

ROCOL®

Metalworking Solutions

Technically advanced lubricants for
all your metalworking needs

Performance you can trust



HISTORY OF EXCELLENCE

At ROCOL® we manufacture a range of innovative greases, oils, metalworking fluids, lubricants, aerosol paints, anti-slip floor coatings and panels – all designed to exceed today's challenging operating conditions.

Over the last 130 years, we have expanded considerably and offer solutions to nearly every facet of industry with over 150 distributors stocking and supplying the product range worldwide.

ROCOL® has worked with some of the world's leading companies in many diverse industries and applications, developing products with one common goal: to deliver optimum performance.

We pride ourselves on producing technically advanced products with industry needs at the core. Each and every product has been developed in the spirit ROCOL® is renowned for:

- ▶ Trusted Superior Performance
- ▶ Problem Solving
- ▶ High Quality
- ▶ Technical Innovation
- ▶ Excellent Technical and After-Sales Support



ROCOL® operates to internationally recognised standards for quality, environment and safety. Also, we are proud of our Investor in People accreditation which demonstrates our commitment to the continual engagement and development of our people.

QUALITY



BS EN ISO 9001
Certificate No. FM 12448

ENVIRONMENT



BS EN ISO 14001
Certificate No. EMS 67596

SAFETY



OHSAS 18001
Certificate No. OHS 78173

PEOPLE





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Reaming, Tapping and Drilling Lubricants

RTD® is the world leading hand applied lubricant for Reaming, Tapping & Drilling operations.

The RTD® range contains technically advanced extreme pressure additives which reduce friction at the cutting edge. As a result, it significantly extends the tool life which give cost saving benefits. The additives also give superior surface finish to the work piece reducing waste and scrap.

As part of an ongoing development programme, RTD® technology remains at the forefront in cutting performance. RTD® has been successfully serving industry for nearly 60 years, bringing cost savings and performance to a wide cross section of industries.

RTD® lubricants are formulated to:

- ▶ Double tool life
- ▶ Reduce wear & tap breakages
- ▶ Promote excellent surface finish
- ▶ Increase rates of metal removal
- ▶ Minimise waste and scrap
- ▶ Multi metal compatibility

Typical users

- ▶ Fabrication workshops
- ▶ Maintenance departments
- ▶ Production machine shops
- ▶ Pipe fitters
- ▶ Toolrooms



RTD® Liquid

Metal cutting liquid which doubles tool life

- ▶ Ultimate cutting performance
- ▶ Flows to the cutting edge
- ▶ Suitable for the most severe cutting operations
- ▶ Available in a plastic squeeze bottle for easy application

| Part code | Size |
|-----------|------|
| 53072 | 400g |
| 53076 | 5L |
| 53078 | 20L |

RTD® Compound

Metal cutting compound which doubles tool life

- ▶ Suitable for the most severe cutting operations
- ▶ Soft low melting-point paste
- ▶ Formulated to cling to the tool providing excellent cutting performance
- ▶ Application by brush – economical in use
- ▶ Rolls Royce approved - Spec CSS 137
- ▶ NATO stock number: 464-6766

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



RTD® Spray

Metal cutting lubricant which doubles tool life

- ▶ Suitable for the most severe cutting operations
- ▶ Ideal for use where accessibility is a problem
- ▶ Can be applied directly to moving tools
- ▶ NATO stock number: 541-7134

| Part code | Size |
|-----------|-------|
| 53011 | 400ml |

RTD® Foamcut Spray

Foaming lubricant which doubles tool life

- ▶ Suitable for severe cutting operations
- ▶ Clean low odour foaming spray
- ▶ Foaming action adheres to the tool
- ▶ Can be applied directly to moving tools

| Part code | Size |
|-----------|-------|
| 53041 | 300ml |

RTD® Cleancut

Metal cutting liquid which doubles tool life

- ▶ Sulphur & chlorine free
- ▶ Water washable
- ▶ Suitable for aerospace & nuclear applications
- ▶ Low viscosity, water soluble lubricant
- ▶ Non-fuming, low odour characteristics
- ▶ Non-staining on yellow metals, aluminium & brass
- ▶ Available in a plastic squeeze bottle for easy application

| Part code | Size |
|-----------|------|
| 53062 | 350g |
| 53066 | 5L |



TRI-Logic RTD®

Metal cutting liquid which doubles tool life

- ▶ Water washable
- ▶ Suitable for the most severe cutting operations
- ▶ Reinforces water mix cutting fluid performance
- ▶ Pleasant to use, low odour & light colour
- ▶ Available in a plastic squeeze bottle for easy application

| Part code | Size |
|-----------|-------|
| 53003 | 350ml |
| 53006 | 5L |
| 53008 | 20L |

Selection Chart

| Product | | Metalworking | | Compatible with Yellow Metals and Aluminium | Water Washable |
|--------------------|---------|--------------------|------------------|---|----------------|
| | | Moderate Operation | Severe Operation | | |
| RTD® Liquid | Liquid | ▼ ▼ | ▼ ▼ | ▼ | |
| RTD® Compound | Paste | ▼ ▼ | ▼ ▼ | ▼ | |
| RTD® Spray | Aerosol | ▼ ▼ | ▼ ▼ | ▼ | |
| RTD® Foamcut Spray | Aerosol | ▼ ▼ | ▼ | ▼ ▼ | |
| RTD® Cleancut | Liquid | ▼ ▼ | ▼ | ▼ ▼ | ▼ ▼ |
| TRI-Logic RTD® | Liquid | ▼ ▼ | ▼ ▼ | ▼ | ▼ ▼ |

▼ ▼ Optimum Performance ▼ Good Performance

If you require help in selecting a product, **contact ROCOL® direct: +44 (0) 113 232 2750**

RTD® Chlorine Free

RTD® Chlorine Free range is used where chlorine cannot be tolerated.

The RTD® Chlorine Free range performance characteristics are the same as standard RTD®.

RTD® Chlorine Free Liquid

Metal cutting liquid which doubles tool life

| Part code | Size |
|-----------|-------|
| 53521 | 350ml |

RTD® Chlorine Free Compound

Metal cutting compound which doubles tool life

| Part code | Size |
|-----------|------|
| 53513 | 450g |

RTD® Chlorine Free Spray

Metal cutting lubricant which doubles tool life

| Part code | Size |
|-----------|-------|
| 53081 | 400ml |



Cutting Fluids



The ULTRACUT® range of water mix cutting fluids has been developed to provide optimum cutting performance. The range has remained at the forefront of technology in terms of performance as well as safety and environmental characteristics. The ULTRACUT® range includes products for all metal removal operations. ULTRACUT® EVO has been carefully formulated to be operator friendly and to minimise environmental impact.

