



# MACHINE SHOP SOLUTIONS

Performance you can trust



From product concept, design and development through to technical expertise and customer services, ROCOL® supports all your machine shop needs.

## Contents

<b>Hand Applied Cutting Lubricants</b>	<b>4 / 7</b>
<b>Cutting Fluids</b>	<b>8 / 9</b>
<b>Fluid Care Products and Equipment</b>	<b>10</b>
<b>Slideaway Lubricants and Cleaner</b>	<b>11</b>
<b>Corrosion Protectives</b>	<b>12</b>
<b>Mould Release</b>	<b>13</b>
<b>Metal Marking Inks</b>	<b>14</b>
<b>Non-Destructive Testing System (NDT)</b>	<b>15</b>
<b>Weld and Fabrication</b>	<b>16</b>
<b>Glass Production</b>	<b>17</b>
<b>Hot Metal Forging Lubricants</b>	<b>18</b>
<b>Knowledge Centre</b>	<b>19</b>

### The sectors we serve

- ▶ CNC Machine Shops
- ▶ Welding and Fabrication
- ▶ Plastic Injection Moulding
- ▶ Cold Metal Forming
- ▶ Hot Metal Forging
- ▶ Glass Production

## Performance you can trust for the metalworking industry



Technically advanced lubricants developed by our chemists and engineers to meet customer needs. Our metalworking products:

- ▶ Extend tooling and component life
- ▶ Reduce machine downtime
- ▶ Reduce tooling costs and breakages
- ▶ Increase productivity
- ▶ Minimise the risk of workpiece rejection and scrappage

ROCOL provides one of the industry's widest portfolios of high performance products used in the many applications found within today's machine shop.

ROCOL products are developed and manufactured in the United Kingdom and supplied to engineers globally. They provide a comprehensive tool box of solutions keeping machine shops running effectively and efficiently.

We help improve quality throughout all machine shop processes and ensure our customers get it right first time. We welcome the opportunity to meet the needs of our customers with end user visits and site surveys.

Our dedicated labs test to ISO, ASTM, BSI and IP standards so you can be assured that you're using the highest quality products.

The RTD® range of hand applied cutting lubricants has a unique formulation, providing superior performance across a range of ferrous and non-ferrous metals.

### RTD lubricants:

- Double tool life
- Reduce tool wear
- Promote improved surface finish
- Increase rates of metal removal
- Minimise waste and scrap
- Reduce drill and tap breakages

### USED BY

- Tool rooms
- Pipe fitters
- Fabrication workshops
- Maintenance departments
- Production machine shops



METAL CUTTING LUBRICANT

Suitable for use on many metal types including medium and difficult materials

### RTD LIQUID



- ▶ Flows to the cutting edge
- ▶ Oil and solvent free
- ▶ Available in a plastic squeeze bottle for easy application

Part code	Size
53072	400 g
53076	5 l
53078	20 l

### RTD COMPOUND



- ▶ Soft low melting-point paste
- ▶ Formulated to cling to the tool - stays where it needs to be for longer
- ▶ Rolls Royce approved - Spec CSS 137 Type B and C
- ▶ NATO Stock Number: 9150 99 220-2775
- ▶ NATO Stock Number: 9150 99 464-6766

Part code	Size
53020	50 g
53023	500 g
53026	5 kg
53028	18 kg

For applications where chlorine free products are needed...



Part code	Size
53513	450 g

### RTD CHLORINE-FREE COMPOUND



### RTD CHLORINE-FREE LIQUID

Part code	Size
53521	350 ml
53526	5 l

### RTD CHLORINE-FREE SPRAY



Part code	Size
53081	400 ml

Can be applied directly to moving tools  
Suitable for use on many metal types including medium and difficult materials  
Used for deep hole drilling and boring

### RTD FOAMCUT



- ▶ Clean, low odour foaming spray
- ▶ Foaming action adheres to the tool - stays where it needs to be for longer
- ▶ Rapidly penetrates to the cutting edge - gets where it needs to be quickly

