



# LOFTWARE™

## CASE STUDY



## **HYPERTHERM® REALIZES \$1.5M – \$5M SAVINGS** *Implementing Loftware Spectrum® Improves Production Uptime*

**Hypertherm®**

As a leading global manufacturer of advanced plasma, laser and water jet cutting systems, [Hypertherm](#) owns a large market share in their space, with Majority Market Share in the plasma market. The company is a recognized leader, with Hypertherm's products being used for cutting any type of metal, for applications in a variety of industries including shipbuilding, manufacturing, and automotive repair. With nearly 50 years of experience in cutting, and maintaining 1,300 associates, the company's client list boasts of brands including Ford, Volvo, Harley Davidson and Caterpillar.

With operations and partners worldwide, Hypertherm was experiencing significant growth. However, their existing consumables product label printing system was not sufficiently accommodating this growth, and was presenting considerable risks to their operations in this lean manufacturing environment. The company's existing "home-grown" system was complex and customized with layers of third party applications, which posed connectivity issues for suppliers, and represented a single point of production failure. Additional software licenses were no longer available to enable them to grow or upgrade their existing deployment, and there were inherent

**Market:** Enterprise Labeling

**Industry:** Manufacturing (Cutting Systems)

**Solution:** Loftware Spectrum®

### **The Challenge:**

- Significantly Improve Production Uptime
- Reduce Errors Resulting in Mislabeling
- Enable Support for Supplier Labeling
- Simplify Maintenance
- Reduce Complexity of Label Design

### **The Solution: Loftware Spectrum**

Hypertherm deployed Loftware's out-of-box, 100% browser based, all-in-one enterprise labeling solution, to meet their global, on-demand labeling print requirements.

- Web Based Deployment
- Centralized Application for Internal and External Use
- Configurable System with Business Rules
- Automated Print Process
- Simplified Design Process with WYSIWYG label design

### **The Results:**

- Millions in Annual Savings
- Reduced Downtime Dramatically
- Reduced Mislabeling / Achieved Greater Consistency
- Ability to Scale / Global Deployment
- Streamlined Manual Processes
- Ease of Maintenance
- Brand Credibility and Improved Customer Responsiveness
- Ability to Leverage Power of Business Rules for Future Growth

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*"Loftware's Spectrum offers a single labeling system to meet all of our needs, throughout all of our locations, across all of our suppliers worldwide." Robert Kay, IS Operations Support, Hypertherm*

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issues with mislabeling. Further, the system was prone to breaking, ultimately causing significant downtime issues representing a loss of productivity, with five to ten hours of troubleshooting and fixing the label system each week. All of this resulted in customer dissatisfaction, brand integrity issues, and lost revenues, equaling \$25,000 – \$100,000 worth of productivity each week due to labeling issues.



## CHALLENGES

*“If labeling goes down, our production process stops because it’s part of our quality system to make sure that the products are completely together before they go out the door. If labeling goes down we’re dead in the water.”*

*Isaac Carty, System Administrator, Hypertherm*

### **Avoid Costly Downtime Due to System Failures**

With their customized “home grown” labeling system, Hypertherm found itself in the midst of production down situations all too often. Additionally, there were a variety of connectivity issues, which caused synching errors when trying to replicate data to local stations, resulting in more downtime.

Inability to print represented a critical issue, because when Hypertherm’s labeling process stopped, production stopped, and they were unable to get product out the door. Unfortunately, due to complexity of the legacy labeling system, it would take excessive amounts of time to figure out where the problem resided to get the system back up and running. This resulted in orders being delayed and credibility being lost.

### **Eliminate Occurrence of Mislabeling / Printing with Bad Data**

The existing system required a reliable network connection because it was synching information from an FTP server to a local database that resided on each workstation. If a failure occurred, there was no notification to the user and the labeling process continued, producing labels with incorrect data. Mislabeling or printing with the wrong data resulted in missed delivery deadlines, customers receiving incorrect parts, and costly returns. Incorrect labels had a downstream impact on customers, which could ultimately cause brand credibility issues and dissatisfaction.

