

# Marine

## Case Study:

Hocut® CM-43 enables leading marine equipment manufacturer to improve plant productivity while improving EHS

### The Unique Challenge

The largest global builder of marine propulsion systems manufacturing engines, propellers, parts and controls used a popular soluble oil coolant in one of their major North American plants and was experiencing multiple production and EHS issues:

- Severe foaming in machines with chip blasters
- Residues deposited on machine fixtures and on the inside of windows
- Employees complained of misting and rancid odor. Bacteria readings were high. Coolant sumps had to be dumped, cleaned and refilled every 6 months.



*Ship propulsion engine*

### The Houghton Approach

Houghton proposed switching from the competitor's coolant to the superior coolant, Hocut® CM-43, which is a heavy duty soluble oil metal removal fluid specially formulated to provide long-lasting biostability, high detergency, superior corrosion protection, and low foaming in high pressure applications.

### Results and Benefits

With the simple change to Hocut® CM-43, this manufacturer created a healthy, odor-free working environment, improved operations, and realized significant improvements in their bottom-line:

- Foamless high-pressure machining operations
- Residue-free machine fixtures and windows
- Elimination of misting and odor complaints
- Extended coolant sump life from 6 months to over 1 year:
  - ⇒ \$25,000 annual savings in coolant consumption
  - ⇒ Greater up-time: Fewer line shut-downs per year for coolant maintenance increased machining capacity.
- 20% improvement in tool life resulted in \$50,000 annual savings



*Hocut® CM-43 provided superior productivity, increased plant capacity, lowest production cost, with the cleanest-running conditions.*



HOUGHTON®

# Fluid Partnerships Making A World Of Difference

Case study after case study demonstrates why Houghton International is leading the global Metalworking Fluids market today. More than 20,000 customers worldwide across a diversified range of manufacturing processes have improved operations due to the mission-critical product portfolio of Houghton.

## Building A Team For Customer Success

An approach that combines chemistry and technology with business expertise uniquely positions Houghton to support customer growth and changing market requirements. With around 2,000 employees in 80 countries, and 12 manufacturing facilities in 10 countries, we are well prepared to capture regional and local business opportunities and support growing expansion of global customers.

Through innovation, expertise and efficiency, our engineers and business specialists are able to build a team with the customer that ensures product optimization, employee health and safety, procurement and logistics management, and reduction of environmental impact. By providing both the solution to customers' fluid challenges and the foundation for continued improvement, Houghton offers a proven method of sustainable profitability.

***For immediate consideration and evaluation of your fluids needs, and to request additional support material, please contact your Houghton International sales representative at [www.houghtonintl.com](http://www.houghtonintl.com)***

## Houghton International Product Portfolio



● Metal Removal	.....	35%
● Hydraulic Fluids	.....	14%
● Steel Rolling	.....	12%
● Metal Finishing	.....	12%
● Non-Ferrous Rolling	...	7%
● Heat Treatment	.....	7%
● Metal Forming	.....	5%
● Metal Protection	.....	4%
● Metal Cleaning	.....	3%
● Other	.....	1%

## Established Client Relationships

Houghton International has long-standing partnerships with over

***20,000 Leading Global Customers***

serving their metalworking fluids needs across a wide range of applications and diversified end-markets including ***automotive, aerospace, fabricated metal goods, bearings, energy, non-ferrous and steel.***



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