coolants

drawing/stamping lubricants

cleaners

rust preventives

industrial lubricants

BRIGHTON LABORATORIES, INC.
MANUFACTURING CHEMISTS

BRIGHTON LABORATORIES, INC. MANUFACTURING CHEMISTS

ISO 9001 CERTIFIED

Cost Effective Fluid Solutions for the Metalworking Industry

Table of Contents

Case Studies:

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Cost Effective Fluid Solutions for the Metalworking Industry

Fluid Recycling Saves $100,000

CASE STUDY: Tier One Automotive Supplier Saves $100,000 Annually with Drawing Compound Recycling Solution

Challenge

One of the world's largest automotive suppliers was using a soluble oil drawing compound on many of its mechanical transfer presses to make transmission components for cars and trucks.

Rising oil and chemical prices led them to ask Brighton Labs if they had any ideas that could help them better control fluid costs without sacrificing fluid or component quality.

Solution

Brighton Labs worked closely with their customer's Plant Manager to better understand its stamping process, press tolerance, and drawing compound fluid requirements.

The insight gained as a trusted partner and the subsequent analysis of the results led Brighton Labs to propose the development of an innovative, cost saving recycling system.

Brighton Labs customized a fluid recycling system and a quality control process that enabled the customer to recycle its drawing compounds in-house. The solution included a new drawing compound fluid to meet its chemical specifications and resist bacteria and fungus growth.

Brighton Labs installed five recycling units at five mechanical transfer presses using the virgin drawing compound. The compound is mixed on site to the specified ratio and applied to the part.

The spent compound is channeled into the recycling unit where it filters the fluid within minutes. The recycled fluid is then sent back to the press, applied to the part, and the process starts over again. Some makeup with virgin fluid is required since some of it is dragged out on each stamped part.

Results

This Tier One automotive and truck supplier has reduced its fluid usage by 30%, saving roughly $100,000 before expenses in year one. The cost of the recycling program, including the recycling unit, plumbing, electrical work and ongoing maintenance was about $4,000 per press.

Brighton Labs estimates that the lifecycle savings for this Tier One supplier will be $480,000 over five (5) years or an additional savings of $100,000 per year.

Returns will vary by press size, but the bigger the press, the greater the savings.

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Smoot Dispersion Reduces Downtime

CASE STUDY: Customized Coolant Eliminates Costly Smoot Problem

Challenge

One of the world's leading manufacturers of automotive and diesel engines discovered their coolant was leaving an unsightly residue on machined engine parts as well as washed parts. The result of this smoot problem led to unplanned downtime to clean out the sumps of the CNC machines and the part washers, and led to unexpected increased costs due to excessive waste hauling and overtime.

This Tier One supplier contacted Brighton Labs to consult on their issue. The Brighton Labs team made an on-site visit, reviewed the customer's system, saw for themselves the smoot problem, and took samples of the coolant back to the lab.

Solution

In the lab, the Brighton Labs team analyzed the coolant's molecular properties and put it through a series of 15 tests to determine an appropriate solution to prevent the smoot from occurring.

As a result of the testing, the Brighton Labs team developed a customized coolant that met this company's specifications for lubricity, odor, foam, and rust protection without the smoot build-up.

Results

Brighton Labs customized coolant solution eliminated the smoot problem, leading to increased productivity and profitability for the manufacturer.

Smoot was no longer clinging to engine parts, equipment, or overloading the part washers. This allowed the manufacturer to get production back on schedule to meet their goals and budgets.

More parts were able to be moved through the system increasing profitability.

Costs were reduced:

- Downtime was reduced, saving money and helping the company meet its production goals.
- Maintenance and disposal costs were reduced since there was no need to continuously clean out the sumps.
- Coolant usage was reduced since their systems didn't need to be cleaned out and recharged as often.

And, from an environmental perspective, this leading manufacturer of diesel and automotive engines was able to meet EPA standards for clean water and clean air in a manufacturing plant (volatility).

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Bacteria Control Saves $50,000

CASE STUDY:
Minimizing Bacteria Growth in Coolants Saves Manufacturer $50,000 Annually

A world-class manufacturer of cutting tools for the metalworking industry serving the needs of automotive, aerospace, agriculture, and infrastructure manufacturers was forced to dump their machining coolant sumps every two weeks due to bacteria build up.

The bacteria that had built up was reducing coolant lubricity during the machining process and was potentially jeopardizing finished tool quality. Bacteria in the coolant can lead to rust issues and cause the emulsion to separate, reducing its lubricating ability. To maintain quality control, the manufacturer was forced to fresh charge its coolant every other week. That's an expensive and timely endeavor to continually purchase new coolant, shutdown the manufacturing line, and re-charge the system.