The ULTRACUT® range is formulated to provide:

- ▶ High dilution ratios — reduced consumption
- ▶ Exceptional cutting performance — extended tool life
- ▶ Long predictable sump life — reduced disposal costs
- ▶ Metal deactivators and passivators — multi-metal compatibility
- ▶ Low foaming – ideal for modern high pressure systems
- ▶ No hazard labelling - operator friendly



Economic in use


The ULTRACUT® range has been formulated to run at high mixing dilutions. This makes them very economic to use, which in turn makes them extremely cost effective.

Typical ULTRACUT® 370 Plus usage illustration:

Number of litres of concentrate to mix 12,000 Litres of mixed emulsions:



ULTRACUT® 370 Plus
Average dilution: 60:1
1 barrel to mix 12,000 Litres



Standard Cutting Fluid
Average dilution: 15:1
4 barrels to mix 12,000 Litres

Extend tool life

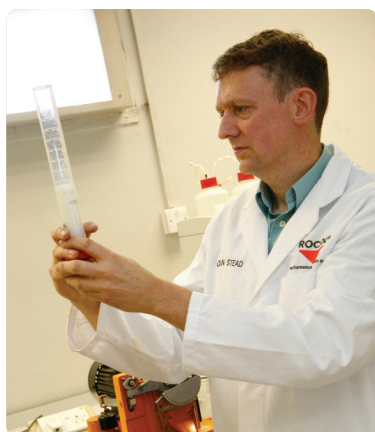
Part of the ULTRACUT® range contains Extreme Pressure (EP) additives, which are used for machining hard metals. These additives reduce wear and friction and are able to withstand exceptionally high pressure, which results in: Reduced tool wear / Improved surface finish / Enables tough work hardening alloys to be easily cut / Allows heavier cuts to be taken and maintained machining tolerances

The international recognised Reichert Friction & Wear test demonstrates the benefits of ULTRACUT® EP cutting fluids.


To see the Reichert Friction & Wear test in action, use the following website link: www.rocol.com/reichert

Technical Information:

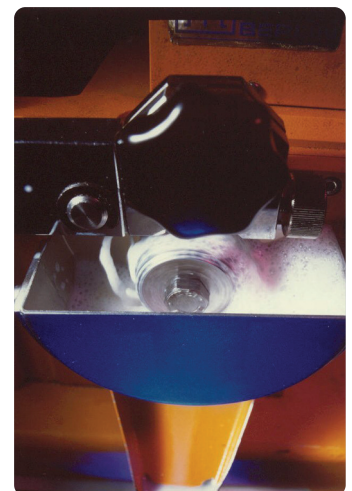
| | |
|----------------|--|
| Test Material: | Hardened Steel |
| Ring material: | 100 Cr 6 Hardness HRc 58 to 65 |
| Pin Material: | 100 Cr 6 Hardness HRc 60 +/-2 |
| Duration: | 100 metres, measured by the counter |
| Surface Speed: | 1.67m/sec |
| Load: | 1.5kg weight applied via a 22:1 lever system |
| Sample volume: | 50mls of emulsion |



A B C



A – Before test
B – Test with non EP metal cutting fluid (Wear 100%)
C – Tested with ULTRACUT® 260 (Wear 22.3%)



ULTRACUT® EVO Series

Water Mix Fluids



ULTRACUT® EVO is the next generation of cutting fluid from ROCOL®, with all the performance and cost effectiveness of ULTRACUT®

ULTRACUT® EVO has been carefully formulated to be operator friendly and minimise environmental impact.

Formulated to provide extremely economical dilution ratios with exceptional cutting performance the ULTRACUT® EVO range provides a very cost effective solution to your metal cutting needs.

NO BIOCIDES

NO HAZARD LABEL

NO SKIN SENSITISERS

NO COMPROMISE

ULTRACUT® EVO 250

Long life soluble oil cutting fluid

- ▶ Formulated for light/medium cutting operations
- ▶ High quality general purpose water mix cutting fluid
- ▶ Suitable for ferrous and non-ferrous metals
- ▶ Very economical dilutions, up to 40:1

| Part code | Size |
|-----------|------|
| 51366 | 5L |
| 51363 | 20L |
| 51362 | 60L |
| 51369 | 200L |

ULTRACUT® EVO 255

Long life EP soluble oil cutting fluid

- ▶ Formulated for medium/severe cutting operations
- ▶ Contains EP additives — formulated to give superior performance and extend tool life
- ▶ Very economical dilutions, up to 40:1

| Part code | Size |
|-----------|------|
| 51336 | 5L |
| 51333 | 20L |
| 51339 | 200L |

ULTRACUT® EVO 260

Long life high performance EP soluble oil cutting fluid

- ▶ Formulated to provide superior performance in severe cutting operations
- ▶ Suitable for a wide range of ferrous and non-ferrous metals including stainless steel, nickel alloys, titanium and nimonics
- ▶ Effective in a wide range of water conditions
- ▶ Contains EP additives — formulated to give superior performance and extend tool life
- ▶ Very economical dilutions, up to 40:1

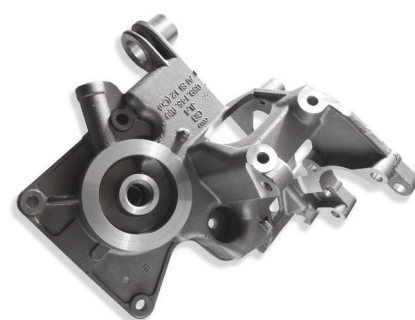
| Part code | Size |
|-----------|------|
| 51263 | 20L |
| 51264 | 60L |
| 51269 | 200L |