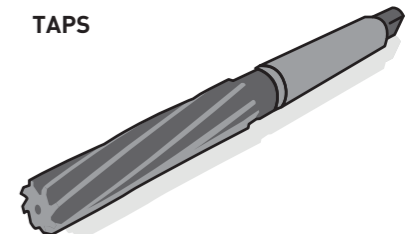
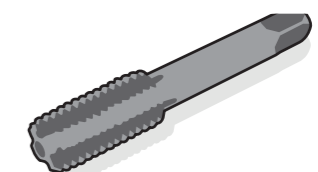
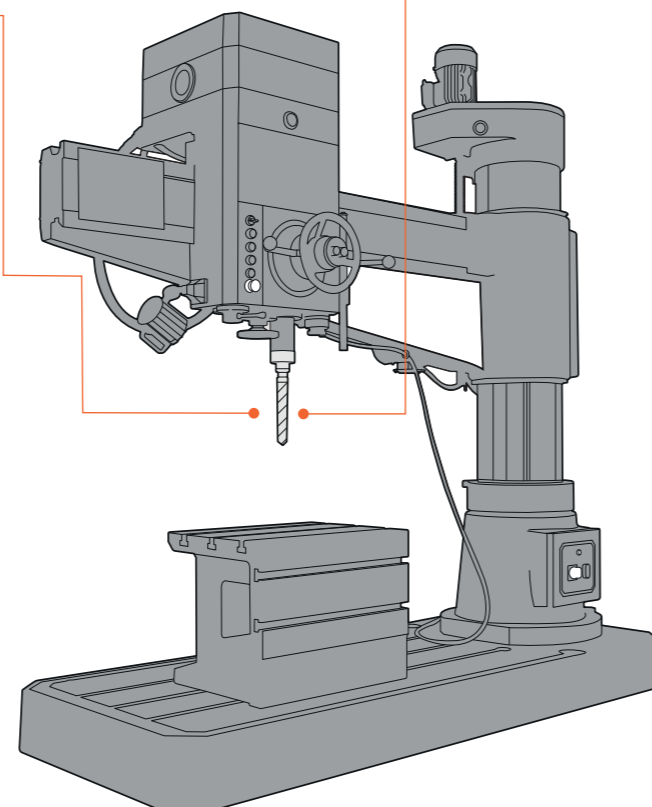
Part code	Size
53041	300 ml

### RTD SPRAY



- ▶ Use on rotating applications - easy and safe
- ▶ NATO Stock Number: 9150 99 541-7134
- ▶ Quick and convenient to use

Part code	Size
53011	400 ml



TAPS

REAMERS



RTD® “doubles tool life” and in some cases can provide up to a 400% increased productivity compared to similar products\*.

Laboratory testing has shown that RTD offers up to 5 times more anti-wear protection than other products, extending tool life and improving surface finish ensuring the quality of the finished workpiece.

During the production processes, damage and breakage can mean significant cost increases - using RTD helps to minimise these risks and allows the precision engineer to **cut with confidence**.



METAL CUTTING LUBRICANT

### Compatible with water mix cutting fluids Best used on CNC machines



#### RTD TRI-LOGIC

- Reinforces water mix cutting fluid performance
- Pleasant to use, low odour and light colour
- Optimised for use in the TRI-Logic system.

Part code	Size
53003	350 ml
53006	5 l
53008	20 l



#### RTD CLEAN CUT

- Sulphur and chlorine free
- Dilute with water for higher economy
- Available in a plastic squeeze bottle for easy application
- Particularly useful on aluminium and yellow metals

