

Beyond lubrication above expectation.



# METALWORKING LUBRICANTS

Integrated solutions for all machining operations  
& any type of metal



[www.surfchems.com](http://www.surfchems.com)

# Beyond Quality Products & Services

At **SurfChem**, terms like quality, innovation, sustainability, customer satisfaction are not just words. They are significant values embedded in our culture and our IQ, or better, our I<sub>2</sub>Q – Innovation, Integrity, Quality.

We offer much more than products that “get the job done”, because, at SurfChem, quality and performance are just our baseline. We set the highest standards in terms of wear protection, decreased surface roughness and waste reduction while we provide the most robust formulations in the market. Furthermore, we put extra focus on sustainability and efficiency – always being environmental aware – delivering products and services that differentiate us.

## Optimising your Processes, Tackling your Challenges

30 years of experience in metal working technologies made us build a strong reputation for designing high-end, sustainable solutions and delivering expertise and specialized technical support services to industries with demanding processes & material performance requirements.

With a broad product portfolio and a customer-orientated philosophy, we have the know-how to satisfy our customers' emerging needs. We monitor the markets, we understand the challenges – existing and latent – and we provide the optimum solutions tailored to each customers' requirements.

# Our World

Integrity



Quality



Technical  Support



Innovation



Trust



At SurfChem, we have a customer-oriented view of business, staying tuned to changing customer needs and marketplace's conditions as well as creating long-term relationships with them, based on customer value and satisfaction.

Together  
we can  
make waves.



#### INNOVATIVE SOLUTIONS

A long history of more than 30 years coupled with a strong Research & Development capacity, allow us to innovate and stay ahead of the competition. We offer the most technologically advanced & efficient chemical solutions in the metal working sector.

#### WE ACHIEVE IT TOGETHER

There is no innovation without challenge. We are always up for a good challenge! Working hand-to-hand with our partners listening to & understanding their needs, aspirations and challenges, enables us to respond immediately with specialized, tailor-made solutions.

#### CONTINUOUS IMPROVEMENT & SUPPORT

Our teams engage, train & support all relevant stakeholders to receive constant feedback. This bottom-up approach is highly effective as we believe that small ideas can make a large impact, such as improved efficiency & focus and decreased time-wasting.

#### QUALITY & PRODUCTION OPTIMIZATION

The rules of metal working are **Quality, Accuracy & Efficiency**. With our LEAN chemical solutions, you can enjoy constant quality, maximized production capacity, minimized risks & wastes and increased sustainability that will magnify the efficiency of your production.

#### YOUR PROFITABILITY

Using the most innovative chemicals & services will lead into efficient production processes & therefore optimized business. Maximized production capacity & minimized waste are translated into total cost reduction & commercial advantage.

**So, it is time to change, isn't it?**

Products alone do not overcome the industrial challenges.  
 But the “**package**” that comes with the product does.

The **SurfChem “package”** consists of:



## The LEANLub

### Robust lubrication, better results!

Our LeanLubs, offer non-stop quality due to expert formulations with the latest lubrication additives & chemical technology.

### Protect your tool!

Decrease tooling costs & surface roughness by wear protecting your tool's life.

### Use your machines more-for-less!

Machine availability, with increased speeds, increases productivity, more pieces per shift = more \$\$\$.

### Minimizing Maintenance

Thanks to anti-ageing agents, our fluids last & perform longer, with 0 stains / corrosion on the equipment & minimized wastewater volume.

### Low Initial & General consumption

Long-life fluids, combined with good stability and rinsing ability, offer lower TOTAL consumption (initial concentration – maintenance feed).

### Human and environmental friendly

We are especially happy when we make a workspace easier & better to work in (minimum odours, smoke, fog) and always in environmentally friendly ways!

## The Support

### Lifelong Training

When we stop learning, we start to decay. Our team offers technical knowledge & trains anyone involved in the process to optimize the fluid's usage.

### Monitoring, Planning & Changeover

Every production has it's own needs and our experts are on the go to support them!

### Never stop listening to you!

Either consultation on a very special process/ metal, or for a new product development, we are always there to listen to you, in order to offer innovative solutions!

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# Why Does The Lube Matter?

What is it, that costs 1%  
of the process but accounts  
for the rest 99%?

The lubricant,  
coolant, cutting fluid,  
you name it!

Oooh yes! The lube!  
But why it could  
be such important?



## **Metalworking processes are shaping our world.**

From marine & automotive to construction & defence, worked pieces are everywhere around us. The fluids used in those processes, even though they account for maybe 1%, can account for maybe more than half of wastes (wastewater, defects, maintenance, cleaning etc.). Therefore, the right choice of lubricants, can offer you direct benefits and satisfaction top-to-bottom.



# Why Does The Lube Matter?

## TOOL PROTECTION

The lubricant is the protector of the tool, in terms of wear and heat, extending its life. As a main contributing factor to “cost per work piece”, an increase in tool life will show a vertical decrease in costs.



## SURFACE FINISH

The quality of the worked piece. Having the right lubricant will make your process robust – clean of in process defects like galling, surface cracking, heat affected zones, corrosion etc. The right lubricant will eliminate reprocessing and faulty pieces, decreasing “cost per work piece”.



## CONSUMPTION

One of the factors that contributes to “cost per work piece”. The right choice, should be a lubricant that works at standard concentrations with long bath life.



**It is simple:**

## ODOUR

Usually a treat of oil derivative lubricants with low bath life. The proper lubricant will stay odourless for their entire lifetime, making a nice work environment.



## EQUIPMENT PROTECTION

Either you have a brand new CNC machine or an older version, you want to keep it clean and rust free. The right coolant will not corrode or stain your CNC machine’s bed, walls or drainage, keeping it in a “brand new” all the time!



## LUBRICANT LIFE

It is directly associated with production up-time & oil consumption costs. Man-hours, consumption & waste management costs are just some of the disadvantages that kill your productivity. The right lubricant will have extra long bath life to keep your production up-time maxed out and consumption & waste-disposal costs at a minimum!



# Our Culture...



## Choosing the Proper solution

In this contemporary era, EVERYONE is an expert. They offer a BIG brand, a lubricant and a price. That is because they "know" your needs better than you.

### We do not do think this way.

Our deep chemical knowledge and technical experience dictates us to ask questions. Questions that will give us the opportunity to understand your needs, and offer the PROPER solution based on the unique needs of each production.



