

If you have product development challenges...

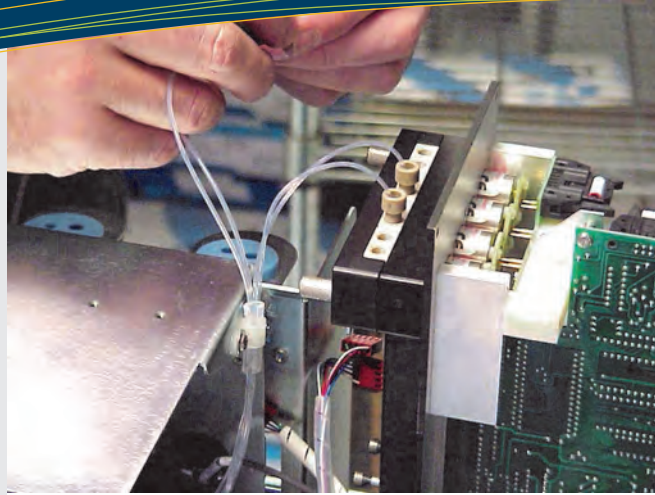
We have the solutions.

Lathrop has a seasoned staff of designers and engineers in the fields of:

- Mechanical Engineering
- Systems Engineering
- Electronics Design
- Optics Design
- Industrial Design & Human Factors
- Software & Firmware Development
- Project Management

## Product Expertise

Biotech Instruments  
Diagnostic Instruments  
Production Automation  
Consumables / Disposables  
Consumer Products  
Medical Devices



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## Lathrop Meets Customer Needs: Unveils Manufacturing

*Article By Leonard Kaufer, Program Manager at Lathrop Engineering*

Lathrop Engineering, a premier provider of engineering design services, is pleased to unveil the addition of manufacturing to their service offerings. Lathrop is now your one-stop source to take your product from concept to market.

*“Lathrop is now your one-stop source to take your product from concept to market.”*

Lathrop Engineering has thirty years of experience taking products from concept through design, prototyping, verification, and transfer to manufacturing. The design phase ends with successful verification of first articles. This is a key moment in the life cycle of the product, especially for startup companies. The product is verified, validated, has achieved regulatory certification and is ready for the

market. Early production must begin immediately and seamlessly to validate market acceptance and generate revenue. There is little time to be spent on transfer to manufacturing, and the market must embrace the product before the non-recurring expenses associated with high volume production are warranted.



Lathrop has worked with select clients over the past decade to develop in-house manufacturing capabilities in

*“Design is not just what it looks and feels like. Design is how it works.”*

*Steve Jobs*



*CE Compliance Build*

order to bridge the gap between design verification and high volume production. We are pleased to unveil this capability and offer it to all clients. Lathrop now offers in-house manufacturing for our designs.

### Roadmap for Success

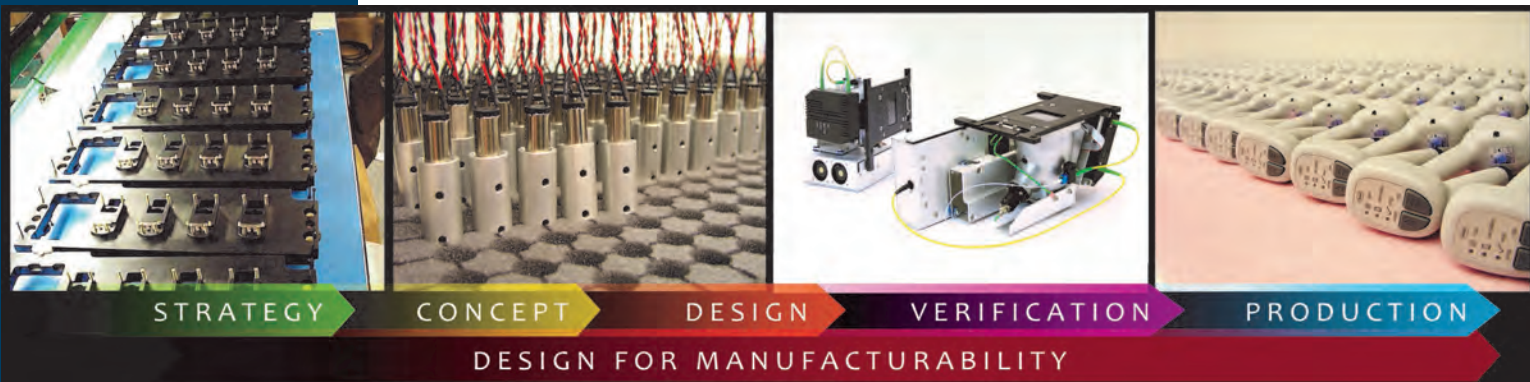
Lathrop begins each project with a thorough evaluation and planning phase. A clear vision of the final target is developed to insure the team is working toward a common goal. The roadmap that is created is unique to each project. Clients with existing manufacturing capability and adequate capacity to handle the new product will benefit from Lathrop’s traditional transfer to manufacturing expertise. Lathrop brings manufacturing into the project early to begin

planning for production, defining manufacturing processes, and identifying any required fixturing, process equipment, or quality processes. For more

*“Lathrop brings manufacturing into the project early to begin planning... Manufacturing is a part of all design reviews.”*

than thirty years, Lathrop has honed and perfected our processes to assure a seamless transition from prototype to production. We accomplish efficient transition by developing the entire project using the manufacturer’s design standards and templates, integrating manufacturing in all design reviews, and including the manufacturing engineers throughout the assembly and testing of final prototypes.