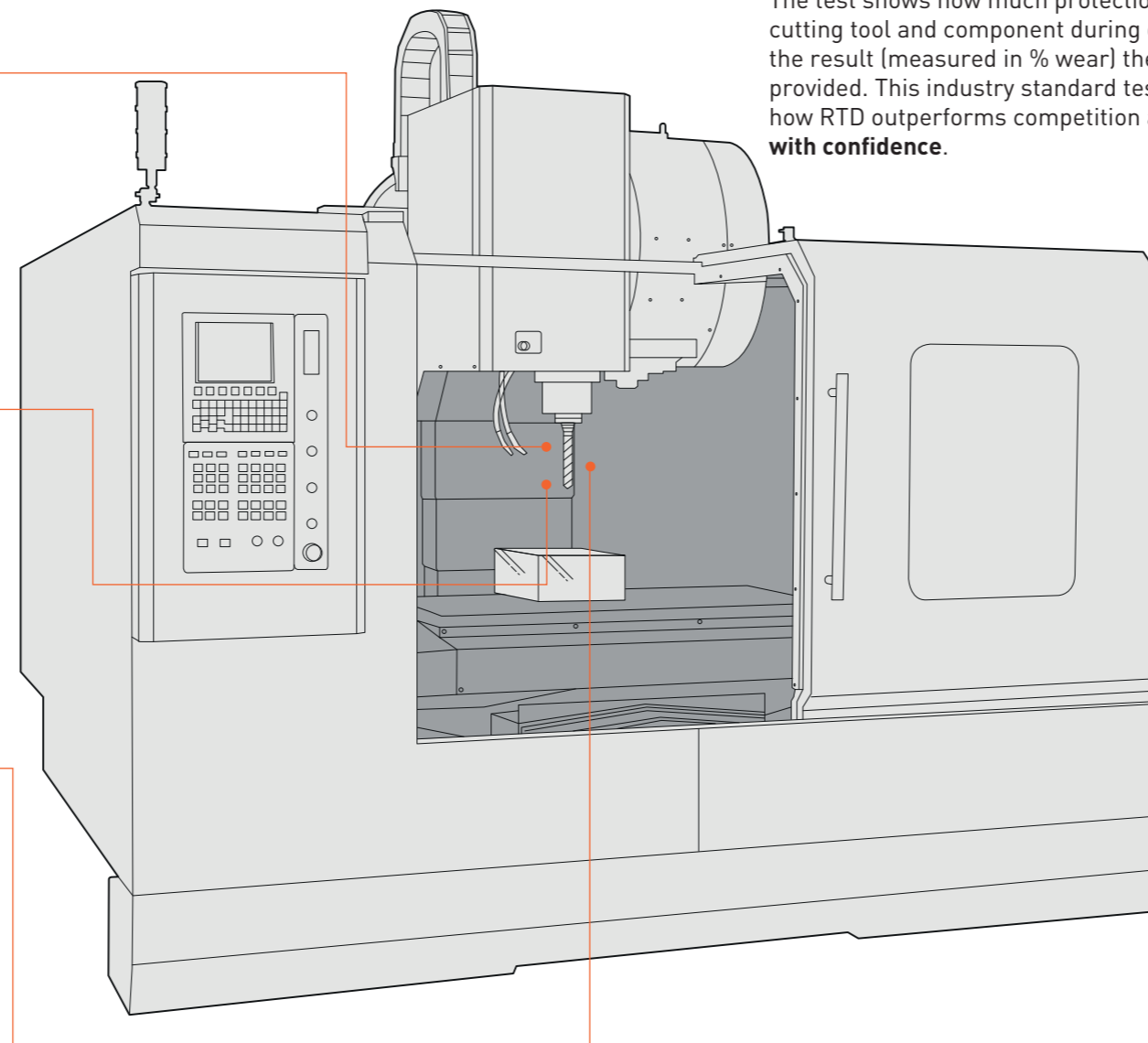
Part code	Size
53062	350 g
53066	5 l



#### RTD COMPOUND

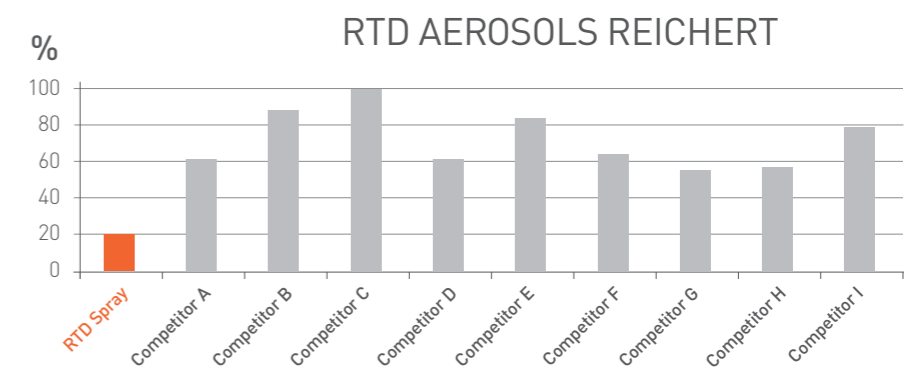
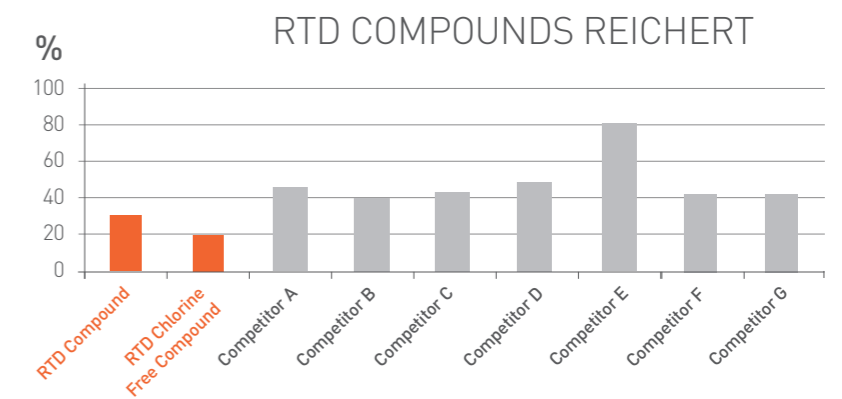
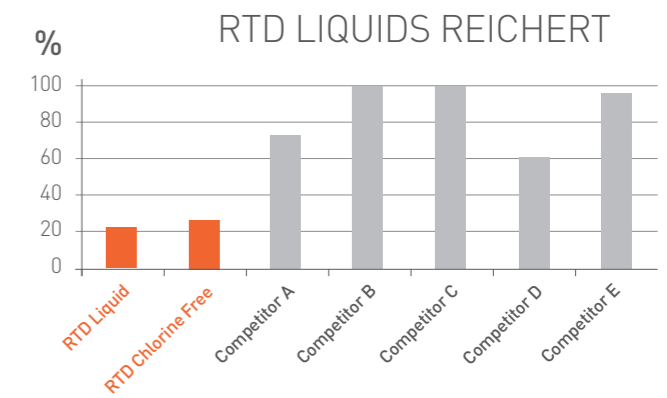
- Soft low melting-point paste
- Formulated to cling to the tool - stays where it needs to be for longer
- Rolls Royce approved - Spec CSS 137
- NATO Stock Number: 9150 99 220-2775
- NATO Stock Number: 9150 99 464-6766

Part code	Size
53020	50 g
53023	500 g
53026	5 kg
53028	18 kg



### The Reichert Wear Test is used to evaluate the extreme pressure (EP) properties of lubrication and cutting fluids.

The test shows how much protection is provided to the cutting tool and component during operation. The lower the result (measured in % wear) the more protection provided. This industry standard test demonstrates how RTD outperforms competition and lets you **cut with confidence**.



### V-CUT™

The V-cut™ range of cutting fluids and maintenance oils provides ROCOL®'s trusted performance and quality at a highly competitive price. ROCOL is a market leader in cutting performance and dilution which means our cutting fluids and your tools last longer.



METAL CUTTING LUBRICANT



CUTTING FLUID

#### V-CUT MP



- ▶ Milky type water mix fluid for all general cutting operations
- ▶ Used on various metals, with excellent results on low to medium carbon steels.
- ▶ Very economical dilutions, up to 35:1