## Some examples would include (but not limited to) Productivity, Efficiency, Waste increase etc.

More than 80% of our team consists of engineers, chemists & technologists dedicated to sustainability. With the LEAN philosophy deeply in our minds, we engineer & create lubricants that not just get the job done.

## Everyone can offer Quality. **But at what cost?**



### With the highest quality output in mind, we do have some extra points to tick...

- ✓ If it is not Productive, we do not formulate it
- ✓ If it is not Efficient, we do not put it in your machines
- ✓ If it is not Waste-reductive, we simply reject it

Therefore, If it is not truly sustainable, we do not launch it in the market



### Appropriate Training & Support

We want our lubricants to be used in the most optimal way. That can only be achieved by:

- ✓ Fitted training as per your process & production needs
- ✓ Knowledge sharing on bath make up, control and waste disposal
- ✓ Non-stop technical support

This way we can turn any question / observation / challenge that you face (VIA our very active R&D and Quality teams) into an alternative solution. This enables us to make your day-to-day work easier & more efficient.



**This is the LEANlub Culture**



# ...Your Benefit.



## Our non-negotiables:

Cutting edge industries like Aerospace, Automotive, Defence, Marine etc. have demanding specs, with very limited (or not at all) allowances. That have to be guarded against defects. That have to be cost-efficient to stay in competition. That are continuously improve and therefore constantly looking for lubricants that offer the whole "package".

We successfully serve such industries for more than 20 years, offering lubricants & chemicals that make waves!  
 More specifically:



### ACCURATE QUALITY

Using the latest chemical technologies to offer minimized wear & maximized accuracy leads to:

- ✓ excellent surface finishing worked pieces & corrosion protection
- ✓ while prolonging the life of the tool

Every time.



### PRODUCTIVE SUSTAINABILITY

The right chemical/lubricant will increase the output of the process. Our lubricant & chemical solutions increase the up-time & of course the Cost-efficiency of the metalworking processes by radically:

- ✓ Reduce maintenance times (0 - coloring of the machine, 0 - corrosion of the equipment, extra-long lubricant life for minimized bath cleaning/changing/discarding/replenish)
- ✓ Minimize defects for the whole life of the tool (new to fatigued to its end of life). Having a robust process means less defects, re-works & quality concerns
- ✓ Increased metal removing rates & speeds
- ✓ Low consumption due to formulation & chip rinsing ability

Use less for more.



### WITH RESPECT TO HUMANS & THE ENVIRONMENT

We respect those who work with lubricants & also the environment we all live in. Hence, we want metalworkers to be happy using our lubricants. As a result we offer them formulations that eliminate:

- ✓ Odors / Smells and Fog
- ✓ Ingredient that would put their well-being at risk

On the same basis, we care about the environment. With a range of eco-friendly products that ensure environmental protection & ecology.

2021

# Continuous improvement philosophy



## LEAN metal working lubricants' characteristics

As our broad portfolio covers all processes & steps, with our **LEANlub** technologies, you can transform your metal working machining to a high performance, productivity and a sustainable process.



### Hassle-free application



#### Time & focus are of extreme importance

We engineer lubricants, coolants & cutting oils that promotes our partners to decrease maintenance work and allow them to shift their focus to other production needs.

### Non-stop Performance & Quality



#### Certified ISO 9001, 14001

In a fast-paced industrial environment performance & quality are constitutional values. Anyone can offer baseline performance – We guarantee above expectation performance and quality without any gaps.

### Optimum cost efficiency



#### Price vs Cost

Using cost effective lubricants & coolants is way beyond price, it is about calculating the total added value in production. To create the next-gen of metal working lubricants & cutting oils, we take under consideration factors that will really add value to your product, such as people focus - manhours, chemical consumption, waste disposal etc. That is how we beat the competition!

### Optimum Lubricity & Robustness



#### How robust is your cutting oil or coolant?

Our cutting oils, lubricants & coolants are designed to offer the maximum lubricity which leads to a perfect work piece but also truly extended cutting tool life. Along with extra long bath life (no need to change baths every now and then), they can perform in non-stop production demand, at any cutting speed WHILE protecting the tool and perfecting the surface of any work piece. That is why Automotive, Construction, Marine, Oil & Gas industries trust our robust lubricants for all metals and processes!

### Radical waste-decreasing



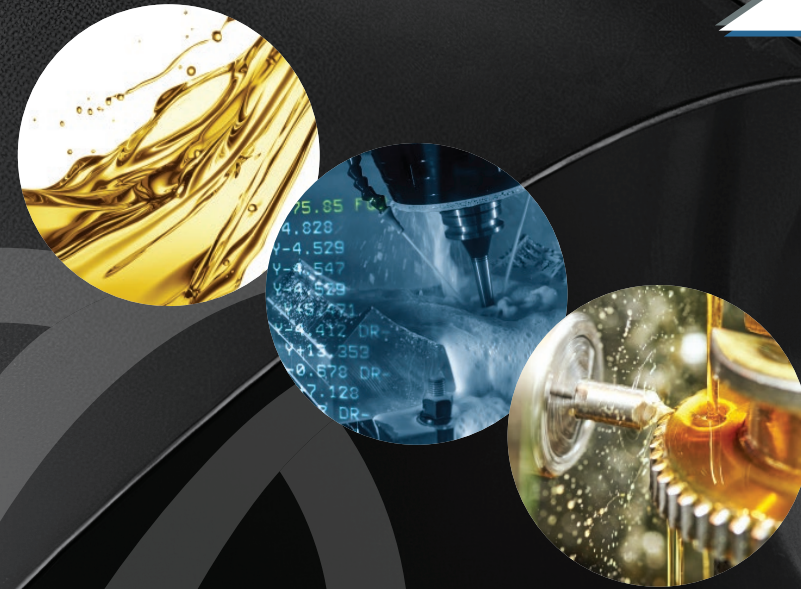
#### Zer-0-waste lubricants

With Zer-0-waste chemical technology we can radically reduce by-products. We are leading the way in profound waste reduction with innovative next-gen formulations.








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# OUR RANGE AT A GLANCE

- 
**For all cuts, even the most demanding**  
 tapping, deep hole cutting, punching, threading, deep drilling, turning, sawing, milling, routing, gear cutting, lathe work etc.
- 
**On any type of metals**  
 stainless steel, titanium, aluminum, inconel, high nickel steel alloys up to 45 Rockwell hardness.
- 
**With a few drops**  
 for hand tapping, hand threading, punching processes
- 
**And Continuous Flow**  
 at gear cutters, CNC, tapping-threading automatic machines, revolvers etc.