ULTRACUT® EVO 280

Long life high performance soluble oil cutting fluid for aluminium

- ▶ Compatible with all grades of aluminium alloys
- ▶ Unique lubricity additives prevent 'built up' edge
- ▶ Superior pH control prevents staining
- ▶ Economical dilutions, up to 25:1

| Part code | Size |
|-----------|------|
| 51682 | 20L |
| 51689 | 200L |



ULTRACUT® Hard Water Series

Water Mix Fluids

ULTRACUT® 250 HW

Long life soluble oil cutting fluid for hard water areas

- ▶ All the characteristics of ULTRACUT EVO 250 for use in areas with water hardness more than 270ppm
- ▶ Economical dilutions, up to 35:1

| Part code | Size |
|-----------|------|
| 51483 | 20L |
| 51489 | 200L |

ULTRACUT® 255 HW

Long life EP soluble oil cutting fluid for hard water areas

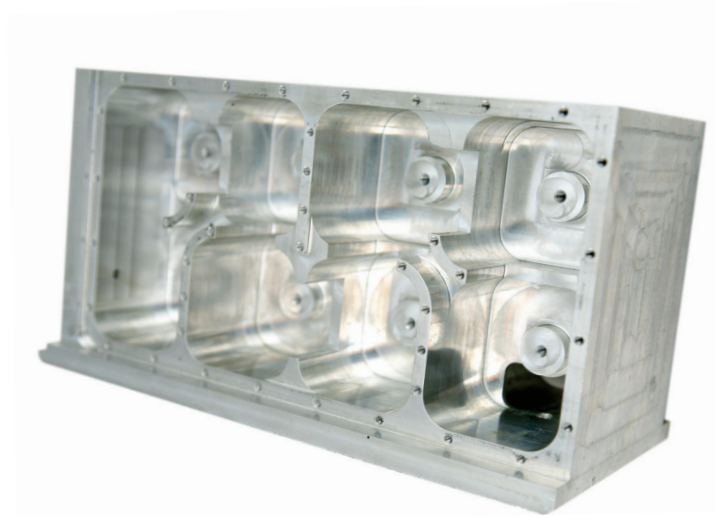
- ▶ All the characteristics of ULTRACUT EVO 255 for use in areas with water hardness more than 270ppm
- ▶ Economical dilutions, up to 35:1

| Part code | Size |
|-----------|------|
| 51473 | 20L |
| 51479 | 200L |



Operator friendly

Careful selection of our raw materials ensures there are no risk phrases assigned to our Hard Water and Semi Synthetic cutting fluids when diluted - therefore minimising the risk of Health & Safety concerns.



ULTRACUT® Semi Synthetic Series

Water Mix Fluids

ULTRACUT® Semi Synthetic Series is a range of highly refined mineral oil fluids that form a semi-synthetic micro emulsion. They can be used to rationalise to one fluid for cutting and grinding applications.

The range is safe and pleasant to use. They give a long predictable sump life, which make them very cost effective.



ULTRACUT® 370 Plus

Long life high dilution semi-synthetic cutting & grinding fluid

- ▶ Very high dilution – Low in sump cost
- ▶ Suitable for use as a light/medium cutting & grinding fluid
- ▶ Forms a translucent green micro-emulsion when mixed with water which provides a clear view of the workpiece
- ▶ Extremely economic dilutions: up to 60:1 for cutting and 70:1 for grinding

ULTRACUT® 320

Long life high performance EP semi-synthetic cutting & grinding fluid

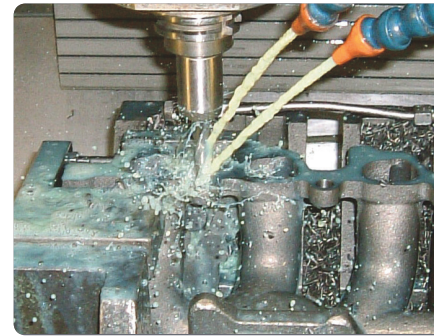
- ▶ Formulated to provide superior performance in medium to severe cutting operations
- ▶ Suitable for a wide range of ferrous & non-ferrous metals
- ▶ Forms a translucent blue micro-emulsion when mixed with water which provides a clear view of the workpiece
- ▶ Contains EP additives – formulated to give superior performance and extend tool life
- ▶ Very economic dilutions: up to 40:1 for cutting, and 60:1 for grinding

ULTRACUT® 390H

Long life semi-synthetic cutting fluid

- ▶ Formulated for light/medium machining of ferrous materials, in particular cast iron
- ▶ Forms a translucent green micro-emulsion when mixed with water which provides a clear view of the workpiece
- ▶ Very economic dilution, up to 40:1

| Part code | Size |
|-----------|------|
| 51376 | 5L |
| 51373 | 20L |
| 51372 | 60L |
| 51379 | 200L |



| Part code | Size |
|-----------|------|
| 51323 | 20L |
| 51329 | 200L |

| Part code | Size |
|-----------|------|
| 51296 | 5L |
| 51293 | 20L |
| 51294 | 60L |
| 51299 | 200L |



ULTRACUT® 620

Water Mix Fluid

The ULTRACUT® 620 is a chlorine free semi-synthetic micro emulsion that has Extreme Pressure (EP) performance - reduces tool wear and improves surface finish.



ULTRACUT® 620

Long life chlorine free EP semi-synthetic cutting & grinding fluid

- ▶ Ideal for medium to severe cutting & grinding operations
- ▶ Unique EP additives – formulated to give superior performance and extend tool life
- ▶ Very economic dilutions: up to 40:1 for cutting, and 55:1 for grinding

Part code

51389

Size

200L

Selection Chart

| Product | Emulsion Colour | Fluid Type & Typical Dilution Range With Water | Cutting Performance / Material Suitability | | | | |
|--------------------|-------------------|---|--|-----------|---------------|--------------------------|-----------------|
| | | | Cast Iron | Aluminium | Copper Alloys | Low-Medium Carbon Steels | Hardened Alloys |
| ULTRACUT® EVO 250 | Milky White | Soluble Oil Up to 40:1 Cutting | ▼▼ | ▼▼ | ▼▼ | ▼▼▼▼ | ▼ |
| ULTRACUT® 250 HW | Milky White | Soluble Oil Up to 35:1 Cutting | ▼▼ | ▼▼ | ▼▼ | ▼▼▼▼ | ▼ |
| ULTRACUT® EVO 255 | Milky White | Soluble Oil Up to 40:1 Cutting | ▼▼ | ▼▼ | ▼▼ | ▼▼▼▼ | ▼▼▼ |
| ULTRACUT® 255 HW | Milky White | Soluble Oil Up to 35:1 Cutting | ▼▼ | ▼▼ | ▼▼ | ▼▼▼▼ | ▼▼▼ |
| ULTRACUT® EVO 260 | Milky White | Soluble Oil Up to 40:1 Cutting | ▼▼ | ▼▼ | ▼▼ | ▼▼▼▼ | ▼▼▼▼ |
| ULTRACUT® EVO 280 | Milky White | Soluble Oil Up to 25:1 Cutting | ▼ | ▼▼▼▼ | ▼▼▼▼ | ▼▼▼▼ | ▼ |
| ULTRACUT® 370 PLUS | Translucent Green | Semi-Synthetic Up to 60:1 Cutting Up to 70:1 Grinding | ▼▼ | ▼ | ▼ | ▼▼▼▼ | ▼ |
| ULTRACUT® 320 | Translucent Blue | Semi-Synthetic Up to 40:1 Cutting Up to 60:1 Grinding | ▼▼ | ▼▼ | ▼ | ▼▼▼▼ | ▼▼ |
| ULTRACUT® 390H | Translucent Green | Soluble Oil Up to 40:1 Cutting | ▼▼▼▼ | ▼ | ▼ | ▼▼▼▼ | ▼ |
| ULTRACUT® 620 | Translucent Blue | Soluble Oil Up to 40:1 Cutting | ▼▼ | ▼▼ | ▼▼ | ▼▼▼▼ | ▼▼ |
| ULTRACUT® 550 | Amber Oil | Neat Oil | ▼▼▼▼ | ▼▼ | ▼ | ▼▼▼▼ | ▼▼▼▼ |
| ULTRACUT® 560 | Dark Amber Oil | Neat Oil | ▼▼▼▼ | ▼ | ✗ | ▼▼▼▼ | ▼▼▼▼ |

