO₂ laser gas mixture is hermetically sealed in the ceramic chamber and the metal RF electrodes sandwich the chamber externally.

In comparison, older technology lasers enclose the CO₂ laser gas mixture with the electrodes in a glass or metal chamber using rubber seals or welding seams. As a result, it's generally accepted that laser gas replacement will be required every 3 to 5 years.

Iradion eliminates gas contamination and/or leakage insuring the longest laser gas life in the industry. Also,



On left, Iradion seals CO₂ laser gas in a ceramic core with electrodes on the outside. On right, traditional lasers place CO₂ laser gas and electrodes in metal or glass chamber prone to gas contamination and seal leakage.

the ceramic chamber's low coefficient of expansion provides improved power stability.

Moreover, this innovative architecture requires fewer components reducing the laser size and weight. The design equates to production cost savings resulting in the most competitive CO₂ lasers pricing in the industry. Iradion offers power levels from 30 to 250 watts with 10.6, 10.2 and 9.3 wavelengths to optimize the pro-



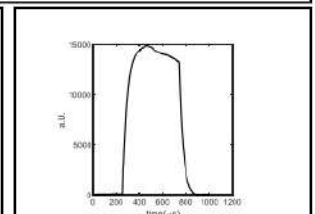
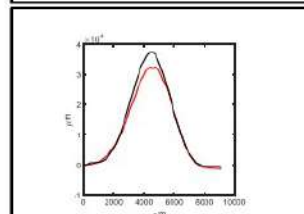
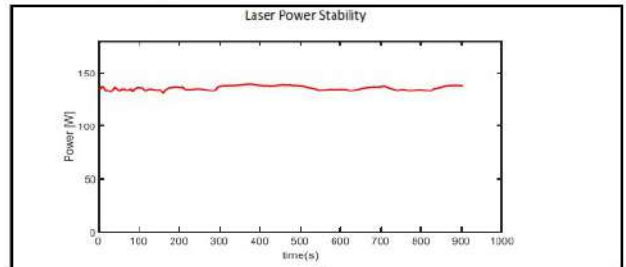
Iradion Laser Product Lines: Eternity (30-40 watts), Infinity (50-120 watts) and 1620/1625 (200-250 watts).

cessing of a wide range of materials and operations. Prior to shipment, Iradion conducts extensive analysis of each laser. See a Final Test Report example showing model, s/n #, max/min power, rise/fall times, power stability, pulsing, beam quality and other metrics.

IRADION

LASER FINAL TEST DATA SHEET			
Model #	1510W	Date:	13-May-20
Serial #	47DC024C6687	Technician	MMC - 1

LASER FINAL TEST MEASUREMENTS			
Measurement	Measured	Specification	Units
Power Minimum	130.60		W
Power Maximum	139.50		W
Power Average	135.83	>110	W
Power Stability	3.30	+/-6	%
Rise Time Warm	64.55	<75	us
Fall Time Warm	67.64	<75	us
Rise Time Cold	60.11	<75	us
Fall Time Cold	66.81	<75	us



Contact Iradion for more information:

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Email: sales@iradion.com