# OUR LUBRICANTS AT A GLANCE

- 
 Are compatible with **all metals**, even the hardest
- 
**Minimize** the risk of corrosion
- 
 Are **easily** applicable and manageable products
- 
 Are **environmentally-friendly** throughout their entire life
- 
**Improve** cutting speed, **increase** tool life, **reducing** downtime & tooling costs
- 
 Deliver **optimum results** and **excellent surface finish** regardless **the process** and the **kind of cut** from deep drilling to honing
- 
 Give lighter color, **improved** odor, and **upgraded** oxidation stability



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# Industries

**Aluminium  
Extrusion**



**Automotive**



**Aerospace**



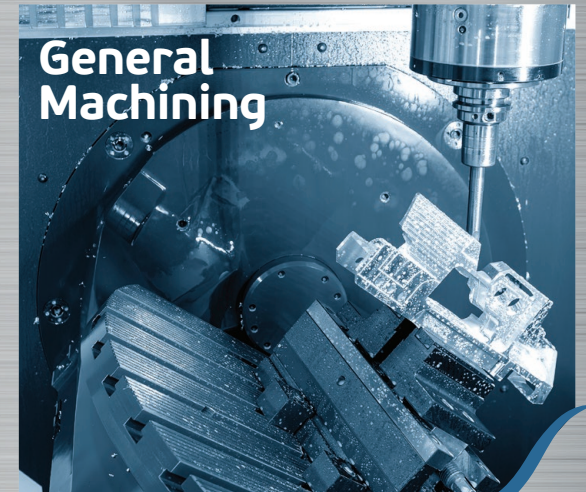
**Defense**



**Marine**



**General  
Machining**



# Product Selector

|   |                      | Type        |           |                |                    |          |               |           | Application |     |          |               |         |           |        |         |         |          |        |                   |                                    | Metal Type |         |               |              |              |             |           |           |        |                 |               |                  |                  |                |                          |                 |   |
|---|----------------------|-------------|-----------|----------------|--------------------|----------|---------------|-----------|-------------|-----|----------|---------------|---------|-----------|--------|---------|---------|----------|--------|-------------------|------------------------------------|------------|---------|---------------|--------------|--------------|-------------|-----------|-----------|--------|-----------------|---------------|------------------|------------------|----------------|--------------------------|-----------------|---|
| PRODUCTS  |                      | Water Based | Synthetic | Semi-synthetic | Water miscible oil | Neat Oil | Biodegradable | Vegetable | MQL         | CNC | Drilling | Deep Drilling | Tapping | Threading | Boring | Milling | Turning | Punching | Sawing | High-Speed Sawing | Extreme Pressure Cutting Processes | Pickling   | Welding | Laser Cutting | Cold Forming | Wire Drawing | Passivation | Aluminium | Magnesium | Copper | Titanium Alloys | Nickel Alloys | Aluminium Alloys | Magnesium Alloys | Ferrous Alloys | Steel/ Galvanized Alloys | Stainless Steel |   |
| ALUMINIUM DRY CUTTING                               | Surf CUT series      |             | ⊗         |                |                    | ⊗        |               |           | ⊗           |     |          |               |         |           |        |         |         |          | ⊗      | ⊗                 | ⊗                                  |            |         |               |              |              |             | ⊗         | ⊗         |        |                 |               | ⊗                | ⊗                |                |                          |                 |   |
|   | Surf CUT I           |             | ⊗         |                |                    | ⊗        |               |           | ⊗           |     |          |               |         |           |        |         |         |          | ⊗      | ⊗                 | ⊗                                  |            |         |               |              |              |             | ⊗         | ⊗         |        |                 |               | ⊗                | ⊗                |                |                          |                 |   |
|   | Surf CUT II          |             |           |                |                    | ⊗        | ⊗             | ⊗         | ⊗           |     |          |               |         |           |        |         |         |          | ⊗      | ⊗                 | ⊗                                  |            |         |               |              |              |             | ⊗         | ⊗         |        |                 |               | ⊗                | ⊗                |                |                          |                 |   |
|   | Surf CUT Dry         |             | ⊗         |                |                    | ⊗        |               |           | ⊗           |     |          |               |         |           |        |         |         |          | ⊗      | ⊗                 | ⊗                                  |            |         |               |              |              |             | ⊗         | ⊗         |        |                 |               | ⊗                | ⊗                |                |                          |                 |   |
|   | Surf MIST Al         |             |           |                |                    | ⊗        | ⊗             | ⊗         | ⊗           |     |          |               |         |           |        |         |         |          | ⊗      | ⊗                 | ⊗                                  |            |         |               |              |              |             | ⊗         | ⊗         |        |                 |               | ⊗                | ⊗                |                |                          |                 |   |
| CNC MACHINING PROCESSES                             | Surf COOL series     | ⊗           | ⊗         |                | ⊗                  |          |               |           |             | ⊗   | ⊗        |               | ⊗       | ⊗         |        | ⊗       | ⊗       |          | ⊗      | ⊗                 | ⊗                                  |            |         |               |              |              | ⊗           | ⊗         |           |        |                 | ⊗             | ⊗                | ⊗                | ⊗              | ⊗                        | ⊗               | ⊗ |
|   | Surf COOL ENV        | ⊗           | ⊗         |                | ⊗                  |          |               |           |             | ⊗   | ⊗        | ⊗             | ⊗       | ⊗         | ⊗      | ⊗       | ⊗       |          | ⊗      | ⊗                 |                                    |            |         |               |              |              | ⊗           | ⊗         | ⊗         | ⊗      | ⊗               | ⊗             | ⊗                | ⊗                | ⊗              | ⊗                        | ⊗               | ⊗ |
| TAPPING & SPECIAL MACHINING OPERATIONS              | Surf NEAT series     |             | ⊗         |                |                    | ⊗        |               |           |             | ⊗   | ⊗        | ⊗             | ⊗       | ⊗         | ⊗      | ⊗       | ⊗       |          |        | ⊗                 |                                    |            |         |               |              |              |             |           |           |        |                 |               |                  |                  | ⊗              | ⊗                        | ⊗               |   |
|   | Surf NEAT Aero       |             | ⊗         |                |                    | ⊗        |               |           |             | ⊗   | ⊗        | ⊗             | ⊗       | ⊗         | ⊗      | ⊗       | ⊗       |          |        | ⊗                 |                                    |            |         |               |              |              |             | ⊗         | ⊗         | ⊗      | ⊗               | ⊗             | ⊗                | ⊗                | ⊗              | ⊗                        | ⊗               |   |
| TAPPING & SPECIAL MACHINING OPERATIONS              | Surf TAP series      |             | ⊗         |                |                    | ⊗        |               |           | ⊗           |     | ⊗        | ⊗             | ⊗       | ⊗         | ⊗      | ⊗       | ⊗       |          |        | ⊗                 |                                    |            |         |               |              |              |             | ⊗         | ⊗         |        |                 |               |                  | ⊗                | ⊗              | ⊗                        | ⊗               |   |