▼▼▼▼ Optimum Performance

▼▼ Very Good Performance

▼ Good Performance

✗ Not Suitable

If you require help in selecting a product, contact ROCOL® direct: +44 (0) 113 232 2750

www.rocol.com

ULTRACUT® 500 Series

Neat Cutting Oils

The ULTRACUT 500® series are formulated from highly refined mineral oil and are formulated for the severest cutting operations.



ULTRACUT® 550

High performance EP neat oil cutting fluid

- ▶ Formulated for medium to severe cutting operations
- ▶ Contains EP additives – formulated to give superior performance and extend tool life
- ▶ Excellent residual corrosion protection
- ▶ Also suitable for: thread grinding, broaching, gear cutting and deep hole drilling

| Part code | Size |
|-----------|------|
| 51619 | 200L |

ULTRACUT® 560

High performance chlorine free EP neat oil cutting fluid

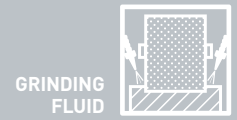
- ▶ All the characteristics of ULTRACUT® 550 but chlorine free
- ▶ Not suitable for use on copper or copper based alloys

| Part code | Size |
|-----------|------|
| 51629 | 200L |



Grinding Fluids

ULTRAGRIND™ is a range of synthetic grinding fluids that contain technically advanced corrosion inhibitors, wetting agents and lubricity additives.



- ▶ Oil free – keeps wheel clean / reduces dressing frequency
- ▶ Formulated to ensure rapid settlement of grinding fines; promoting an excellent surface finish
- ▶ Excellent residual corrosion protection
- ▶ Low odour, low foaming



ULTRAGRIND™ 430

Long life multi-purpose synthetic grinding fluid

- ▶ Formulated for light to medium surface, centreless & cylindrical grinding operations
- ▶ Very economic dilutions, up to 60:1

| Part code | Size |
|-----------|------|
| 51503 | 20L |
| 51509 | 200L |

ULTRAGRIND™ Premium

Long life high performance synthetic grinding fluid

- ▶ Formulated for medium to heavy surface, centreless & cylindrical grinding operations
- ▶ Extremely economic dilutions, up to 70:1

| Part code | Size |
|-----------|------|
| 51182 | 20L |
| 51189 | 200L |

ULTRAGRIND™ Carbide

Long life high performance synthetic carbide grinding fluid

- ▶ Formulated for grinding tungsten carbide
- ▶ Contains inhibitors to minimise cobalt leaching
- ▶ Economic dilutions, up to 30:1

| Part code | Size |
|-----------|------|
| 51719 | 200L |



Selection Chart

| Product | Emulsion Colour | Fluid Type & Typical Dilution Range With Water | Grinding Performance | | |
|---------------------|-------------------|--|----------------------|------------|------------------|
| | | | Light/Medium Duty | Heavy Duty | Tungsten Carbide |
| ULTRAGRIND™ 430 | Translucent Green | Synthetic Up to 60:1 | ▼▼▼ | ▼▼ | × |
| ULTRAGRIND™ PREMIUM | Translucent Green | Synthetic Up to 70:1 | ▼▼▼ | ▼▼▼ | × |
| ULTRAGRIND™ CARBIDE | Translucent Green | Synthetic Up to 30:1 | ▼▼▼ | ▼▼▼ | ▼▼▼ |

▼▼▼ Optimum Performance ▼▼ Good Performance × Not Suitable

If you require help in selecting a product, contact Rocol® direct: +44 (0) 113 232 2750

Supply & Management of ROCOL® Cutting Fluids

Ultracare® can offer up to 40% saving on your total metalworking fluid spend through:

- ▶ Reduced fluid usage
- ▶ Improved machine performance & efficiency
- ▶ Extended tool life
- ▶ Less downtime
- ▶ Reduced waste disposal costs

Ultracare®

To complement the ULTRACUT® Range, ROCOL® offers the Ultracare® programme, which is a commitment to our customers that their cutting fluid is running at an optimum level of performance at all times.

This is achieved through experienced ROCOL® Service Engineers operating across the UK, who provide a world-class service package. All ROCOL® Service Engineers have been extensively trained in the care and maintenance of metalworking fluids. They are able to provide a unique customised care and maintenance programme that ensures all metalworking fluid requirements are achieved, as well as offering training sessions which are tailored to suit the needs of any company.



The Ultracare® programme includes:

- ▶ Free machine shop survey that accurately identifies cost saving potential
- ▶ Regular ROCOL® Service Engineer visits to monitor fluid condition
- ▶ Operator training on best practice of metalworking fluid management
- ▶ Electronic fluid management record system which is fully HSE compliant
- ▶ Expert advice & solutions on all aspects of cutting fluid usage and disposal
- ▶ Extremely competitive disposal prices



