

A NEW PERSPECTIVE ON MANUFACTURING

SPECIALY-ENGINEERED LUBRICANTS
WHERE IT MATTERS MOST



IT'S MORE THAN JUST OIL. IT'S LIQUID ENGINEERING.® 

PURPOSE-BUILT LUBRICANT. CRITICAL PROCESS. BIG DIFFERENCE.

Manufacturing is a complex business. It requires a multi-stage process – and several of those stages have a significant impact on quality, productivity and cost.

There are your critical applications, where every incremental improvement makes an important difference. They're the parts of your process our Liquid Engineers obsess over.

As a result, Castrol has specially-created lubricants for every critical application in the manufacturing process. And with 110 years of industrial experience, we're ready to be your lubricant partner, helping you to optimise your process from end to end:

- Accelerate bottlenecks
- Reduce top-ups and extending sump life
- Cut reworks and discarded parts
- Prolong the lifespan of expensive tools

Specialised lubricants, making differences that add up, in the stages that matter most – backed up with the expertise to keep your plant at peak performance, for longer.

It's a new perspective, and it's transforming industrial operations worldwide.

ENGINEERED ANSWERS TO YOUR KEY CHALLENGES

Finding improvements is central to every manufacturer's job: producing more parts faster, achieving better quality or satisfying customers' demands for cost savings. In fast-moving markets, that also includes standardising production methods, and supporting new metallurgies and techniques.

Worldwide, Castrol's Liquid Engineers are helping plants to find significant improvements:

PRODUCTIVITY

We help plants produce more finished parts. Our customers have been able to dramatically reduce downtime and equipment failure, while extending lubrication intervals from hours to months.

The right lubricant can help accelerate cutting speeds, extend tool life, and reduce cycle times. Improving pH stability and sump life also gives consistent working conditions for longer, making your plant more productive.

QUALITY

We're always working to help you keep pace with new metals and methods, without compromising the quality of finished parts. For example, Castrol lubricants are currently enabling the Double Digital Grinding process used in the latest smartphones.

We focus on corrosion protection, surface finish precision and effective cleaning and quenching products, helping reduce the number of reworked and rejected parts.

COST CONTROL

Minimising lubricant consumption, improving recycling, reducing maintenance and protecting expensive cutting tools all help you to reduce costs – and those savings add up.

Many Castrol customers save hundreds of thousands of dollars¹ across all their processes, report up to a 90% reduction in additive top-ups², and in some cases eliminating service additive top-ups entirely³.

GLOBAL SUPPORT

Castrol is a truly global brand, offering a consistently high standard of lubricant, and expert support, regardless of your location.

We can often shorten delivery lead times, and help engineers to rationalise their lubricant selection, simplifying their processes. Our technical support services can also help you optimise your machining process, and use data analytics to forecast maintenance schedules.