|   | Aluminium Surf TAP   |             | ⊗         |                |                    | ⊗        |               |           | ⊗           |     | ⊗        | ⊗             | ⊗       | ⊗         | ⊗      | ⊗       | ⊗       |          |        | ⊗                 |                                    |            |         |               |              |              | ⊗           | ⊗         | ⊗         |        |                 | ⊗             | ⊗                |                  |                |                          |                 |   |
|   | Inox Surf TAP        |             | ⊗         |                |                    | ⊗        |               |           | ⊗           |     | ⊗        | ⊗             | ⊗       | ⊗         | ⊗      | ⊗       | ⊗       |          |        | ⊗                 |                                    |            |         |               |              |              |             | ⊗         |           |        |                 |               |                  | ⊗                | ⊗              |                          |                 |   |
|   | Surf TAP Eco         |             | ⊗         |                |                    | ⊗        | ⊗             |           | ⊗           |     | ⊗        | ⊗             | ⊗       | ⊗         | ⊗      | ⊗       | ⊗       |          |        | ⊗                 |                                    |            |         |               |              |              | ⊗           | ⊗         | ⊗         | ⊗      | ⊗               | ⊗             | ⊗                | ⊗                | ⊗              | ⊗                        | ⊗               |   |
| STAINLESS STEEL PICKLING, DEOXIDIZING & PASSIVATION | Inox DERUSTER series |             |           |                |                    |          |               |           |             |     |          |               |         |           |        |         |         |          |        |                   | ⊗                                  | ⊗          |         |               |              |              |             |           |           |        |                 |               |                  |                  |                | ⊗                        |                 |   |
|   | Inox DERUSTER L      |             |           |                |                    |          |               |           |             |     |          |               |         |           |        |         |         |          |        |                   | ⊗                                  | ⊗          |         |               |              |              |             |           |           |        |                 |               |                  |                  |                | ⊗                        |                 |   |
|   | Inox DERUSTER DC     |             |           |                |                    |          |               |           |             |     |          |               |         |           |        |         |         |          |        |                   | ⊗                                  | ⊗          |         |               |              |              |             |           |           |        |                 |               |                  |                  |                | ⊗                        |                 |   |
| COLD FORMING & WIRE DRAWING                         | Surf Inox PaSS       |             |           |                |                    |          |               |           |             |     |          |               |         |           |        |         |         |          |        |                   |                                    |            |         |               |              | ⊗            |             |           |           |        |                 |               |                  |                  |                | ⊗                        |                 |   |
|   | CF series            | ⊗           | ⊗         |                |                    |          |               |           |             |     |          |               |         |           |        |         |         |          |        |                   |                                    |            |         |               | ⊗            |              |             |           |           |        |                 |               |                  | ⊗                | ⊗              |                          |                 |   |
| ANTISPATTERS WELDING & LASER CUTTING                | Surf DRAW series     | ⊗           | ⊗         |                |                    | ⊗        |               |           |             |     |          |               |         |           |        |         |         |          |        |                   |                                    |            |         |               | ⊗            |              |             | ⊗         |           |        |                 |               |                  |                  |                |                          |                 |   |
|   | Surf CoolDRAW multi  | ⊗           | ⊗         |                |                    |          |               |           |             |     |          |               |         |           |        |         |         |          |        |                   |                                    |            |         |               | ⊗            |              | ⊗           |           |           |        |                 |               | ⊗                |                  |                |                          |                 |   |
|   | Surf AluDRAW         |             | ⊗         |                |                    | ⊗        | ⊗             |           |             |     |          |               |         |           |        |         |         |          |        |                   |                                    |            |         |               | ⊗            |              | ⊗           | ⊗         |           |        |                 | ⊗             |                  |                  |                |                          |                 |   |
| Surf AntiSpatter RB                                 | ⊗                    | ⊗           |           |                |                    |          |               |           |             |     |          |               |         |           |        |         |         |          |        |                   |                                    |            |         |               |              |              |             |           |           |        |                 |               |                  |                  | ⊗              | ⊗                        |                 |   |

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# ALUMINIUM "DRY CUTTING"

- 🔥 **Surf Cut series**
  - 01/a • Surf CUT
  - 01/b • Surf CUT I
  - 01/c • Surf CUT II
  - 01/d • Surf CUT Dry
  
- 🔥 **Surf Mist Al**
  - 01/e • Surf MIST AL

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ALUMINIUM "DRY CUTTING"  
/ Surf Cut series

# Surf CUT



Based on special **low carbon** fatty esters and deodorized petroleum distillates, **Surf CUT** is a **high quality** lubricant engineered for **cutting operations** on **aluminium profiles & magnesium alloys**.


**Highly effective on:**

- Aluminium Profiles
- Magnesium & Aluminium alloys

**Specially recommended for:**

- High speed sawing machines

 **Surf CUT** is designed to perform very good on high speed cutting operations.

 **Surf CUT** can be atomized in **any misting/spraying system**.



## Why Surf CUT?

- Assures very good performance especially for high speed sawing.
- Can be easily evaporated during the aluminium thermal aging process, in order to facilitate the degreasing stage before coating.



- MQL lubricant
- Increases cutting disk's life
- Rapid evaporation after thermal process
- Improves process speed



ALUMINIUM "DRY CUTTING"  
/ Surf Cut series

# Surf CUT I



Based on special **medium carbon** fatty esters and deodorized petroleum distillates, **Surf CUT I** is a **high quality** lubricant specifically engineered for cutting operations on **aluminium profiles & magnesium alloys**.

