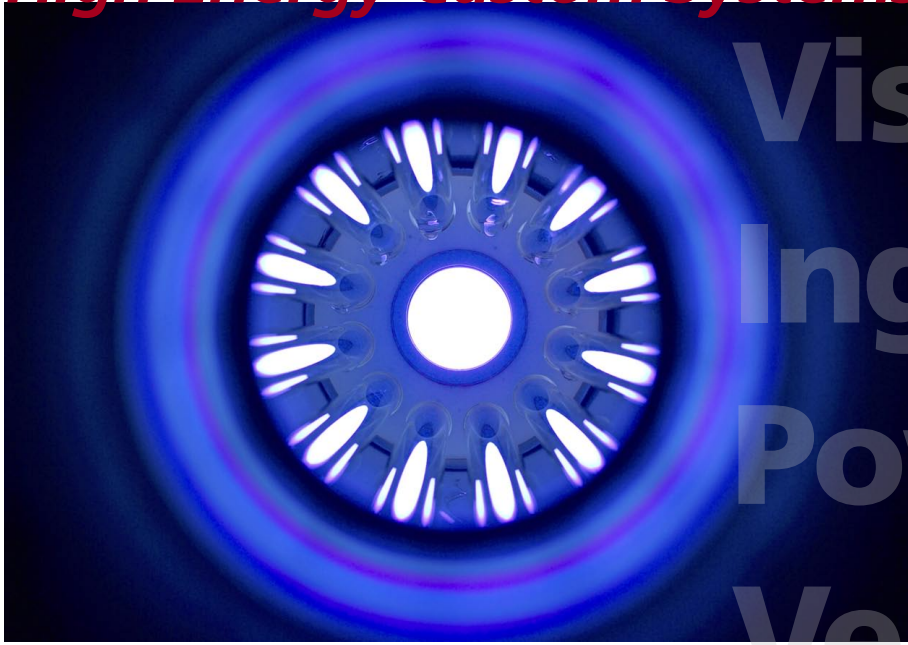


# High Energy Custom Systems



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Vision  
Ingenuity  
Power  
Versatility

## Innovative Engineering of Specialty Components

Continuum manufactures custom systems to satisfy special laser requirements. Meeting these needs necessitates a level of innovation allowing for the development of special components.

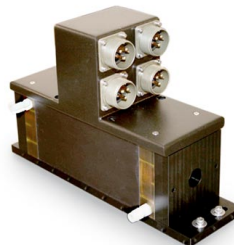
The National Ignition Facility at Lawrence Livermore National Laboratory required glass heads with very stringent performance characteristics. The result is a new series of glass heads with increased lifetime and less stress induced birefringence. The energies of the new Ti:Sapphire amplifier pump lasers traditionally require the use of glass rods with the downside of low repetition rates. A new four lamp head was then designed, reducing hardware and increasing efficiency while allowing for the increase in repetition rate. Powerful adaptive engineering makes this all possible.

The complexity of custom systems and the systems requiring custom components have necessitated the development of new system control hardware. These power supply components embody the philosophy of distributed intelligence. Each power supply component contains a microcomputer to monitor and control its operating parameters. The power supply components also employ another microcomputer contained in the Smart Card on the laser deck. With this feature, power feedback control

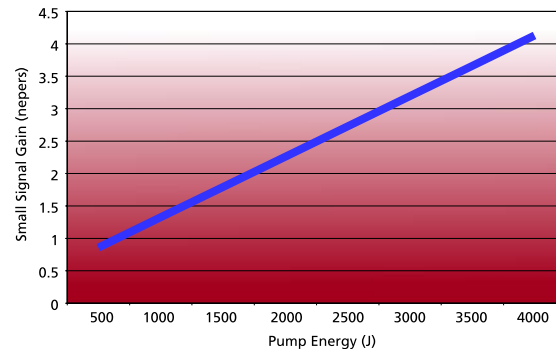
is possible as well as active monitoring and control of a number of laser parameters.

The distributed intelligence architecture is tied together with a master Graphical User Interface (GUI).

These GUIs can be customized to each laser configuration allowing for tailored solutions. This greatly enhances the utility of the system architecture.



Small Signal Gain of 414-16 Glass Head



For more information, please contact your local Continuum representative, [www.continuumlasers.com](http://www.continuumlasers.com), or call 1(866)532-1064.

**Continuum**<sup>®</sup>  
The High Energy Laser Company™