



DIE-CASTING RELEASE AGENTS  
PISTON LUBRICANTS  
HOT METAL WORKING LUBRICANTS  
HEAT TRANSFER FLUIDS

# DIE-CASTING AND FORGING



**PETROFER**  
industrial oils and chemicals

## INTRODUCTION

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PETROFER has a complete range of high quality release agents for hot working processes as well as for high pressure die-casting. Our service engineers are available to sample the in use products and analyse them thus ensuring uninterrupted and cost effective manufacturing with a maximised fluid service life.

Our customer partnership approach in die-casting has helped our clients with:

- maximum production reliability
- ensured longevity of the tooling and hydraulic components
- lowered energy consumption
- higher integrity of the component
- reduced cycle times
- reduced effluent

Whether high performance casting release agents, piston lubricants, heat transfer media, release agents for drop forging or hot metal extrusion – we have the right product for every requirement. Our highly qualified and experienced application engineers assist in the optimisation of your processes.



## OUR PRODUCT RANGE

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### DIE-CASTING RELEASE AGENTS

The DIE-LUBRIC product range includes water dilutable and water free release agents for die-casting of aluminium, magnesium and zinc along with other specialised metals. Wax containing and wax free products are available as well as our award winning BS-formulations for cleaner, safer and more efficient casting release. PETROFER also offer cost effective special products for novel minimal spray, and reduced spray application techniques.

### PISTON LUBRICANTS

Our PISTON-LUBRICANT and PISTON-POWDER product ranges consist of graphite containing and graphite free piston lubricants that achieve maximum anti-wear effects. They meet all the requirements of quality orientated and economical die-casting production. We also offer powder dosing equipment for the application of solid piston lubricants.

### HOT METAL WORKING LUBRICANTS

PETROFER's DIE-FORGENT product line consists of water dilutable and water free lubricants for drop forging, extrusion, super plastic forming and hot pressing. Our graphite containing and graphite free products meet the highest demands and contribute to increasing the service life of the dies, moulds, punches and tooling, improving component quality and cleanliness. All of our hot working lubricants are designed to give maximum lubrication and release even in the most arduous process.

### HEAT TRANSFER FLUIDS

The TRANSTHERM range consists of both synthetic and traditional mineral oil based heat transfer fluids; typically used for die-heater units, cooling equipment and other heat transfer operations. All of our heat transfer products have been developed to give outstanding thermal stability and resistance to oxidation.

*“cost saving, technically advanced and efficient”*

## YOUR BENEFITS

### REDUCTION OF TOTAL COST OF OWNERSHIP

- optimising the spraying and casting process
- improving the cycle time
- reducing setup time through training
- reduced component defects

### HIGHER PROCESS EFFICIENCY AND RELIABILITY

- consulting, training and assistance by highly qualified application engineers
- information transfer with R & D department
- innovative, high quality products from technically selected raw materials

### IMPROVEMENT OF THE ENVIRONMENTAL BALANCE

- lowering energy consumption
- reduced process media and water consumption
- reduced effluent
- possibility to recycle water

## APPLICATION EXPERTISE

### INDUSTRIAL SECTORS USING OUR PRODUCTS

- aerospace, defence and marine
- agricultural and construction equipment with supply chain
- automotive and components supply chain
- casting and forging
- consumer, electronics, white and brown goods
- machine tool OEM's
- medical equipment
- pressings, extrusion, hydroforming and fasteners
- public transportation

### APPLICATION EXAMPLES

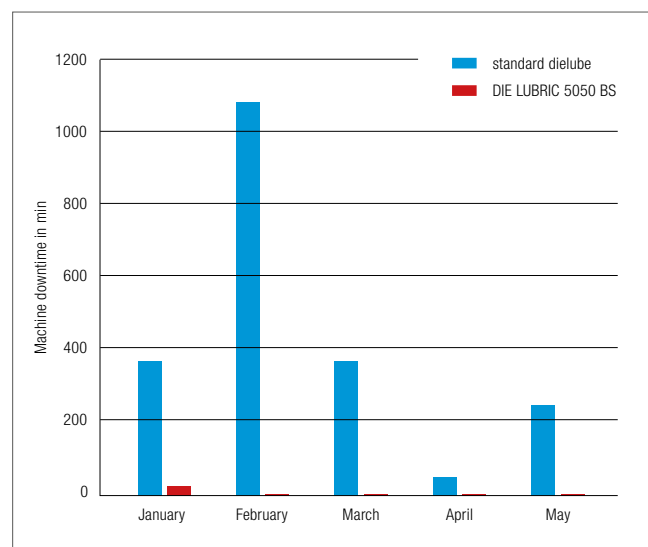
The water dilutable and water free DIE-LUBRIC die-face lubricants are used for aluminium, magnesium and zinc high pressure die-casting. Due to the versatility of the chemistry they are suitable for conventional spray, short spray, micro spray or electrostatic spray. This is a growing area for the casting of new generation light-weight automotive structural parts.

### HIGHLIGHT PROJECT

A special die-lube technology is the unique DIE-LUBRIC BS series. Due to the outstanding flushing abilities and the special raw material selection the risk of clogging in pipelines, filters and spray nozzles from bacteria and fungi is safely avoided.



Aluminium car parts, casting process in the automotive industry factory



Machine downtime caused by blocked nozzles

PETROFER is a system supplier and offers perfectly coordinated chemistry along the entire production process route.

1

HEAT TREATMENT

2

DIE-CASTING AND FORGING

3

FIRE RESISTANT HYDRAULIC FLUIDS

4

METALWORKING FLUIDS

5

METAL FORMING LUBRICANTS

6

INDUSTRIAL LUBRICANTS

7

INDUSTRIAL CLEANERS

8

RUST PREVENTATIVES

9

PAPER CHEMICALS

10

SUPPORT

For further information please visit or contact through our website  
[www.petrofer.com](http://www.petrofer.com)



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