**Highly effective on:**

- Aluminium Profiles
- Magnesium & Aluminium alloys

**Specially recommended for:**

- High speed sawing machines

 **Surf CUT I** is designed to perform effectively on high speed cutting operations.

 **Surf CUT I** can be atomized in **any misting/spraying system**.



## Why Surf CUT I?

- Guarantees excellent performance especially for high speed sawing.
- Can be easily evaporated during the aluminium thermal aging process, in order to facilitate the degreasing stage before coating.



- MQL lubricant
- Increases cutting disk's life
- Rapid evaporation after thermal process
- Improves process speed





**#01** ALUMINIUM "DRY CUTTING"  
/ Surf Cut series

# Surf CUT II



Based on special **high carbon** fatty acid esters, **Surf CUT II** is a **premium quality, environmentally friendly** lubricant specifically engineered for **demanding cutting operations** on **aluminium profiles & magnesium alloys**.

**Highly effective on:**

- Aluminium Profiles
- Magnesium & Aluminium alloys

**Specially recommended for:**

- High speed sawing machines

 **Surf CUT II** is designed to perform incredibly on high speed cutting operations.

 **Surf CUT II** can be atomized in any **misting/spraying system**.



## Why Surf CUT II?

- is a heavy duty product that guarantees premium performance especially for high speed sawing.
- Is a special cutting fluid that can be easily evaporated during the aluminium thermal aging process, in order to facilitate the degreasing stage before coating.



- MQL lubricant
- VOC free formula
- Environmentally friendly product
- Increases cutting disk's life
- Rapid evaporation after thermal process
- Improves process speed



**#01** ALUMINIUM "DRY CUTTING"  
/ Surf Cut series

# Surf CUT Dry



Based on special **low carbon** fatty acid esters, **Surf CUT Dry** is a **new generation, environmentally friendly** lubricant specifically engineered for cutting operations on **aluminium profiles & magnesium alloys**.

**Highly effective on:**

- Aluminium Profiles
- Magnesium & Aluminium alloys

**Specially recommended for:**

- High speed sawing machines

 **Surf CUT Dry** is designed to perform incredibly on high speed cutting operations.

 **Surf CUT Dry** can be applied with all spraying – misting systems.



## Why Surf CUT Dry?

- Is a heavy-duty, new generation product that guarantees superior performance for high speed sawing.
- Is a special cutting fluid that can be easily evaporated during the aluminium thermal aging process, in order to facilitate the degreasing stage before coating.



- MQL lubricant
- VOC free formula
- Environmentally friendly product
- Increases cutting disk's life
- Rapid evaporation after thermal process



ALUMINIUM "DRY CUTTING"  
/ Surf MIST AL

# Surf MIST AL



**Surf MIST AL** is a **new generation, superior performance** lubricant specially designed for **high speed sawing processes** for **aluminum profiles & billets**. **Free of VOC**, based on an **environmentally friendly** formula of **vegetable fatty esters**, this eco-friendly, special cutting fluid is engineered for **hot & cold heavy cutting operations**.

**Highly effective on:**

- Aluminium Alloys
- Magnesium Alloys

**Specially recommended for:**

- High speed sawing machines
- Aluminium profiles & billets
- Preheated billets
- Thick aluminium profiles



## Why Surf MIST AL?

- Delivers optimum results at high speed and extreme pressure cutting processes.
- Is applied with all systems, MQL and/or spray.
- Delivers superior performance up to 250°C.
- Can be easily evaporated during the heat treatment of aluminum in order to facilitate the degreasing process.



- MQL lubricant
- Increases cutting disk's life
- Maintains cutting temperature at low levels
- Provides excellent precision
- Rapid evaporation after heat treatment
- High corrosion protection
- Odorless



  
**A more responsible today,  
a sustainable tomorrow.**



# CNC MACHINING PROCESSES

## WATER-MISCIBLE SYSTEMS

### **Surf Cool Series**

02/a • Surf COOL S

02/b • Surf COOL ENV

## NEAT OIL SYSTEMS

### **Surf Neat Series**

02/c • Surf NEAT Heavy

02/d • Surf NEAT Aero

01-09C



**CNC MACHINING PROCESSES  
/ WATER-MISCIBLE SYSTEMS  
/ Surf Cool Series**

# Surf COOL S



Based on **synthetic** esters and **synthetic hydrotreated mineral** oils, **Surf COOL S** is a **multipurpose, semi-synthetic** cutting lubricant & coolant. It is specifically engineered for **all** cutting operations on **Aluminum, Magnesium & Steel**.

|                                   |   |
|-----------------------------------|---|
| <b>Highly effective on:</b>       | <ul style="list-style-type: none"> <li>Aluminium alloys (2xxx, 5xxx, 6xxx &amp; 7xxx series)</li> <li>Ferrous Alloys</li> </ul>                                       |
| <b>Specially recommended for:</b> | <ul style="list-style-type: none"> <li>CNC machines</li> <li>Cuts of extreme pressure and operations that require extended cutting time and/or high speeds</li> </ul> |

- Water-based** and **non-corrosive** formula with special additives.
- Guarantees **high EP, antiwear** and **anticorrosion** properties on **all metals**.



## Why Surf COOL S?

- Designed to deliver very good performance for a wide range of demanding cutting & machining operations as:
- Sawing** (for high speed sawing machines)
  - Drilling**
  - Milling**
  - Tapping**
  - Threading**
  - Turning**



- Provides very good anticorrosion properties on cast iron, steel, aluminium & copper
- Increases tool life
- Optimizes all operations
- Provides excellent precision
- Improves process speed



**CNC MACHINING PROCESSES  
/ WATER-MISCIBLE SYSTEMS  
/ Surf Cool Series**

# Surf COOL ENV



Based on **synthetic** esters, **Surf COOL ENV** is an **ultra premium** quality, **multipurpose, synthetic** lubricant & coolant. It is specifically engineered for **all** cutting operations - **even the most demanding** - on **aluminum, magnesium, ferrous & stainless steel**.

|                                   |   |
|-----------------------------------|---|
| <b>Highly effective on:</b>       | <ul style="list-style-type: none"> <li>Aluminium alloys (2xxx, 5xxx, 6xxx &amp; 7xxx series)</li> <li>High alloyed steels</li> <li>Stainless Steel series</li> </ul>  |
| <b>Specially recommended for:</b> | <ul style="list-style-type: none"> <li>CNC machines</li> <li>Cuts of extreme pressure and operations that require extended cutting time and/or high speeds</li> </ul> |

- Water-based** and **non-corrosive** formula with special additives.
- Guarantees **high EP, antiwear** and **anticorrosion** properties on **all metals**.