Solution

Frustrated with its original supplier's inability to fix the problem, the manufacturer called Brighton Labs to investigate the bacteria problem and propose a solution. Brighton Labs sent its team to the site to gather samples to analyze them back in the lab. The series of tests conducted back at Brighton Labs indicated a positive bacteria outcome.

Based on the company's coolant specifications, the type of tooling being used, the parts being made and the substrate that was used, Brighton Labs was able to recommend a solution that would provide maximum lubrication and minimize bacteria build up.

Results

The company was able to save $50,000 in the first year alone on coolant, tooling savings and shut down costs.

Instead of using 275 gallons of coolant per month, this world-class manufacturer of cutting tools for the metalworking industry was able to maintain and budget for 45 gallons per month. Instead of purchasing 3,300 gallons annually, they were able to cut back to 550 gallons per year.

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Cost Effective Fluid Solutions for the Metalworking Industry

About Brighton Laboratories

Cost Effective Fluid Solutions for the Metalworking Industry

Brighton Laboratories provides a complete line of synthetic and petroleum oil based products for the metalworking industry. Our products are designed for the toughest metalworking conditions, and to exceed our customer's quality standards.

Our Mission: Continuous Improvement

Brighton Laboratories is dedicated to a philosophy of continuous improvements to ensure our products perform to the manufacturing needs of our customers. We achieve this commitment through:

- Raw material evaluation and performance demands
- Consistent manufacturing techniques supported by chemical and physical testing

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Products

Our products provide stable solutions, are easy to use, bacteria resistant and waste treatable. They include:

- Coolants
- Drawing compounds
- Cleaners
- Rust preventives
- Lapping compounds
- Other various lubricants

Industries Served

Specialty products are also manufactured for specific jobs. Many of our products also have approval — and are in use — by:

- Automotive
- Trucking
- Aviation
- Defense
- Construction
- Agriculture
- Appliance
- Steel

Chemical Management Services and Private Labeling

Not only are we a manufacturer, but we supply chemical management services that will improve your company's performance and financial position. We are also involved in private labeling — we'll manufacture for you and put your name on the product, without any reference to Brighton Laboratories.

Brighton Laboratories History

Brighton Laboratories was founded in 1989, by current president, Gregory Yates. The first office building and manufacturing plant was located in Whitmore Lake, Michigan. During the years between 1990 and 1997, Brighton Laboratories experienced high levels of growth and by the end of 1997 the original manufacturing plant just wasn't large enough to keep up with the high levels of demand.

Brighton Laboratories moved into a larger facility. Since then, Brighton Laboratories has continued to reinvest in the facility and its assets. A large investment was made to purchase new blending tanks, storage tanks, and other equipment to prevent any disruptions in the manufacturing process and to ensure on-time delivery.

Demand continues to grow and Brighton Laboratories continues to reinvest in its facilities, developing new products and providing new services to meet the needs of its customers.

Services and Benefits

Benefits of Working with Brighton Labs

Cost Effective Solutions

Brighton Labs is committed to solving your fluid management problems with:

- Low cost solutions
- Long lasting products
- Turn-key solutions
- Exceptional product performance even under harsh conditions

Better Value

Brighton Labs provides you with fluid solutions that balance years of worldly experience with enthusiasm and product innovation.

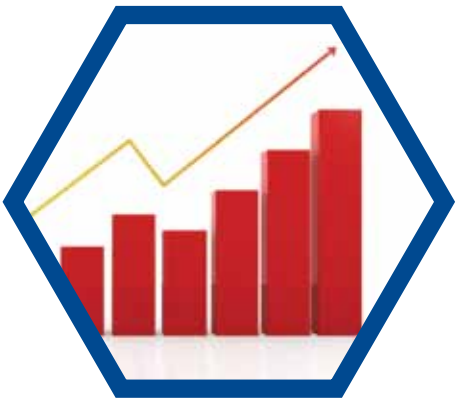
- Serving the metalworking industry for over 25 years
- Unmatched, experienced technical support to solve the most complex problems
- Commitment to customer service 24 hours a day, seven days a week

Long Lasting Quality Materials

Brighton Laboratories manufactures a complete line of synthetic and petroleum oil based chemistries.

Long lasting, premium virgin materials:

- Clean and pure
- Not recycled
- Not re-used



Premium Performance

Brighton Labs products are custom formulated and manufactured for the toughest metalworking operations and designed to meet or exceed industry standards and specifications.