**Part code** 51543 **Size** 20 l

#### V-CUT H32



- ▶ V-cut H32 is a high quality oil designed for use in hydraulic systems of machine tools
- ▶ Has good anti-wear properties increasing service life and extending oil change intervals

**Part code** 51573 **Size** 20 l

#### V-CUT EP



- ▶ Extreme pressure water mix fluid for heavy duty cutting operations
- ▶ Contains extreme pressure additives enabling best performance when machining harder materials such as hardened steels or similar tough alloys
- ▶ Extended tool life and faster machining rates providing cost savings on expensive tooling

**Part code** 51533 **Size** 20 l  
**51530** 55 l

#### V-CUT S68



- ▶ V-cut S68 is an ISO VG 68 viscosity grade lubricant for machine tool beds giving a smooth movement of any slideway
- ▶ Prevents 'stick slip' movement eliminating chatter and vibration

**Part code** 51593 **Size** 20 l

#### V-CUT SS



- ▶ Semi-synthetic water mix fluid for all general cutting and grinding operations
- ▶ Allows rationalization to one product for cutting and grinding
- ▶ Used on most metals especially low to medium carbon steels
- ▶ Extremely economical dilutions, up to 65:1

**Part code** 51523 **Size** 20 l



#### MORE CHOICE

Complete range of fluid solutions for the machine shop:

- Cutting fluid
- Slideway oil
- Hydraulic oil

#### MORE PERFORMANCE

Specially selected lubricity additives help to extend tool life and improve surface finish