## Why Surf COOL ENV?

- Designed to deliver outstanding performance for a wide range of demanding cutting & machining operations as:
- Sawing** (for high speed sawing machines)
  - Drilling**
  - Deep Drilling**
  - Milling**
  - Tapping**
  - Threading**
  - Turning**



- Provides exceptional anticorrosion properties on cast iron, steel, aluminium & copper
- Increases tool life
- Optimizes all operations
- Provides excellent precision
- Improves process speed

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CNC MACHINING PROCESSES  
 / NEAT OIL SYSTEMS  
 / Surf Neat Series



# Surf NEAT Heavy

Free of **chlorinated paraffins**, **Surf NEAT Heavy** is a special cutting fluid engineered for **heavy cutting** operations. Based on **new generation** extreme pressure/antiwear additives & **deodorized hydrotreated** mineral oils, **Surf NEAT Heavy** provides **excellent** corrosion protection on **steel alloys** as well as on **aluminium alloys**.

### Ideal cutting on:

- Stainless Steel series
- Special Hard Steel alloys
- Aluminium alloys

### Specially recommended for:

- Drilling machines
- Tapping & Threading Machines
- CNC
- Revolvers

 **Heavy duty, environmentally friendly formulation.**

 Delivers **optimum cooling** and **antiwear** properties, even at **high speed** and **extreme pressure** cutting processes.



## Why Surf NEAT Heavy?

Designed to perform incredibly on high speed cutting processes as well as a wide range of operations, such as:

- Tapping
- Drilling
- Deep Drilling
- Threading
- Milling
- Turning
- Punching



- Environmentally friendly
- Increases tool life
- Minimum odor
- Improves the speed of processing
- Provides excellent precision



CNC MACHINING PROCESSES  
 / NEAT OIL SYSTEMS  
 / Surf Neat Series



# Surf NEAT Aero

**Surf NEAT Aero** is a **synthetic** cutting fluid **free of mineral oils & chlorinated paraffins**, specifically engineered for **heavy cutting** operations. **Surf NEAT Aero** assures **superior performance** and **excellent corrosion protection** on steel as well as on **aluminium alloys**.


### Ideal cutting on:

- Stainless Steel series
- Special Hard Steel alloys
- Aluminium alloys

### Specially recommended for:

- Drilling machines
- Tapping & Threading Machines
- CNC
- Revolvers

 Based on **new generation** Extreme Pressure/antiwear, **nanoceramic** additives & special polymers.

 Delivers **optimum cooling** and **antiwear** properties, even at **high speed** and **extreme pressure** cutting processes.



## Why Surf NEAT Aero?

Designed to perform incredibly on high speed cutting processes as well as a wide range of operations, such as:

- Tapping
- Drilling
- Deep Drilling
- Threading
- Milling
- Turning
- Punching



- Environmentally friendly
- Increases tool life
- Minimum odor
- Improves process speed
- Provides excellent precision

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# TAPPING & SPECIAL MACHINING OPERATIONS

- 🔥 **Surf Tap series**
- 03/a • Surf TAP
- 03/b • Aluminium Surf TAP
- 03/c • Inox Surf TAP
- 03/d • Surf TAP Eco



TAPPING & SPECIAL MACHINING OPERATIONS  
/ Surf Tap series



# Surf TAP

**Surf TAP** is a **superior quality** tapping fluid that is especially engineered for **all cuts on all metals**.




**Highly effective on:**

- All hard metals, even hard steel alloys up to 45° Rockwell hardness

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**Specially recommended for:**

- Drilling machines
- Tapping & Threading Machines
- Cuts of extreme pressure & long duration

-  **Heavy-duty** formula
-  **Versatile** product that delivers superior performance for **ANY cutting operation on ANY metal**
-  Available also in **aerosol type, free of flammable solvents**



## Why Surf TAP?

Designed to perform incredibly on a wide range of machining operations, such as:

- Tapping
- Drilling
- Boring
- Threading
- Milling
- Turning



- MQL lubricant
- Optimizes all operations
- Improves process speed
- Increases tool life
- Provides excellent precision



TAPPING & SPECIAL MACHINING OPERATIONS  
/ Surf Tap series



# Aluminium Surf TAP

**Aluminium Surf TAP** is a **high performance**, special tapping fluid that is specifically engineered for **all cutting operations on aluminium & soft metals**.



**Highly effective on:**

- Aluminium alloys
- Magnesium alloys
- Copper alloys

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**Specially recommended for:**

- Drilling machines
- Tapping & Threading Machines
- Cuts of extreme pressure & long duration

-  **Heavy-duty** formula based on esters
-  Can be applied with any spraying system as an **MQL** (Minimum Quantity Lubricant)



## Why Aluminium Surf TAP?

Designed to perform incredibly on a wide range of machining operations, such as:

- Tapping
- Sawing
- Boring
- Drilling
- Threading
- Milling
- Turning
- Punching



- MQL lubricant
- Optimizes all operations
- Improves process speed
- Increases tool life
- Provides excellent precision
- Leaves the substrate proper without any stain



TAPPING & SPECIAL MACHINING OPERATIONS  
/ Surf Tap series



# Inox Surf TAP

**Inox Surf TAP** is a **heavy duty** cutting paste designed for **high speed** tapping & threading processes on **stainless steel**.

Due to its **thick formulation**, **Inox Surf TAP** delivers **optimum** results for **flow tapping** process as it adheres to the work piece, even at **high-speed** applications and **long duration** operations.

### Highly effective on:

- Stainless steel
- Titanium alloys
- Ni-based alloys
- High nickel steel alloys up to 45° Rockwell hardness

### Specially recommended for:

- Flow tapping processes
- Tapping and Threading machines
- Cuts of extreme pressure & operations that require extended cutting time



## Why Inox Surf TAP?

Designed to perform incredibly on a wide range of machining operations, such as:

- Staff threading
- Pipe threading
- Tapping
- Deep hole cutting
- Drilling



- MQL lubricant
- Optimizes all operations
- Improves process speed
- Increases tool life
- Provides excellent precision
- Eliminates work hardening



TAPPING & SPECIAL MACHINING OPERATIONS  
/ Surf Tap series



# Surf TAP Eco

**Surf TAP Eco** is a **heavy-duty** product that delivers **superior** performance for **any** cutting operation on any metal, founded on an **environmentally friendly** formula. Based on **new generation**, totally **biodegradable synthetic** agents, **Surf TAP Eco** is a **premium-quality** tapping fluid engineered for **all cuts** on **all metals**.