| ROCOL® Ultracare® CUTTING FLUID SERVICE REPORT | | | | | | | | | |
|--|----------------|-----------|---------------|-------|-----|-------------------|-------------------|--|--|
| Hobson Engineering | | | | | | | | | |
| ROCOL Service Engineer: Ian Walker Service Visit Date: 01/10/2009 | | | | | | | | | |
| Company: Hobson Engineering, Sheffield | | | | | | | | | |
| Contact: S. Wilkinson Position: Machine Shop Manager | | | | | | | | | |
| Product 1: ULTRACUT 250 Dilution: 40 :1 to 20 :1 Refractometer: 2.7 to 5.1 % | | | | | | | | | |
| Product 2: Dilution: :1 to :1 Refractometer: to % | | | | | | | | | |
| Machine/Plant No | Product Number | Fill Date | Sump Capacity | Ref % | pH | Visual Inspection | Comments | | |
| 14 Machine 1 | 1 | 14/08/08 | 125L | 4.3% | 9.0 | OK | OK | | |
| 15 Machine 2 | 1 | 01/10/08 | 500L | 3.8% | 9.0 | OK | OK | | |
| 16 Machine 3 | 1 | 13/10/08 | 250L | 6.0% | 9.0 | OK | Tramp oil removed | | |
| 17 Machine 4 | 1 | 07/02/08 | 280L | 2.1% | 8.9 | OK | OK | | |
| 18 Machine 5 | 1 | 12/03/08 | 1400L | 2.0% | 8.9 | OK | OK | | |
| 19 Machine 6 | 1 | 20/06/08 | 300L | 3.8% | 9.0 | OK | Tramp oil removed | | |
| 20 Machine 7 | 1 | 26/01/08 | 500L | 1.0% | 8.7 | OK | OK | | |
| 21 Machine 8 | 1 | 28/02/08 | 930L | 4.0% | 9.0 | OK | OK | | |
| 22 Machine 9 | 1 | 28/06/08 | 1000L | 5.4% | 8.9 | OK | OK | | |

Electronic fluid management record

Conditions apply.

Ultracare® is HSE compliant, which contributes to the safety of employees. The programme also ensures a long predictable sump life, therefore less waste is generated which is kind to the environment – the Ultracare® programme can help towards the achievement of OHSAS 18001 and BS EN ISO 14001.

Value Engineered Cutting Fluids



The V-cut™ range consists of three 'Value Engineered' water mix cutting fluids that offer our performance and quality at a competitive price.

The range offers an optimum balance between lubrication and cooling whilst giving excellent metal removal rates, long predictable sump life and excellent cutting / grinding performance.

V-cut™ fluids have been carefully formulated using the latest in modern cutting fluid additive technology and highly refined mineral oils, making them safe and pleasant to use.

TYPICAL USERS

- ▶ Maintenance departments
- ▶ Education centres
- ▶ Small machine shops



V-cut™ MT

Milky type water mix fluid for all general cutting operations

- ▶ Stable low foaming milky white emulsion
- ▶ Economic dilutions, up to 20:1

| Part code | Size |
|-----------|------|
| 51516 | 5L |
| 51513 | 20L |
| 51514 | 60L |

V-cut™ SS

Semi-synthetic water mix fluid for all general cutting & grinding operations

- ▶ Rationalise to one fluid for cutting & grinding
- ▶ Forms translucent green micro-emulsion in water
- ▶ Very economic dilutions, up to 45:1 for cutting. 55:1 for grinding

| Part code | Size |
|-----------|------|
| 51526 | 5L |
| 51523 | 20L |
| 51524 | 60L |

V-cut™ EP

Extreme pressure water mix fluid for heavy duty cutting operations

- ▶ Special extreme pressure (EP) additives extend tool life and improve surface finish
- ▶ Stable low foaming milky white emulsion
- ▶ Very economic dilutions, up to 40:1

| Part code | Size |
|-----------|------|
| 51533 | 20L |
| 51534 | 60L |



Selection Chart

| Product | Metal cutting | | Grinding Operation |
|-----------|-------------------|----------------------|--------------------|
| | General Operation | Heavy Duty Operation | |
| V-cut™ MT | ▼▼▼ | ▼▼ | ▼ |
| V-cut™ SS | ▼▼▼ | ▼ | ▼▼▼ |
| V-cut™ EP | ▼▼▼ | ▼▼▼ | ▼ |

▼▼▼ Optimum Performance ▼▼ Good Performance ▼ Suitable

If you require help in selecting a product, **contact ROCOL® direct: +44 (0) 113 232 2750**

Fluid Care Products and Equipment

The ULTRAGUARD® range of machine tool care products are formulated to compliment our water mix metalworking fluids. They ensure best practice care and maintenance of machine tools, as well as optimum performance from your ROCOL® metalworking fluid.

ULTRAGUARD® SC

Machine tool system cleaner

- ▶ Dilution ratio 100:1 – economical in use
- ▶ Exceptional performance - cleans & disinfects in one operation
- ▶ Formulated for use prior to recharging machine tools with fresh cutting/grinding fluid
- ▶ Can be used while machine is in operation

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



ULTRAGUARD® BX

Bactericide additive

- ▶ Dilution ratio 1000:1 – economical in use
- ▶ Formulated to provide long lasting protection against bacterial contamination
- ▶ Can be safely used with all water mix metalworking fluids

| Part code | Size |
|-----------|------|
| 52084 | 1L |

ULTRAGUARD® FX

Fungicide additive

- ▶ Dilution ratio 1000:1 – economical in use
- ▶ Formulated to provide long lasting protection against fungal growth
- ▶ Can be safely used with all water mix metalworking fluids

| Part code | Size |
|-----------|------|
| 52094 | 1L |

ULTRAGUARD® PF

Machine tool purging fluid

- ▶ Dilution ratio 50:1 – economical in use
- ▶ Used to clean out the system prior to refilling with fresh fluid
- ▶ Cleans and disinfects the most severely contaminated machine tool systems
- ▶ Loosens sludge and slime deposits
- ▶ Not to be used when machining aluminium alloys

| Part code | Size |
|-----------|------|
| 52054 | 1L |

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 | 1L |

ROCOL® Automatic Fluid Mixer

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

| Part code | Size |
|-----------|------|
| 52233 | 1 |

ROCOL® Refractometer

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

| Part code | Size |
|-----------|------|
| 52060 | 1 |



ROCOL® Automatic Fluid Mixer



ROCOL® Refractometer

Near Dry Machining



Accu-Lube® offers a complete range of natural-based lubricants along with specially-developed, patented micro-lubrication systems. Where appropriate they are a viable alternative to water mix cutting fluids.

The Accu-Lube® System can be used on all major workshop processes, such as: Circular & Band Sawing, Turning, Milling, Drilling, Tapping, Reaming and Forming.

Accu-Lube® Lubricants

Accu-Lube® lubricants comprise of a complete line of natural based lubricants, which are biodegradable, non toxic and no-allergenic: suitable for most machining operations.

Accu-Lube® Applicator

Accu-Lube® applicators regulate the lubricant supplied to the cutting edge in exact quantities. The lubricant is carried by air, with pinpoint accuracy onto the cutting edge with no risk of hazardous atomising or mist.