#### MORE ECONOMY

With highly economical dilutions (up to 65:1) and prolonged sump life, V-cut goes at least twice as far as similar cutting fluids

#### MORE PEACE OF MIND

Used with ROCOL fluid mixer, V-cut products keep the workplace clean and help reduce health and safety issues

#### LESS COST

V-cut products give you the quality and performance expected from ROCOL at a competitive price

		V-CUT EP	V-CUT MP	V-CUT SS	V-CUT H32	V-CUT S68
<b>FUNCTION</b>		Cutting fluid	Cutting fluid	Cutting/grinding fluid	Hydraulic fluid	Slideway lubricant
<b>SUITABILITY</b>		Medium to heavy duty	General purpose	General cutting and grinding	Where ISO VG32 is specified	General purpose
<b>EMULSION COLOUR</b>		Milky white	Milky white	Translucent green	Amber liquid	Amber liquid
<b>FLUID TYPE AND TYPICAL DILUTION RATIO</b>		Soluble oil Up to 35:1	Soluble oil Up to 35:1	Semi-synthetic Up to 65:1	Neat oil	Neat oil
<b>MATERIAL SUITABILITY</b>	CAST IRON	★★★★★	★★★★★	★★★★★		
	ALUMINIUM	★★★★★	★★★★★	★★★★★		
	COPPER ALLOYS	★★★★★	★★★★★	★★★★★		
	LOW-MEDIUM CARBON STEELS	★★★★★	★★★★★	★★★★★		
	HARDENED ALLOYS	★★★★★	★★★★★	★★★★★		
<b>METAL CUTTING</b>	GENERAL OPERATION	★★★★★	★★★★★	★★★★★		
	HEAVY DUTY OPERATION	★★★★★	★★★★★	★★★★★		
<b>GRINDING</b>		★★★	★★★	★★★★★		
<b>PACK SIZES</b>	20L	51533	51543	51523	51573	51593
	55L	51530	-	-	-	-

KEY TO PERFORMANCE ★ NOT SUITABLE ★★ OK ★★★ GOOD ★★★★ VERY GOOD ★★★★★ EXCELLENT

## ULTRAGUARD®

Our ULTRAGUARD® range of machine tool care products work with our water mix metalworking fluids to ensure your ROCOL® cutting fluid is in optimum condition and your machines and operators are cared for.



FLUID CARE PRODUCTS AND EQUIPMENT



SLIDEWAY LUBRICANT



CLEANER

### ULTRAGUARD BX



#### Bactericide additive

- ▶ Dilution ratio 1000:1 – economical in use
- ▶ Formulated to provide long lasting protection against bacterial contamination

Part code	Size
52084	1 L

### ULTRAGUARD FX



#### Bactericide additive

- ▶ Dilution ratio 1000:1 – economical in use
- ▶ Provides long lasting protection against fungal growth

Part code	Size
52094	1 L

### ULTRAGUARD AF



#### Non-silicone antifoam

- ▶ Dilution ratio 10000:1 – economical in use
- ▶ Antifoam formulated for the treatment of all types of water mix metalworking fluids
- ▶ Effectively controls excessive foaming

Part code	Size
52074	1 L

### ULTRAGUARD SC



#### Machine tool system cleaner

- ▶ Dilution ratio 100:1 – economical in use
- ▶ Cleans and disinfects in one operation
- ▶ For use prior to recharging machine tools with fresh cutting / grinding fluid

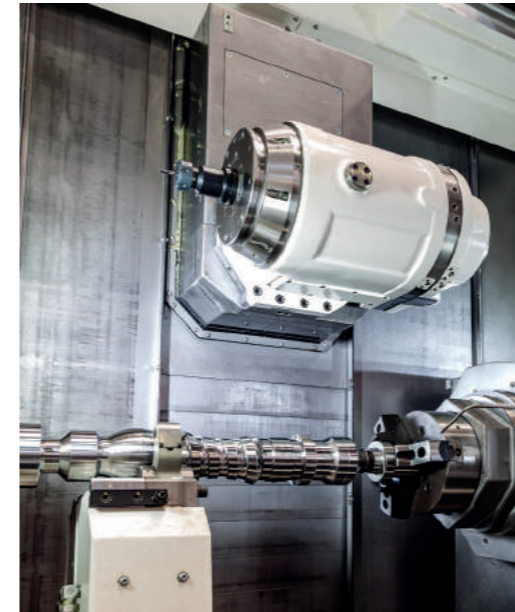
Part code	Size
52024	1 L
52026	5 L
52023	20 L



### ROCOL Automatic Fluid Mixer

- ▶ Accurately mixes and dispenses water mix cutting and grinding fluids from the barrel

Part code 52233



### ROCOL Refractometer

- ▶ Provides accurate read out (strength/mix ratio) of water mix cutting and grinding fluids

Part code 52060



## SLIDEWAY LUBRICANTS

ULTRAGLIDE contains high quality oils and additives that provide lubrication and corrosion protection for machine tool slideways.



