

# SHOPTALK

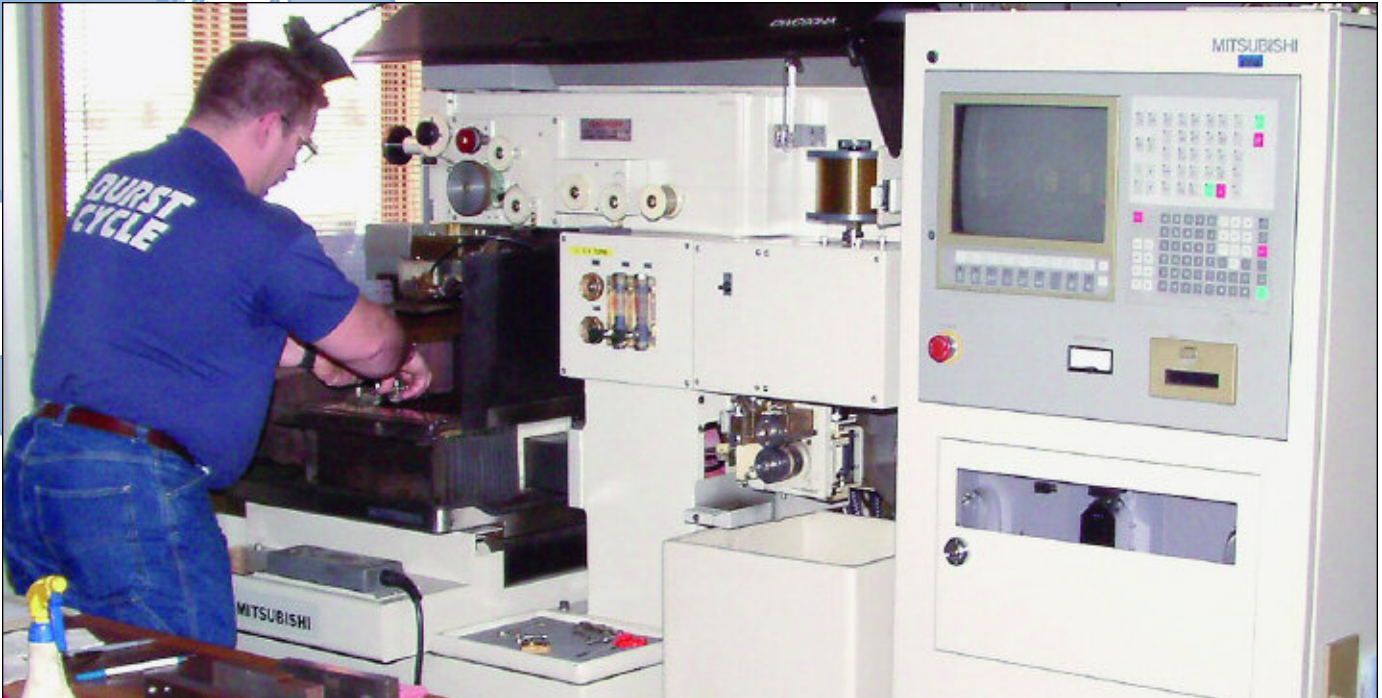
**METALWORKING SOLUTIONS FOR THE GREAT LAKES**



## **JOB SHOP PROFILE:**



***Design Manufacturing***  
***"One-Stop Shop"***  
***The Ticket for Success***



*Design & Manufacturing, Inc. provides services from product design to delivery. Prototyping, machining, fabrication, welding, assembly, and inspection are only a few of the services offered.*

## "One-Stop Shop"

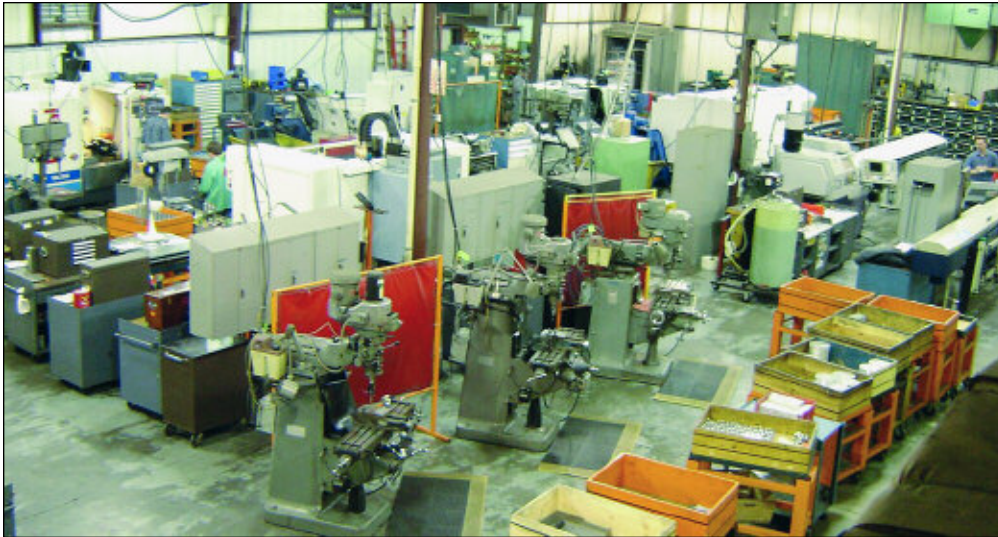
### Just the Ticket for One Company's Success

by Juli Ikonomopoulos

Having achieved and maintained the goal of being able to offer a wide variety of products and services to its customers, Design & Manufacturing, Inc. President Brian Hendricks says he couldn't be prouder of the fact that throughout all the highs and lows his company experienced over the years, they've hung in there and paved the way toward the success the company enjoys today.