Accu-Lube® represents the very latest technology ensuring:

- ▶ Improved productivity
- ▶ Reduced operating costs
- ▶ Safer working conditions
- ▶ Cleaner machine operations
- ▶ No waste disposal
- ▶ Eliminates cutting fluid
- ▶ Environmentally considerate



Accu-Lube® LB2000

Heavy duty machining lubricant

- ▶ High performance lubricant based on highly refined natural base oils
- ▶ Excellent on ferrous and non ferrous metals
- ▶ Must be cleaned off prior to heat treating

| Part code | Size |
|-----------|------|
| 74006 | 5L |
| 74009 | 200L |

Accu-Lube® LB4000

Light to medium duty machining lubricant

- ▶ High performance lubricant based on naturally derived fatty acids
- ▶ Excellent on ferrous and non ferrous metals
- ▶ No cleaning required prior to heat treating

| Part code | Size |
|-----------|------|
| 74026 | 5L |
| 74029 | 200L |

Accu-Lube® LB5000

Medium duty machining lubricant

- ▶ High performance light viscosity lubricant based on fatty alcohol
- ▶ Suitable for non ferrous metals, especially aluminium
- ▶ No cleaning required prior to heat treating

| Part code | Size |
|-----------|------|
| 74036 | 5L |
| 74039 | 200L |

Accu-Lube® LB10000

Medium to heavy duty machining lubricant

- ▶ Machining lubricant based on refined natural base oils
- ▶ Suitable for ferrous and non ferrous metals
- ▶ Must be cleaned off prior to heat treating

| Part code | Size |
|-----------|------|
| 74056 | 5L |
| 74059 | 200L |

Accu-Lube® Applicator

Accu-Lube® applicators regulate the lubricant supplied to the cutting edge in exact quantities depending on the operation.

| Part code | Size |
|-----------|------|
| 74999 | - |



Slideway Lubricants



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

It's compatible with water mix cutting and grinding fluids which prevents the formation of solids. This reduces the risk of oilway blockages which cause expensive downtime and repairs.

The high film strength prevents metal to metal contact, reduces wear and ensures smooth and precise movement.

ULTRAGLIDE X5

Total protection slideway lubricant

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

| Part code | Size |
|-----------|------|
| 52086 | 5L |
| 52083 | 20L |
| 52089 | 200L |



ULTRAGLIDE Spray

Total protection slideway lubricant

- ▶ All the features of ULTRAGLIDE X5 with the convenience of an aerosol
- ▶ Ideal for machine tools without automatic lubrication systems

| Part code | Size |
|-----------|-------|
| 52041 | 400ml |



Multi-Purpose Water Based Cleaner



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

ULTRACLEAN 2000

Multi-purpose water based cleaner

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

| Part code | Size |
|-----------|------|
| 51056 | 5L |
| 51059 | 200L |



Corrosion Protectives

MOISTURE GUARD

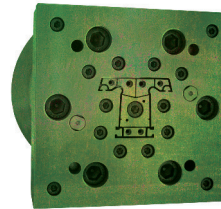
MOISTURE GUARD gives exceptional corrosion protection. It is typically used to protect high value moulding tools and bright metal components in storage.



MOISTURE GUARD Spray/Fluid

Five year indoor corrosion protective

- ▶ Flexible film – does not chip or crack
- ▶ Dewatering 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



MOISTURE GUARD Clear Spray

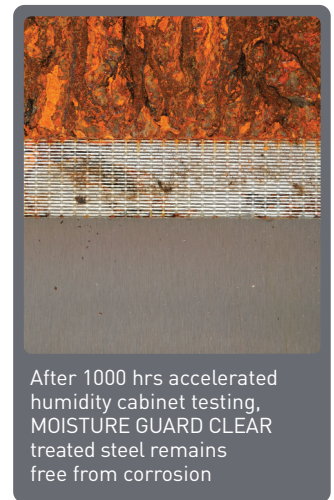
| | |
|-----------|-------|
| Part code | Size |
| 69025 | 400ml |

MOISTURE GUARD Green Spray

| | |
|-----------|-------|
| Part code | Size |
| 69045 | 400ml |

MOISTURE GUARD Green Fluid

| | |
|-----------|------|
| Part code | Size |
| 69006 | 5L |



METAL GUARD

METAL GUARD is a corrosion protective for the temporary indoor protection of components such as pressings and any machined metal components - whether in storage, transit or between operations.



METAL GUARD Fluid

One year indoor corrosion protective

- ▶ Dewatering corrosion protective
- ▶ Suppresses corrosion attack from finger prints
- ▶ Ideal for dipping, brushing or spraying
- ▶ Easily removable oily film
- ▶ Does not contain silicone
- ▶ After 500 hrs accelerated humidity cabinet testing, METAL GUARD treated steel remains free from corrosion



| | |
|-----------|------|
| Part code | Size |
| 69069 | 200L |



FORMING LUBRICANTS

Cold Metal Forming Lubricants



The ULTRAFORM™ range of forming lubricants are formulated for cold forming operations such as deep drawing, forming, piercing and blanking. They are formulated to:

- ▶ Increase production rates and reduce lubricant usage
- ▶ Provide optimum performance, preventing splitting, pick up & scoring, resulting in minimal scrap rates
- ▶ Be used on a wide range of metals
- ▶ Give maximum tool/die life
- ▶ Provide excellent process compatibility



Neat Oils

ULTRAFORM™ 1060

Vanishing film forming lubricant

- ▶ Light duty forming lubricant
- ▶ Dries rapidly usually requiring no cleaning prior to finishing process