Additionally, when a user selected a wrong printer and the job went to print, they would need to start the print process over, resulting in lost time and productivity. Hypertherm realized that they needed to establish a good technology foundation to eliminate, or at least reduce the role of human error in the occurrence of mislabeling. The company wanted to simplify their labeling approach so they could configure a single enterprise application, rather than having layers of third party solutions and custom code. Hypertherm wanted a solution, which was automated and allowed them to simply scan a part number to automatically pick the appropriate label template, the printer and the media, rather than requiring manual entry which added more failure points. They also wanted a system that was “poke-yoke” compliant, meaning workers could simply scan a tray to establish the appropriate part number rather than manually typing in part numbers to avoid mislabeling.

### **Address Connectivity Issues to Meet Suppliers Needs**

As a growing company, Hypertherm was expanding their production capacity by enabling relationships with third-party manufacturers to supplement production when demand was high. That meant they needed a labeling system that could grow with the company, so that external suppliers could access their system and seamlessly print labels for successful “dock-to-stock” shipping. The existing system depended heavily on network connectivity. However, the lack of a reliable connection, especially for suppliers in Europe and Asia, resulted in unreliable access to the system, dramatically affecting the supplier’s ability to produce labels.





Many suppliers were experiencing syncing errors when attempting to pull data from Hypertherm's labeling database which resulted in production down-time. In some cases suppliers needed to ship computers back to Hypertherm to be reconfigured, which required a full-day get them back up and running. As they continued to grow and add to their network of suppliers, Hypertherm needed to have these external suppliers access the same labeling solution that they utilized to ensure consistency and enable continuous operations.

### **Simplify Maintenance**

Hypertherm's custom labeling application was primarily developed and managed by one IT person which represented a single point of knowledge and failure for this complex, multi layered printing system. Hypertherm recognized the risk and inefficiency of having a single resource responsible for their mission critical labeling. Considering the amount of system downtime and the system intricacies, they needed a more streamlined, automated system to address this significant risk point.

Maintaining their complex labeling system, which included 35 printer stations, was a daunting task. Setting up each label station entailed a complex process. Each station required nearly one full day to prep in order to put in the base applications and all the customizations on top. It involved installing the license, adding layers of off the shelf software, the custom interface was installed, and they needed to ensure the correct templates were at the right stations or they wouldn't be able to print. Often when there was

an issue, there was no clear way to determine where the problem originated due to the complexity of the system. This represented a very clear challenge to the IS Operations Team who spent significant time troubleshooting and routinely rebuilding labeling stations.

### **Reduce Complexity of Label Design**

The person who programmed Hypertherm's previous system did almost all of the label design because it was so cryptic since it required custom coding. When a label needed to be created, what was on screen didn't have much correlation with what actually came out of the printer, so it required a tremendous amount of knowledge simply to design labels. Due to the complexity of their existing system it was necessary for IT to manage and develop code for producing any labels.

To institute best practices, Hypertherm was looking to extend control of the label design process to their marketing department. To do so, it required a solution that offered the ability for users in marketing to design labels without needing to rely on technical resources to write code for label design. To achieve the goal of enabling marketing to be responsible for label design, they needed a system to be WYSIWYG (What You See Is What You Get), so that the label they design on the screen is what actually gets printed.



## SOLUTIONS

*“Spectrum allows us to have an attractive product, whose labels display accurate information and effectively reach our customers.”*

*Isaac Carty, System Administrator, Hypertherm*

After finding out how [Loftware](#) could address all of their existing challenges, with their out-of-box, 100% browser based, all-in-one enterprise labeling solution, Hypertherm deployed [Loftware Spectrum](#) to meet their global, on-demand labeling print requirements. As the recognized global leader, with over 5,000 global customers spanning 100 countries, Loftware provides enterprise labeling solutions, deep experience in a wide range of industries, and an unparalleled customer support to provide Hypertherm with an all-in-one solution designed to meet its complex labeling requirements.