### Highly effective on:

- All hard metals, even hard steel alloys up to 45° Rockwell hardness

### Specially recommended for:

- Drilling machines
- Tapping & Threading machines
- Cuts of extreme pressure and operations that require extended cutting time



## Why Surf TAP Eco?

Designed to perform incredibly on a wide range of machining operations, such as:

- Tapping
- Drilling
- Boring
- Threading
- Milling
- Turning
- Punching



- MQL lubricant
- Totally biodegradable product
- Increases tool life
- Optimizes all operations
- Improves process speed
- Provides excellent precision





# STAINLESS STEEL PICKLING, DEOXIDIZING & PASSIVATION

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- 🔥 **Inox Deruster series**
  - 04/a • Inox DERUSTER gel
  - 04/b • Inox DERUSTER L
  - 04/c • Inox DERUSTER DC
- 🔥 **Surf Inox Pass**
  - 04/d • Surf Inox PaSS



STAINLESS STEEL PICKLING,  
DEOXIDIZING & PASSIVATION  
/ Inox Deruster series

## Inox DERUSTER gel



Inox DERUSTER gel is a **fast-acting**, acidic pickling gel especially engineered to remove thoroughly **welding scales, black oxides** and **discoloration** from stainless steel surfaces. Based on a heavy-duty formula of effective pickling agents combined with special inhibitors, **Inox DERUSTER gel** is a versatile product that removes rust and impurities as well as provides stainless steel with a protective layer to resist corrosion.



Heavy-duty formula of **effective pickling agents** combined with special inhibitors



Versatile product that removes **rust and impurities** while providing stainless steel with a **protective layer** to resist corrosion.



### Why Inox DERUSTER gel?



- Easy to use
- Very rapid action
- Delivers optimum pickling, deoxidizing & anticorrosive properties
- Restores full corrosion resistance to treated surfaces
- Suitable for all stainless steel series, especially for 3XX series
- Extended shelf life



STAINLESS STEEL PICKLING,  
DEOXIDIZING & PASSIVATION  
/ Inox Deruster series

## Inox DERUSTER L



Inox DERUSTER L is a **fast-acting**, acidic pickling liquid especially engineered to remove thoroughly **welding scales, black oxides** and **discoloration** from stainless steel surfaces. Based on a heavy-duty formula of effective pickling agents combined with special inhibitors, **Inox DERUSTER L** is a versatile product that removes rust and impurities as well as provides stainless steel with a protective layer to resist corrosion.



Apply **Inox DERUSTER L** - undiluted - by immersion or low pressure spraying for 5-15 min at ambient temperature.



Rinse the surface thoroughly with water.



### Why Inox DERUSTER L?



- Easy to use
- Very rapid action
- Delivers optimum pickling, deoxidizing & anticorrosive properties
- Provides full corrosion resistance to treated surfaces
- Suitable for all stainless steel series, especially for 3XX series
- Extended shelf life



STAINLESS STEEL PICKLING,  
 DEOXIDIZING & PASSIVATION  
 / Inox Deruster series



# Inox DERUSTER DC

**Inox DERUSTER DC** is a **fast-acting**, weld cleaning fluid especially engineered to remove defects **easily** and **thoroughly** from **stainless steel** surfaces like **rust, weld scale, black oxides, discoloration, heat tints, burn marks, cross-contamination** etc. through **basic electrolytic treatment**.



**Heavy-duty** formula of effective electrolytes



Can penetrate even the **smallest cracks** on the surface of metals and **prevent** further problems like **pitting** and **corrosion build-up**, while **removing impurities** and **maintaining the attractive appearance** of stainless steel.



## Why Inox DERUSTER DC?



- Easy to use, cost-effective & very safe
- Very rapid action; cleans and passivates the surface in one step
- Increases durability and preserves physical properties of metal surfaces and welds
- Eradicates the need for costly reworking
- Excellent corrosion prevention; electrochemical weld cleaning reaches new heights in corrosion resistance
- Electrolytic process only restores the bright and shiny state of the metal surface without any deformation
- Easy-to-use equipment; electrolytic weld cleaning machines are portable and easy to use on- and off-site.



STAINLESS STEEL PICKLING,  
 DEOXIDIZING & PASSIVATION  
 / Surf Inox Pass



# Surf Inox PaSS

**Surf Inox PaSS** is a **fast-acting, passivation** liquid especially engineered to **regenerate the thin chromium layer**, known as **passivation**, on **stainless steel**.



**Heavy-duty** formula of effective **passivating agents** combined with **special inhibitors**



Versatile product that **efficiently & rapidly** promotes the formation of the **passive layer** on **stainless steel**, especially where **rapid action** is needed or **little air access** is available (e.g. vessel internal surfaces).



## Why Surf Inox PaSS?



- Rapid Action
- Easy to use
- High efficiency; 1 Kg of product for 5-6 m<sup>2</sup> of treated surface
- Provides full corrosion resistance to treated surfaces as per ASTM A380
- Suitable for all austenitic (3xx) stainless steel series – for martensitic (4xx) please contact our technical support team
- Extended shelf life

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120°C

# COLD FORMING

## CF series

- 05/a • CF Soap II
- 05/b • CF Neat ENV

## Surf DRAW series

-  05/c • Surf CoolDRAW ENV
- 05/d • Surf CoolDRAW multi
- 05/e • Surf AluDRAW



COLD FORMING  
/ CF series



# CF Soap II

Due to its **high viscous formulation**, **CF Soap II** is specifically engineered for **deep cold forming applications** assuring **superior performance** and **excellent corrosion protection** on **all metals** and especially on **stainless steel**.

## Specially recommended for:

- Wire drawing applications
- Deep cold forming applications

 Based on **new generation** additives & special polymers, **free of mineral oils formula**.

 Fully replaces solid stearates and stands for its **premium quality & excellent application results**, even at **extreme pressure conditions**.