#### **In the Beginning**

Reflecting back on more humble beginnings, Design & Manufacturing, located in Fisher, Ill., was incorporated in 1976 with a staff of six and utilized a 6,800-square-foot facility. Back then, the original objective was to design and manufacture a film handling system to be used in the projection booths of commercial theaters. "We got into the automated film handling business in 1977, but we really first started as a job shop," explained Hendricks, a 28-year company veteran.



*The Skimerator is used to control contamination of coolant in machines throughout the shop. The reduction in odors and skin irritation make working conditions more pleasant and reduce lost labor time. Other benefits include reduced coolant costs, maintenance expenses, and machine downtime.*

## One-Stop Shop

Though the company's primary business still remains seated in the automated film handling industry, Hendricks, who took over as company president in 2001, says, "Because of our diverse product and service offerings, I like to think of our company as a one-stop shop for customers."

Design & Manufacturing has evolved over the years and today offers a full range of manufacturing, fabrication, and assembly capabilities serving a wide range of customer needs. Their facility has grown to 37,000 square feet with 50 employees, and boasts state-of-the-art equipment and in-house computerization of inventory, costing, and pricing. From short runs to specialized high precision parts, to product development and machine tool work, the company offers cost-effective solutions for the design and manufacturing needs of its customers.

### Tackling Challenges Head-On

"Our biggest obstacle," explained Hendricks, "was when the movie theater industry hit a big downturn in 1999, and our business fell off by 50%." But the company was already taking steps to diversify back then, which undoubtedly helped the bottom line. And it is diversity that has catapulted Design & Manufacturing to the top of their game. "We are able to offer customers a broad

spectrum of services and maintain a diverse customer base simply because we're involved in so many areas. During boom and bust times, a diverse company will keep things very level," explained Hendricks.

## The Skimerator

In the early 1990s, Design & Manufacturing's machine shop faced the problem of coolant spoilage. "Tramp oils on the surface of the coolant promoted bacteria buildup which in turn caused the coolant to spoil and smell, forcing us to dispose of 100 gallons of coolant a month," said Hendricks. "So we decided to design our own oil removal system."

In 1993, the company succeeded in developing a device that was extremely effective in removing oil from coolant sumps, and had the additional benefit of continuously aerating the coolant, therefore eliminating bacteria build-up.

The idea originally came from Russ Bahlenhorst, a coolant salesperson. He fashioned a crude version of an oil skimmer from a coffee can and a five-gallon coolant pail. "Russ was calling on us at the time because he knew we were trying to solve a spoiled coolant problem," explained Hendricks. "He had a garage invention for us to try out. We worked with the idea and ended up with the

Skimerator. We've been selling it to other machine shops for 12 years now."

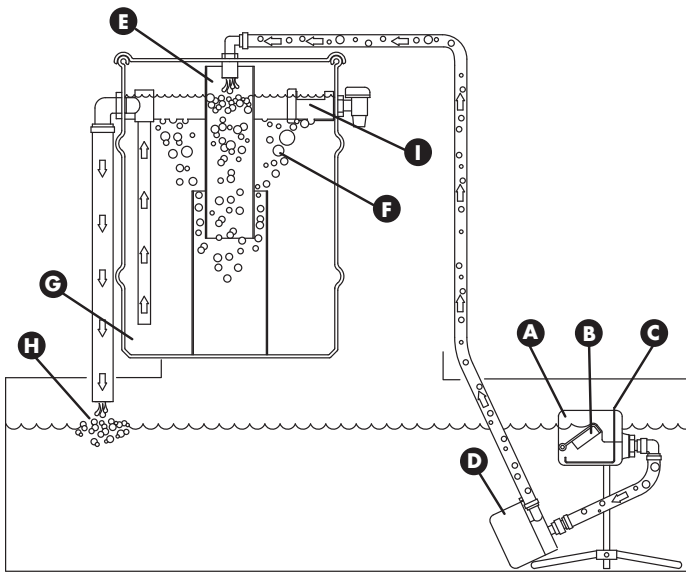
"The primary methods for removing oil from coolant sumps in the past have been belt and disk skimmers, and though they work they rarely are ever able to take much out so you're left with a layer of oil on the coolant surface, and oil is primarily what causes coolant spoilage," said Hendricks. "The Skimerator completely removes that layer of oil. In addition, the Skimerator continually aerates the coolant and further retards bacteria growth."

## The True Key to Success

While diversification is a very important element to Design & Manufacturing's success, the most valuable asset they have is the people. Hendricks explains: "Overall, what our success boils down to is our employees. Our whole company and product and service offerings couldn't be realized without our staff. We have a dedicated group of employees and their emphasis is to satisfy the needs of our customers; without that, we wouldn't be the true success that we are today."

# SKIMERATOR®

*The simple, reliable way to separate "tramp" oil and aerate coolant.*



Oil floating on the coolant is skimmed off at the skimmer box (A). The floating gate (B) allows skimming as coolant levels fluctuate. Metal particles are captured by a removable screen (C). An electric or air powered pump (D) pumps the liquid to the reservoir. As the oil/coolant mixture enters the reservoir (E) the first stage of aeration takes place. As the mixture settles, oil floats to the top of the reservoir (F) and cleaner coolant settles to the bottom (G). As more fluid enters the reservoir, the cleaner coolant is forced through the stand tube where it returns to the sump. As the coolant enters the sump (H) the second stage of aeration takes place. When a significant amount of oil has accumulated in the reservoir, the oil is drained off by adjusting the weir assembly (I) and opening the faucet until coolant reaches the weir level.

## Design Manufacturing

302 West Division Street • Fisher, IL 61843

PH: 217-897-1172 • FX: 217-897-1924

[www.design-mfg.net](http://www.design-mfg.net)