| Part code | Size |
|-----------|------|
| 86213 | 20L |
| 86219 | 200L |

ULTRAFORM™ 1050

Low residue forming lubricant

- ▶ Light to medium duty operations
- ▶ Normally requires no cleaning

| Part code | Size |
|-----------|------|
| 86103 | 20L |
| 86109 | 200L |

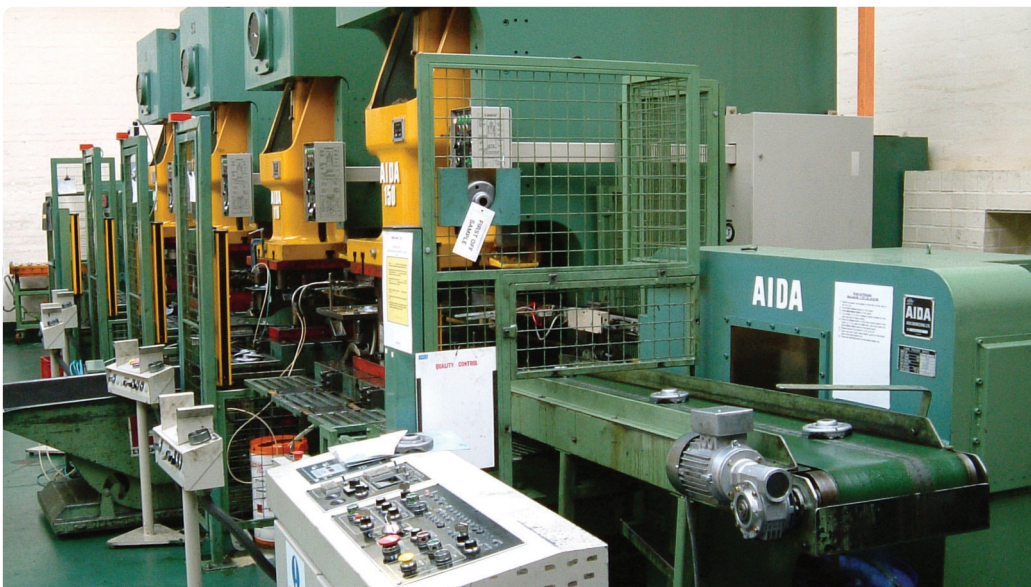
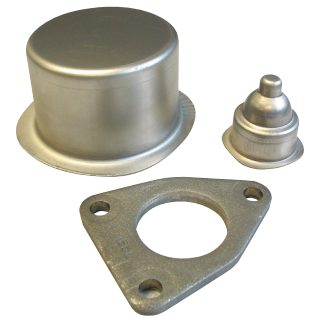


ULTRAFORM™ 1030

High performance forming lubricant

- ▶ Suited to the most demanding forming operation
- ▶ Leaves an oily film for corrosion protection or carry over lubrication for a secondary process
- ▶ Easily applied and cleaned

| Part code | Size |
|-----------|------|
| 86083 | 20L |
| 86089 | 200L |



Water Extendable Oils

The ULTRAFORM™ 2000 Series are very versatile & economical forming products that can be used neat or diluted with oil/water.



ULTRAFORM™ 2030

High performance light/medium duty EP forming lubricant

- ▶ Formulated for light/medium duty forming operations on ferrous and non-ferrous metals

| Part code | Size |
|-----------|------|
| 86013 | 20L |
| 86019 | 200L |

ULTRAFORM™ 2020

High performance heavy duty EP forming lubricant

- ▶ Formulated for heavy duty forming operations on ferrous and non-ferrous metals

| Part code | Size |
|-----------|------|
| 86113 | 20L |
| 86119 | 200L |

ULTRAFORM™ 2010

Ultimate performance severe/extra severe duty EP forming lubricant

- ▶ Particularly suitable for use on ferrous and non ferrous metals including stainless steels and nickel alloys
- ▶ Use neat for ultimate metal forming performance

| Part code | Size |
|-----------|------|
| 86043 | 20L |
| 86049 | 200L |

ULTRAFORM™ 2015

High performance medium/heavy duty EP chlorine free forming lubricant

- ▶ Formulated for medium/heavy duty forming operations on ferrous and non-ferrous metals

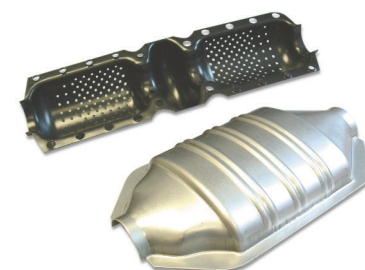
| Part code | Size |
|-----------|------|
| 86099 | 200L |

ULTRAFORM™ Advantage

Ultimate performance medium/heavy duty EP chlorine free forming lubricant

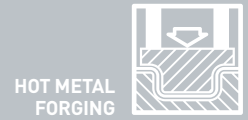
- ▶ Formulated for medium/heavy duty forming operations on ferrous and non-ferrous metals
- ▶ Provides outstanding economy and minimal scrap
- ▶ Difficult operations use neat
- ▶ Medium/heavy operations dilute with water

| TPart code | Size |
|------------|------|
| 86273 | 20L |
| 86279 | 200L |



Hot Metal Forging Lubricants

METALFLO products are lubricants specifically formulated to assist manufacture in the forging industry.



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

Part code

78374

Size

18kg

METALFLO 20

Dispersion of graphite in alcohol

- ▶ Formulated for use as a pre-treatment to provide a dry film to all forms of hot metalworking tooling

Part code

78456

Size

5L

METALFLO 2064

Semi-colloidal dispersion of graphite in water

- ▶ Formulated to lubricate closed dies in ferrous forging or as a parting agent in gravity die casting

Part code

78344

Size

18kg

METALFLO 4000

Dispersion of graphite in water

- ▶ Ideal for drop hammer and press forging

Part code

78543

Size

20L



MOULD RELEASE AGENTS



Our unique range of mould release agents offers high performance, economy and versatility in the release of all types of plastics and rubbers. They are commonly used in injection and compression mouldings, as well as extrusion and glass fibre lay up work.

The ROCOL[®] mould release range is formulated to:

- ▶ Ensure trouble free start up
- ▶ Be highly economical - one pass coating
- ▶ Penetrate and spread to all parts of intricate moulds to give full clean release
- ▶ Enable high speed production



PR Spray

Long lasting silicone mould release

- ▶ Ultimate 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
72015

Size
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
72021

Size
400ml



RS-7 Spray

Long lasting non silicone mould release

- ▶ Non silicone wet film promotes gloss finish
- ▶ Can be over-painted or printed when dry
- ▶ Suitable up to 150°C

Part code
72035

Size
400ml



Selection Chart

| Product | Base | Upper Temperature Limit | Wet/Dry Film | Component Finish | Over Printed or Printed |
|---------------------|-------------------|-------------------------|--------------|------------------|-------------------------|
| PR Spray | Silicone | 200°C | Wet | Gloss | ✗ |
| Mould Release Spray | PTFE | 270°C | Dry | Matt | ▼ |
| RS-7 Spray | Hydrocarbon Blend | 150°C | Wet | Gloss | ▼ |

▼ Suitable ✗ Non Suitable

If you require help in selecting a product, contact ROCOL[®] direct: +44 (0) 113 232 2750

Mould Tool Corrosion Protective

MOISTURE GUARD gives exceptional corrosion protection. It is typically used to protect high value moulding tools and bright metal components in storage.