Clients who do not have manufacturing in place and want to validate their market before investing in high volume production will benefit from our in-house manufacturing capability. Lathrop uses an extensive suite of in-house design standards and templates ensuring the design is ready for



***Exceeding Expectations By Design!***



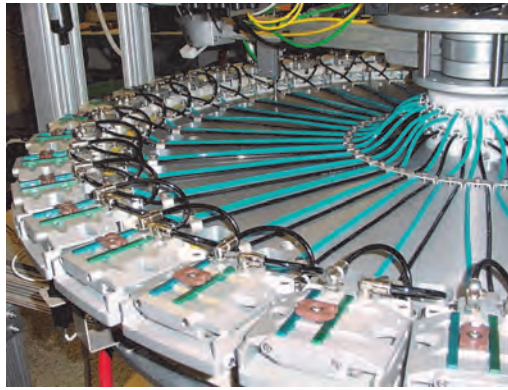
manufacturing. The Lathrop manufacturing team assists in all phases of development. The line between final prototypes, first article, and pilot production blurs as internal manufacturing resources take on an ever larger role in build, assembly, and test, saving the client money and, most importantly, time to market.

Regardless of the unique milestones developed for each client, all of the work is done to the same high standards for which Lathrop is known throughout the industry.

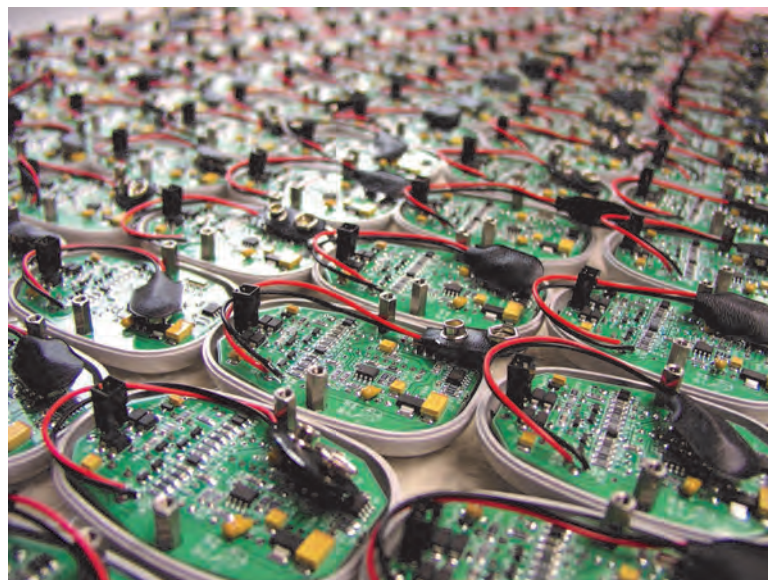
### Rightsizing Manufacturing

Manufacturers build their capabilities around specific production levels. One manufacturer may specialize in products generating \$1 million to \$2 million while another is optimized for \$10-\$20 million. The roadmap developed at the start of the project must identify not only the final production volumes, but also any interim steps

*“Planning and executing a manufacturing strategy to insure that the appropriate level of manufacturing is available at the right time is critical.”*



along the way. Lathrop often works with industry pioneers who are opening exciting new markets. These markets may take time to develop. Planning and executing a manufacturing strategy to insure that the appropriate level of manufacturing is available at the right time is critical. Lathrop’s production capabilities may be the ideal first stop on the road to success. For other projects, Lathrop may be the perfect manufacturing solution for the entire product lifecycle.



## A Case Study

### Hand Held Device:

Lathrop developed a hand held device for one of the leading Global 500 companies. The client has extensive manufacturing capabilities throughout the world, but did not want to distract those resources from their core mission to service this smaller project. Lathrop completed the design and provided the client with 50 initial units. The results were very well received, but the lifetime projected production for this project did not justify the expense of transferring it to a contract manufacturer. Throughout the successful life of this project Lathrop built, tested, and delivered 1500 units.

## Lathrop Celebrates 30 years of Success

Lathrop has been providing top notch design and engineering services since its founding in 1982.

### Upcoming Events

- **May 18-21, 2013 American Society for Microbiology**  
ASM 2013 - Denver, Colorado  
Booth 613
- **July 28—August 1, 2013 American Association for Clinical Chemistry**  
AACC 2013 - Houston, Texas  
Booth TBA

Lathrop exhibits and attends many tradeshows throughout the year across the country. Come visit us at our booth. If you cannot make it to the tradeshow, call us and we can schedule a visit while we are in your area.

## LathropNEWS Preview

### Topics of Upcoming Newsletters

Risk and Hazards

Part 2 of the Understanding Industrial Design Series

Gap Analysis

***Learn more! Call us today!***