### ULTRAGLIDE X5

#### Total protection slideaway lubricant

- ▶ Highly tenacious film - resistant to water wash off/protects slides from corrosion
- ▶ Good lubrication and load carrying properties - reduces wear and prevents 'stick slip'
- ▶ Rapid demulsification - separates rapidly from cutting fluid and easily removed by oil skimmers/separators

Part code	Size
52041	400 ml
52086	5 L
52083	20 L
52089	200 L

## MULTI-PURPOSE WATER BASED CLEANER

ULTRACLEAN 2000 is a highly effective water based multi-purpose cleaner. Its primary use is the fast and easy removal of oils and greases



### ULTRACLEAN 2000

#### Multi-purpose water based cleaner

- ▶ Fast easy removal of oils and greases
- ▶ Use on virtually any non-porous surface
- ▶ Leaves no residue when rinsed away
- ▶ Economical - dilution range up to 100:1
- ▶ Used in for ultrasonic baths, cleaning floors and pressure washers

Part code	Size
51059	200 L



## MOISTURE GUARD

Moisture Guard is a medium to long indoor corrosion protection solution for bare metal components and mould tools. It is used to protect high value moulding tools and bright metal components in storage, particularly where condensation is a problem.



CORROSION PROTECTION

## MOULD RELEASE

Our mould release agents give fast, efficient and clean release of all types of plastics and rubbers. They provide faithful reproduction of the mould profile however complex the mould or minute the detail. They are commonly used in injection and compression mouldings, as well as extrusion and glass fibre lay up work.



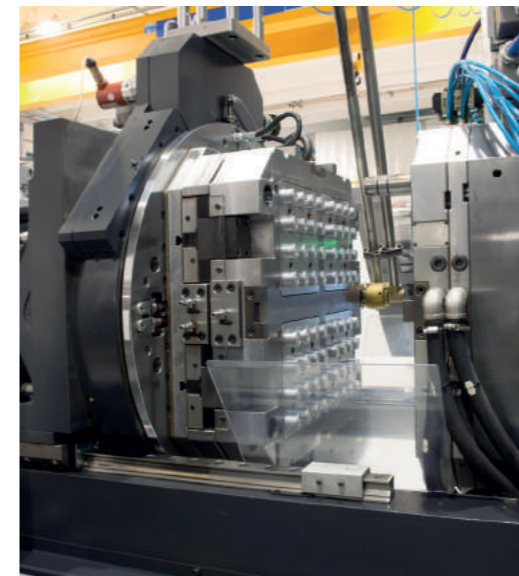
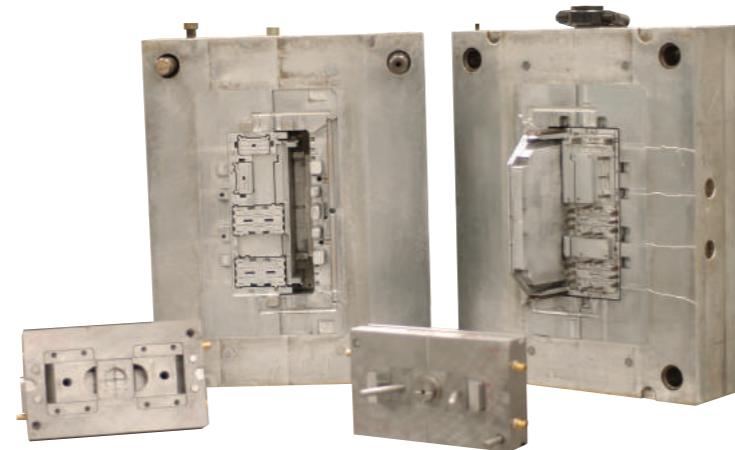
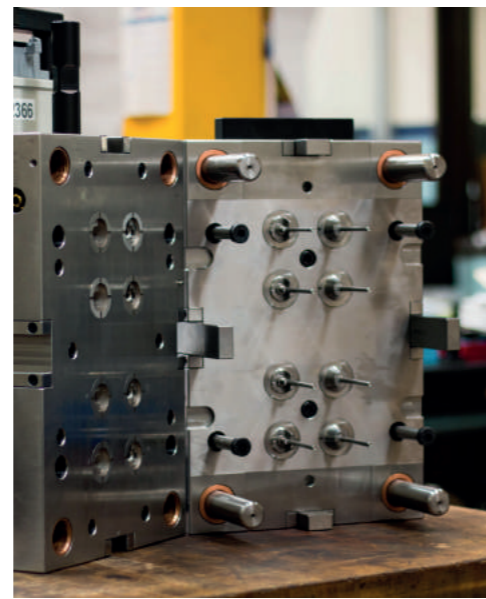
MOULD RELEASE