## Why CF Soap II?



- Shows high resistance to extreme pressures
- Delivers outstanding lubricating & anticorrosion properties
- Increases productivity using innovative additive combinations
- Easily rinsed with any water based type of cleaner
- Biodegradable product



COLD FORMING  
/ CF series



# CF Neat ENV

**Free of mineral oil**, **CF Neat ENV** is a **high performance** wire drawing lubricant, specifically engineered for **copper & aluminium** alloys **wire drawing**. It is formulated with natural antiwear additives along with **novel antioxidant** technology. Thus and so, **CF Neat ENV** is engineered to provide **superior wire surface quality**, **integrated wear protection** to dies, **minimized thermal degradation** and **extended service life**. Additionally, **CF Neat ENV** will **evaporate completely** in the ageing oven.

## Specially recommended for:

- Wire drawing applications
- Copper & aluminium alloys



## Why CF Neat ENV?



- Increased productivity; significantly eliminates wire break frequency & surface scratching
- Increased quality; ensures high lubrication & extreme antiwear properties on dies
- Superior separation of aluminium fines
- Extended product life due to novel antioxidant technology
- 100% vegetable based
- Self-evaporation in the ageing oven

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**COLD FORMING**  
/ Surf DRAW series

# Surf CoolDRAW ENV



Mineral oil free, **Surf CoolDRAW ENV** is a **high performance, heavy duty rod break down emulsifiable lubricant**. Based on synthetic & natural additives, **Surf CoolDRAW ENV** delivers superior surface finish on drawn wire and extreme lubrication, protecting dies & capstans from wear. It offers extended emulsion life as it withstands destabilization from water hardness & dissolved copper ions.

## Highly effective on:

- Copper
- Tinned Copper
- Enameling wire

## Specially recommended for:

- A wide range of copper drawing related processes
- Processes where very good foaming control is required
- All types of filtration systems



## Why Surf CoolDRAW ENV?



- Biodegradable formulation
- Optimum anti-wear properties to protect tooling
- Superior surface finishing; from rod sizes to fine wire
- Improved emulsion life; minimum downtime & disposal costs
- Robust formula; minimum maintenance time & costs
- Superior filterability; all types of filtering systems
- Low foaming formulation
- Maximum process safety & safe for users



**COLD FORMING**  
/ Surf DRAW series

# Surf CoolDRAW multi



**Surf CoolDRAW multi** is a **high performance wire drawing lubricant** specifically engineered to provide **superior wire surface quality** and **integrated protection** to dies and capstans. Based on a **heavy-duty** formula of mineral oil, natural triglycerides and special additives, this **versatile** product is designed to perform incredibly on **plain copper**, fine **aluminium/aluminium alloys** as well as **brass** wire. **Surf CoolDRAW multi** guarantees highly effective **lubrication** and **antiwear** properties while **maintaining foam at low levels**.

## Highly effective on:

- Plain copper wire
- Fine aluminium /aluminium alloys wire
- Brass wire

## Specially recommended for:

- Fine and multi-wire machines
- Processes where very good foaming control is required
- All types of filtration systems



## Why Surf CoolDRAW multi?



- Increased productivity; significantly eliminates wire break frequency
- Increased quality; ensures high lubrication & antiwear properties on dies and capstans
- Extended bath life due to superior emulsion stability
- Maintains foam at low levels
- Maximum process safety & safe for users



COLD FORMING  
/ Surf DRAW series



## Surf AluDRAW

Free of mineral oil, **Surf AluDRAW** is a **high performance wire drawing lubricant**, specifically engineered for aluminium & aluminium alloy wire drawing. This new generation product is formulated with **natural & synthetic antiwear** additives along with **novel antioxidant** technology. Thus and so, **Surf AluDRAW** is engineered to provide **superior wire surface quality, integrated wear protection** to dies, **minimized thermal degradation** and **extended service life**. Additionally, **Surf AluDRAW's** ability to absorb small water volumes **puts an end** to wire breaking and surface imperfections caused by moisture.

Highly  
effective on:

- Aluminium / aluminium alloys wire

Specially  
recommended for:

- High speed slip machines



### Why Surf AluDRAW?



- Increased productivity; significantly eliminates wire break frequency & surface scratching
- Increased quality; ensures high lubrication & extreme antiwear properties on dies
- Superior separation of aluminium fines
- Extended product life due to novel antioxidant technology
- Maximum process safety & safe for users



Your lubrication  
expert  
at every process.



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# ANTISPATTERS – WELDING & LASER CUTTING

06/a • Surf AntiSpatter RB





**ANTISPATTERS – WELDING & LASER CUTTING**  
 / Surf AntiSpatter RB



# Surf AntiSpatter RB



Free of silicone and flammable solvents, **Surf AntiSpatter RB** is a special fluid engineered to provide **high-grade protection** to adhering hot metal spatter. Intended for application to workpieces, equipment and tools, especially for **robotic welding applications**.

## Optimized for:

- Stainless steel, steel, zinc-plated steel, etc.
- All welding techniques (e.g. MIG/MAG welding etc)

## Highly recommended for:

- Robotic Welding Nozzles

-  Based on **new generation, biodegradable, synthetic** release agents
-  **Prevents** hot splashes from sticking to the inside of the robotic welding nozzle while providing an **integrated degreasing effect & highly effective corrosion protection properties**.



## Why Surf AntiSpatter RB?



- Easy removal of welding spatter
- Prevents the adhesion of projections on all treated surfaces
- Silicone free; ideal for posterior painting of welded parts
- Safe and sustainable: non-flammable, biodegradable, renewable raw materials
- Increased productivity; no need for reworking
- Increased quality with spatter-free metal surfaces
- Maximum process safety & safe for users

**Surf AntiSpatter RB** consists the ideal preparation for any conversion coating method.



**Withstand more**  
**Stay clean**  
**Offer quality**  
**Be prod-active**

The End? No!  
As promised... **Non-stop** support.

## Our Partners, Our Focus!

Our strategic focus on customer satisfaction is based on four fundamental pillars:



We are a **trusted partner** for our customer, not another supplier in their supply chain.

# Customer Service & Support



## We build relationships that last.


At SurfChem, we have a customer – oriented view of business, staying tuned to changing customer needs and marketplace's conditions as well as creating long-term relationships with them, based on customer value and satisfaction.

## We work hand-to-hand with our customers as partners in order to:


Always by providing them breakthrough solutions.




Boost their productivity & enhance efficiency and commercial advantage




Increase their profitability



Minimize their risks



Reduce operational costs, overall consumption and waste



Comply with constantly shifting environmental regulations

**We make waves.**



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