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

MOISTURE GUARD Clear Spray

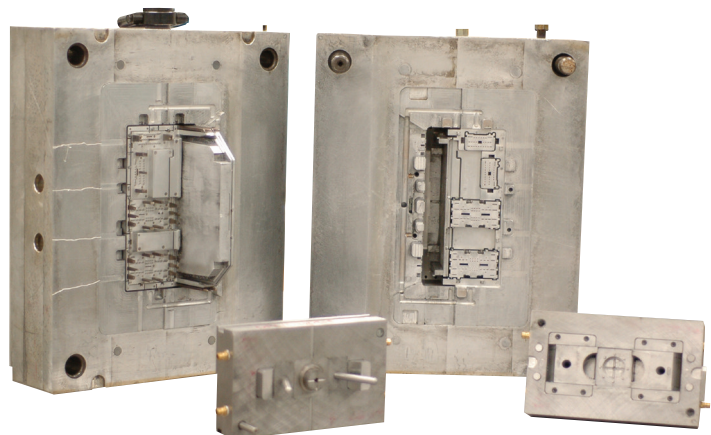
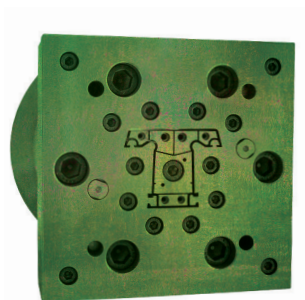
| Part code | Size |
|-----------|-------|
| 69025 | 400ml |

MOISTURE GUARD Green Spray

| Part code | Size |
|-----------|-------|
| 69045 | 400ml |

MOISTURE GUARD Green Fluid

| Part code | Size |
|-----------|------|
| 69006 | 5L |



Non Destructive Testing System (NDT)

The FLAWFINDER System is a non destructive crack detection system. The benefits of the Flawfinder System include:

- ▶ Industrially recognised NDT system
- ▶ Portable and simple to use in natural light
- ▶ Cost effective

Typical applications

- ▶ Weld inspection
- ▶ Batch testing
- ▶ Checking tools



FLAWFINDER CLEANER Spray

Fast drying, no residue cleaner

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

Part code

63125

Size

300ml



Cleaner

FLAWFINDER DYE PENETRANT Spray

Precision crack detection penetrant

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

Part code

63151

Size

300ml



Penetrant

FLAWFINDER DEVELOPER Spray

Precision crack detection developer

- ▶ Highly absorbent white film for rapid results
 - ▶ Highlights very fine cracks
 - ▶ Sharp indication and geometry of defect to the naked eye
- Suitable for pressure testing & leak detection

Part code

63135

Size

400ml



Developer

FLAWFINDER KIT

Part code

63181

Size

3 x
Aerosols

Metal Marking Inks

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



Typical users

- ▶ Toolrooms
- ▶ Engineering workshops
- ▶ Maintenance departments
- ▶ Production machining
- ▶ Fabricators



LAYOUT INK Spray/Fluid

Ultimate Metal Marking Ink

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

LAYOUT INK Spray (Blue)

| Part code | Size |
|-----------|-------|
| 57015 | 400ml |

LAYOUT INK Fluid (Blue)

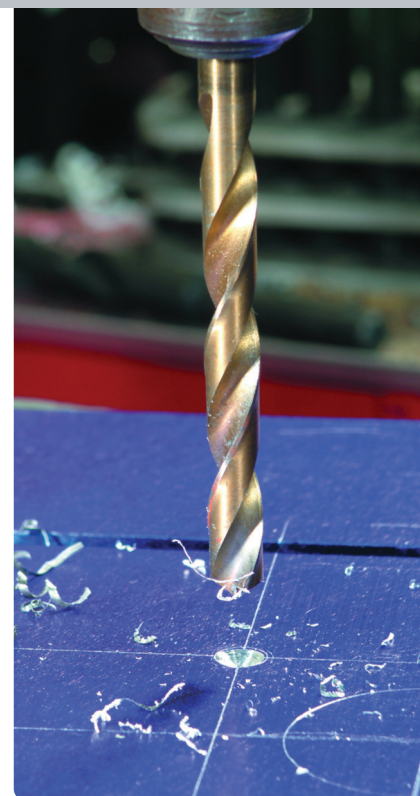
| Part code | Size |
|-----------|------|
| 57034 | 1L |

LAYOUT INK Spray (White)

| Part code | Size |
|-----------|-------|
| 57025 | 400ml |

LAYOUT INK Fluid (White)

| Part code | Size |
|-----------|------|
| 57044 | 1L |



Weld Spatter Release

SPATTER RELEASE is formulated to prevent the adhesion of molten weld spatter to the work piece, fixtures, jigs, shrouds and nozzles. They have been designed to provide a cost effective even film with excellent spatter release properties.



SPATTER RELEASE Spray

Economical non flammable spatter release

- ▶ Exceptional spatter release - one pass coating
- ▶ Film allows multiple welds
- ▶ Silicone free
- ▶ Easy cleaning

Part code

66080

Size

300ml

SPATTER RELEASE Fluid Oil Free

Paintable water based spatter release

- ▶ Available in an easy to use trigger pack
- ▶ Non flammable
- ▶ Solvent, oil & silicone free
- ▶ No cleaning required after use - paintable & plateable

Part code

66070

Size

500ml

66096

5L



Selection Chart

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

▼ ▼ Excellent ▼ Suitable ✗ Not Suitable

If you require help in selecting a product, **contact Rocol® direct: +44 (0) 113 232 2750**

SPECIALIST APPLICATIONS

Glass Production Lubricants

GLASSFLO products are lubricants & coatings specifically formulated to assist production in the glass manufacturing industry.



GLASSFLO 2017

Dry graphite lubricant

- ▶ Dry lubricant for wire mesh belts and slide plates found on glass container making machines

| Part code | Size |
|-----------|-------|
| 78836 | 4.5kg |

GLASSFLO 785

High performance dry delivery coating

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

| Part code | Size |
|-----------|------|
| 78844 | 500g |

GLASSFLO MPT

Mould pre-treatment spray

- ▶ Formulated to remove the need for manual swabbing of moulds during start up

| Part code | Size |
|-----------|-------|
| 78871 | 400ml |



Graphite Powders

GRAPHITE powders are used in a range of different industries, such as:

- ▶ Paper making industries as an opacity modifier
- ▶ High temperature seals
- ▶ Batteries
- ▶ Sintered products
- ▶ Conductive electrical coatings
- ▶ Paints and explosives
- ▶ High temperature lubrication

X2101 Graphite

Typical particle size - Less than 40 microns

| Part code | Size |
|-----------|------|
| 82055 | 40kg |

X3149 Graphite

Typical particle size - Less than 75 microns

| Part code | Size |
|-----------|------|
| 82234 | 25kg |

X2103 Graphite

Typical particle size - Less than 75 microns

| Part code | Size |
|-----------|------|
| 82076 | 50kg |

X7119 Graphite

Typical particle size - Less than 18 microns

| Part code | Size |
|-----------|------|
| 82464 | 20kg |

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