### MOISTURE GUARD SPRAY/FLUID

#### Five year indoor corrosion protective

- ▶ Flexible film – does not chip or crack
- ▶ De watering film protects against corrosion caused by moisture or damp atmospheres
- ▶ Protects against condensation attack
- ▶ Does not attract dirt or dust
- ▶ Silicone free
- ▶ Does not normally require removal prior to use
- ▶ Available in clear and green formulations
- ▶ After 1000 hrs accelerated humidity cabinet testing, MOISTURE GUARD treated steel remains free from corrosion

Part code	Size
<b>Clear Spray</b> 69025	400 ml
<b>Green Spray</b> 69045	400 ml
<b>Green Fluid</b> 69006	5 l



### PR SPRAY

#### Long lasting silicone mould release

- ▶ Release agent where silicones can be tolerated
- ▶ Wet film promotes gloss finish
- ▶ Ultra fine even film gives controlled application with complete coverage
- ▶ Suitable up to 200°C

Part code	Size
72015	400ml



### MOULD RELEASE SPRAY

#### Long lasting PTFE mould release

- ▶ Ultra thin non-silicone dry film PTFE release agent
- ▶ Can be over-painted or printed
- ▶ Suitable up to 270°C

Part code	Size
72021	400ml





## METAL MARKING

Our LAYOUT INK provides faster, cleaner, more accurate marking out on all metal and plastic surfaces. It gives a smooth even film, enabling clear sharply defined lines to be scribed easily on all surfaces without chipping.



## FLAWFINDER

Our FLAWFINDER non-destructive inspection system provides a fast, reliable method for visible detection of cracks or flaws which would not normally be visible to the naked eye. Used to inspect welded joints, castings, forgings on many different materials.



### LAYOUT INK SPRAY/FLUID

#### Metal Marking Ink

- ▶ Scribes without flaking or chipping
- ▶ Provides contrast and definition
- ▶ Fast drying
- ▶ Easily removable
- ▶ Forms an even thin film
- ▶ Blue for bright surfaces, white for dark surfaces

Part code	Size
<b>Blue Spray</b> 57015	400 ml
<b>Blue Fluid</b> 57034	1 l
<b>White Spray</b> 57025	400 ml
<b>White Fluid</b> 57044	1 l



#### USED BY

- Toolroom
- Engineering workshops
- Maintenance departments
- Production machining
- Fabricators.



Cleaner



### FLAWFINDER CLEANER SPRAY

#### Fast drying, no residue cleaner

- ▶ Cuts through dirt, grease and grime
- ▶ Zero residue
- ▶ Prepares surface for non-destructive testing

Part code	Size
63125	300 ml



Penetrant



### FLAWFINDER DYE PENETRANT SPRAY

#### Precision crack detection penetrant

- ▶ Bright red even film
- ▶ Highly sensitive dye
- ▶ Water washable

Part code	Size
63151	400ml



Developer



### FLAWFINDER DEVELOPER SPRAY

#### Precision crack detection penetrant

- ▶ Highly absorbent white film for rapid results
- ▶ Highlights very fine cracks
- ▶ Sharp indication and geometry of defect to the naked eye

Part code	Size
63135	400 ml



### FLAWFINDER KIT

- ▶ All three products in one convenient kit
- ▶ Useful for remote testing or for mobile engineers

Part code	Size
63181	3x Aerosols



## SPATTER RELEASE

Our SPATTER RELEASE prevents the adhesion of molten weld spatter to the work piece, fixtures, jigs, shrouds and nozzles. They provide a cost effective even film with excellent spatter release properties.