### **Web Based Deployment**

Utilizing a 100% browser-based application designed for global deployment dramatically reduced the burden of installation and simplified support, allowing Hypertherm to manage global operations and provide new levels of reliability and support for supplier labeling. The Loftware Spectrum solution also addressed the critical connectivity issues and supported suppliers with bandwidth challenges, while addressing complex labeling requirements and streamlining maintenance.

### **Centralized Application for Internal and External Use**

Hypertherm wanted to print and use the same application internally as they used for external customers to avoid having two multiple replicated databases. Spectrum’s streamlined, centralized approach, which allowed Hypertherm to drive data from a single source of data, offered greater control. By using a central database, Hypertherm was able to avoid the need to replicate data in remote locations, reducing errors and removing the risk of syncing the system’s data, while providing access from any point. This single repository ultimately simplified troubleshooting and streamlined processes.

### **Configurable Business Rules**

Loftware Spectrum’s Business Rules enabled Hypertherm to define logic to streamline and remove risks from label printing without expensive and time-consuming coding. This functionality, which helped eliminate failure points, allowed users to simply enter field values and scan parts to dynamically select printers and templates, populate label data, and apply conditional formatting.

### **Automated Print Process**

Offering a streamlined print user interface allows users to initiate labeling and offers the ability to set default quantities and adjust them down but not up, to eliminate potential stock piling of labels. With Loftware Spectrum, Hypertherm is able to initiate print jobs in an easily supportable way and greatly reduce the occurrence of mislabeling. In addition, Hypertherm achieves significant printing performance gains. Rather than waiting approximately 20 seconds for a job, once a user submits a job the printing is nearly instantaneous, eliminating confusion and redundant printing.

### **Business User Label Design**

With the new labeling solution, substantial knowledge wasn’t required to simply design labels. Loftware Spectrum’s browser-based WYSIWYG label design offered more flexibility and empowered the business users in marketing to manage new label design, as well as label changes. This eliminates the need for IT to get involved to write code for label designs while enabling a best practice of allowing marketing to take ownership of the design process.



## RESULTS

*“Labeling is the cap on the end of the manufacturing process that ties everything together to make sure that we have the correct package that reaches the correct customer – on time.”*

*Robert Kay, IS Operations Support, Hypertherm*

The deployment of Loftware Spectrum ultimately saved the company millions. By utilizing Loftware’s Enterprise Labeling Solution, Hypertherm was able to significantly reduce downtime, avoid mislabeling, simplify maintenance, and provide reliable labeling for its global suppliers.

Immediately after implementing Loftware Spectrum, Hypertherm realized significant results including:

- **Dramatically Reduced Downtime** - resulted in substantial savings
- **Reduced Mislabeling and Achieved Greater Consistency** - improved brand credibility and customer responsiveness, while increasing efficiency and productivity
- **Ability to Scale** - offered global deployment, unlimited access and expansion for continued growth
- **Streamlined Manual Processes** - resulted in added flexibility, convenience, and superior usability with reduced human error
- **Ease of Maintenance** - ability to easily meet demands and support new requirements

With unlimited capabilities and possibilities, Loftware Spectrum offers Hypertherm a flexible and scalable solution for future labeling requirements. As they look toward the future, Hypertherm will rely on Spectrum to integrate to its enterprise applications for transactional labeling, leverage the power of Business Rules to readily support any future business requirements, and scale to meet Hypertherm’s plans for continued growth.

### ABOUT LOFTWARE SPECTRUM

*Loftware Spectrum is the only all-in-one solution designed to address the complex labeling requirements of large organizations via a 100% browser-based interface. Building on Loftware’s unmatched history of innovation, Spectrum is the most robust solution in the industry; offering incomparable WYSIWYG label design, true enterprise integration, a powerful business rules engine, sophisticated device management, intelligent on-demand printing, and high performance native printing in a single software solution.*



### WEB CLIP SERIES

Robert Kay, IS Operations Support Leader for Hypertherm, discusses the implementation of Loftware Spectrum, a 100% browser based, all-in-one enterprise labeling solution to meet their complex labeling requirements and achieve new levels of reliability and scalability. View several topical clips that highlight some of the benefits of Loftware Spectrum.

<http://www.loftware.com/resources/2-minute-clips.cfm>