Just-In-Time, Easy Access

- Brighton Labs forecasts its customers demands and keeps needed product in stock.
- Expedited delivery and shorter lead times.
- Simple re-ordering:
  (Phone) 810-225-9520
  (Toll Free) 866-928-1201
  (Fax) 810-225-9528
  (Email) support@brightonlabs.com

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ISO 9001 CERTIFIED

Cost Effective Fluid Solutions for the Metalworking Industry

Brighton Labs Core Products

Coolants

Our full product line of machining coolants were developed for the machining and grinding of all ferrous and non-ferrous metals. Our products provide superior cooling, cleanliness and long emulsion stability. Additionally, we employ a biocide/fungicide package that keeps solutions in peak condition for extended periods. Our product line includes a series of:

- Semi-Synthetics
- Soluble Oils
- Synthetics
- Straight Oils

Rust Preventives

Our premium rust preventives are formulated to provide excellent corrosion protection on a variety of metal substrates. Water-soluble dilutions can provide dry-to-touch and paintable surface finishes. Many of our products are weldable and are also compatible with many adhesive-bonding systems. The protective films can be removed with a mild alkaline cleaner at ambient temperatures. The constituents of many of our products are biodegradable and non-hazardous when used as intended. Our product line includes the following:

- Dry Films
- Soluble Oils
- Straight Oils
- Water-Soluble Synthetics (Dry-To-Touch)
- Solvents (Water Displacing/Water Separating)

Stamping/Drawing Fluids

Our stamping and drawing fluids are formulated to be used “neat” for deep draw applications or reduced with water for lighter blanking and piercing operations. Mixtures form very stable solutions and the residual films provide excellent short term rust protection. A mild ambient cleaner will remove dried residual films and in many cases cold water will remove our products if cleaned shortly after forming. Our products are compatible with current waste-treatment processes, weldable, biodegradable and non-toxic. Our product line includes:

- Synthetics
- Semi-Synthetics
- Soluble Oils
- Straight Oils
- Vanishing Oils
- Dry Film Lubricants
- Vegetable Seed Oil Lubricants
- High Strength Steel Lubricants

Cleaners

Brighton Laboratories has formulated a full line of metal cleaners to be used at ambient temperatures or heated to 150°F for more tenacious soils. Our products contain special water conditioners that keeps scale off the washers and water hardness from building up on the spray nozzles. Many of our surfactant packages are low foaming and free rinsing. Our product line includes cleaners for ferrous and non-ferrous substrates:

- Acid Cleaners
- Alkaline Cleaners
- Emulsion Cleaners

Brighton Labs Core Products

Lapping Compounds

Our enhanced product line of lapping compounds consists of an abrasive silicon carbide formulated to properly finish and polish metal surfaces to ensure precision mating of metal gear sets. Our lapping compounds were developed to suspend the dense silicon carbide at a low viscosity. In addition, our compounds are very pourable and pumpable. Any residual film will easily wash off at ambient temperature with most alkaline cleaners. Other benefits include:

- Improves gear lapping efficiency
- Optimizes the quality of the part finish
- Minimizes gear noise of finished gear sets
- Excellent stability and long shelf life
- Maintains fluidity during lapping cycle
- Cleans in low temperature cleaners

We offer our lapping compounds in many different silicon carbide profile sizes for specific applications.

Industrial Lubricants

Brighton Laboratories has developed many different types of industrial lubricants for everyday plant use. Our industrial lubricants are formulated with the highest quality virgin base oils and lubricity additives on the market today. We formulate our products to reduce friction, heat, and wear, resulting in extended equipment life. We also offer our customers the opportunity for our lab to develop custom products to meet their specific lubrication requirements. Our product line includes:

- Gear Oils
- Way Oils
- Hydraulic Oils
- Airline Oils
- Spindle Oils

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Brighton Labs Line Card

Drawing/Stamping Compounds

- Synthetics
- Semi-Synthetics
- Soluble Oils
- Straight Oils
- Vanishing Oils
- Dry Film Lubricants
- Vegetable Seed Oil Lubricants
- High Strength Steel Lubricants

Metal Removal Fluids/ Coolants

- Soluble Oils
- Straight Oils
- Lapping Compounds
- Synthetics (Non-Petroleum)
- Semi-Synthetics
- Vegetable Seed Oils

Metal Cleaners

- Acid Cleaners
- Alkaline Cleaners
- Emulsion Cleaners

Rust Preventives/ Protective Coatings

- Dry Films
- Soluble Oils
- Straight Oils
- Water Soluble Synthetics (Dry-To-Touch)
- Solvents (Water Displacing/Water Separating)

Industrial Lubricants

- Gear Oils
- Way Oils
- Hydraulic Oils
- Airline Oils
- Spindle Oils

General Cleaning Products

- Floor Cleaners
- Degreasers
- Truck/Vehicle Wash
- Hand Soaps
- DFE (Designed For The Environment) Certified Green Cleaners

Cost Effective Fluid Solutions for the Metalworking Industry

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11871 Grand River Rd. | Brighton, MI 48116-8505
Phone 810-225-9520 | Toll-Free 866-928-1201 | Fax 810-225-9528
www.brightonlabs.com | support@brightonlabs.com