WELD SPATTER RELEASE

## GLASSFLO

Our GLASSFLO products are lubricants and coatings that assist production in the glass manufacturing industry.



GLASS LUBRICANT

### SPATTER RELEASE SPRAY

#### Long lasting non-flammable spatter release

- ▶ One pass coating - goes further / lasts longer
- ▶ Film allows multiple welds
- ▶ Silicone free
- ▶ Easy cleaning

**Part code** 66080 **Size** 400 ml



Product	Non Flammable	Silicone Free	Water Based and Oil Free	Allows Multiple Welds	No Cleaning Paintable and Plateable
Spatter Release Spray	✓	✓	✗	▼▼	✗

▼▼ Excellent    ▼ Suitable    ✗ Not Suitable



### GLASSFLO 2017

#### Dry graphite lubricant

- ▶ Dry lubricant for wire mesh belts and slide plates found on glass container making machines
- ▶ Reduces thermal shock between hot glass and cold transfer plate or belt
- ▶ Reduces crizzling and thermal marking

**Part code** 78836 **Size** 4.5 kg



### GLASSFLO 785

#### High performance dry delivery coating

- ▶ Dry coating system for scoops, troughs and deflectors used on all types of glass forming delivery equipment
- ▶ Gives consistent delivery speed
- ▶ Suitable for patch coating

**Part code** 78844 **Size** 500 g



### GLASSFLO MPT

#### Mould pre-treatment spray

- ▶ Formulated to remove the need for manual swabbing of moulds during start up
- ▶ Clean, air cured, dry coating - requires no baking
- ▶ Prevents adhesion of ware to moulds

**Part code** 78871 **Size** 400 ml





## METALFLO

Our METALFLO products are lubricants to assist manufacturing in the forging industry.



HOT METAL FORGING

ROCOL® is synonymous with quality and that reputation comes from developing technically advanced products for demanding industry applications.

We develop products that display significant advantages over the competition, advantages that add true value to our customers.

### METALFLO 1204

#### Dispersion of graphite in non-melting grease

- ▶ Suitable for lubricating dies and pegs in hot brass and copper stamping where maximum resistance to heat is required
- ▶ Also used for the lubrication of bearings and weld spindles conducting electrical current on seam welding machines
- ▶ Graphite base and non-melting at high temperatures

**Part code** 78374 **Size** 18 kg



### METALFLO 2064

#### Semi-colloidal dispersion of graphite in water

- ▶ Lubricates closed dies in ferrous forging or as a parting agent in gravity die casting
- ▶ Withstands temperatures of up to 650°C
- ▶ Can be extended with water, up to 10:1, making it last longer than other solutions

**Part code** 78344 **Size** 18 kg



### METALFLO 4000

#### Dispersion of graphite in water

- ▶ Used on drop hammers and press forgings
- ▶ Controls die temperature and extends die life
- ▶ Can be extended with water, up to 20:1, making it last longer

**Part code** 78543 **Size** 20 l



We formulate and test our products in-house but, also carry out independent testing which means that you can be sure that you are using the best product for the job.

To guarantee we achieve this, ROCOL's team of chemists and engineers develops all products in accordance with the ISO 9001 system and is certified to internationally recognised standards.

Our products exist to serve you. By working within our AS 9100:2016 and ISO 9001:2015 accredited quality management systems, we ensure that we continue to deliver products that exceed our customer expectations. From product concept and design through to technical expertise and customer services, all the functions at ROCOL are carefully controlled, meaning you consistently get what you need.

Each batch of every product we manufacture is tested by the experienced personnel in our quality control laboratory and released for use only when we are confident that it meets the high standards of quality and superior performance associated with all ROCOL products: performance you can trust.

- ▶ Technically advanced products for demanding industry applications
- ▶ Products formulated and tested in-house as well as to industry standards
- ▶ All products developed in accordance with ISO 9100:2016 and ISO 9001:2015 accredited Quality Management System
- ▶ Each product tested in our quality control laboratory – only released when ready for use in your applications







ROCOL® House, Swillington, Leeds LS26 8BS

T +44 (0) 113 232 2600

F +44 (0) 113 232 2740

E [customer.service@rocol.com](mailto:customer.service@rocol.com)

Part of ITW [www.itw.com](http://www.itw.com)

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



ROCOL® is a trademark of ITW Inc.