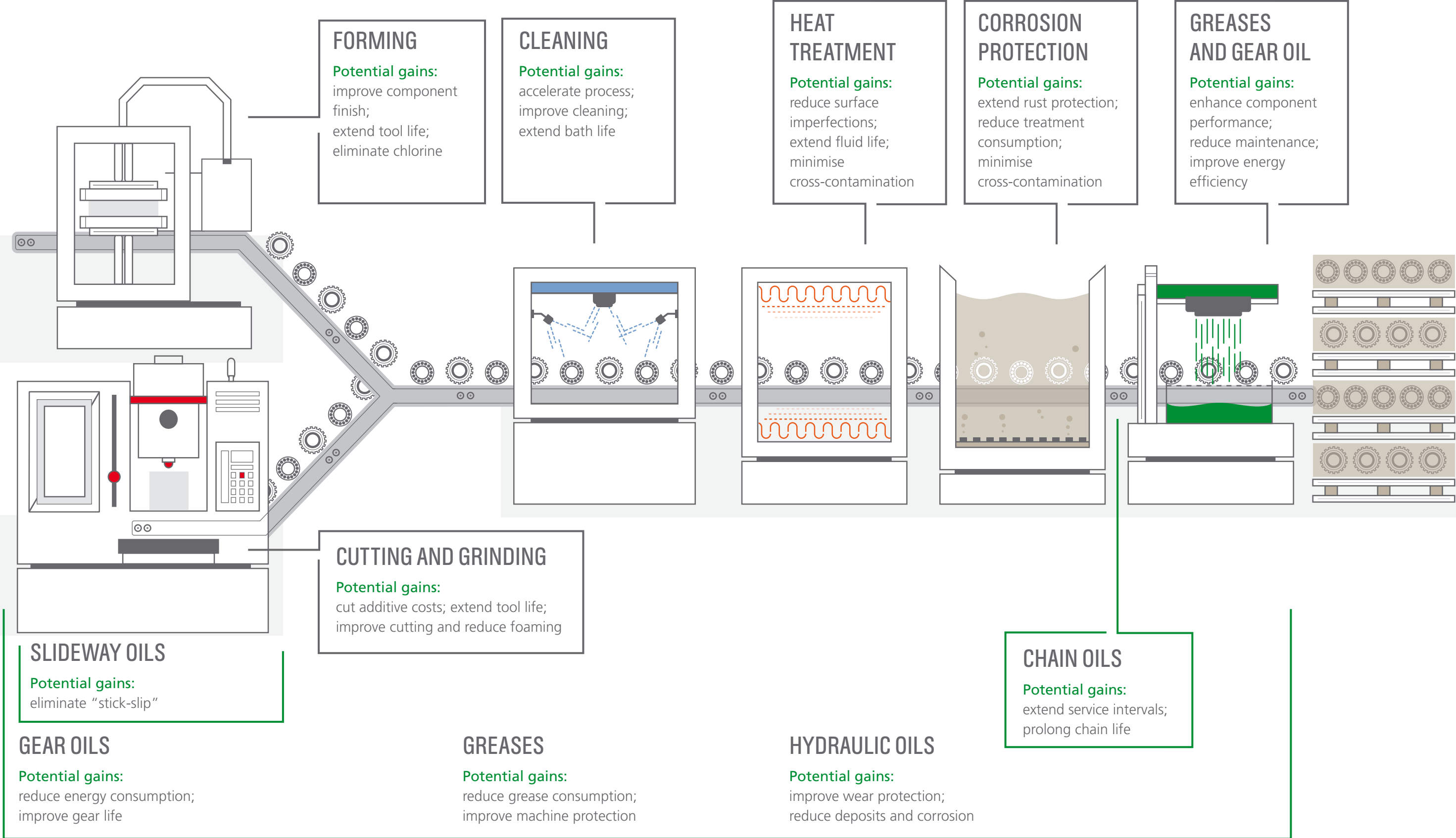
¹ Castrol Molub-Alloy: The Expert's View

² Based on Castrol XBB customer feedback.

³ Castrol Tribol: The Expert's View

AT EVERY STAGE, CASTROL DELIVERS

Let's look at the key parts of your manufacturing process, to find the critical places where a specially-engineered lubricant could unlock real business value:



THE RIGHT ANSWER FOR EVERY CHALLENGE

CUTTING & GRINDING/FORMING

Engineers worldwide use Castrol cutting fluids to overcome metalworking challenges. We can help you reduce biocides, achieve high performance with new alloys, and protect your tools and products – all while ensuring high productivity and a quality surface finish.

And our forming oils are a perfect match for today's metal forming challenges – giving dependable, stable performance for drawing, stamping, hydroforming and rolling techniques.

“Castrol Syntilo delivers clean operations at high speeds to enhance machining performance and prolong tool life”

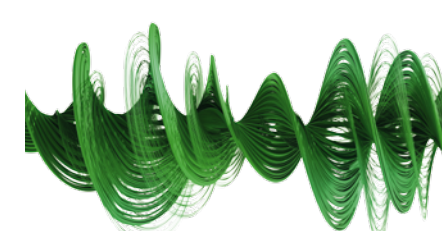
– Lisa Gianino, Castrol global OEM manager



Castrol ALUSOL

Precision performance in aluminium machining

- Long-lasting performance
- Works at low concentrations
- Soft-water version available



Castrol HYSOL

Long-lasting fluids for system stability

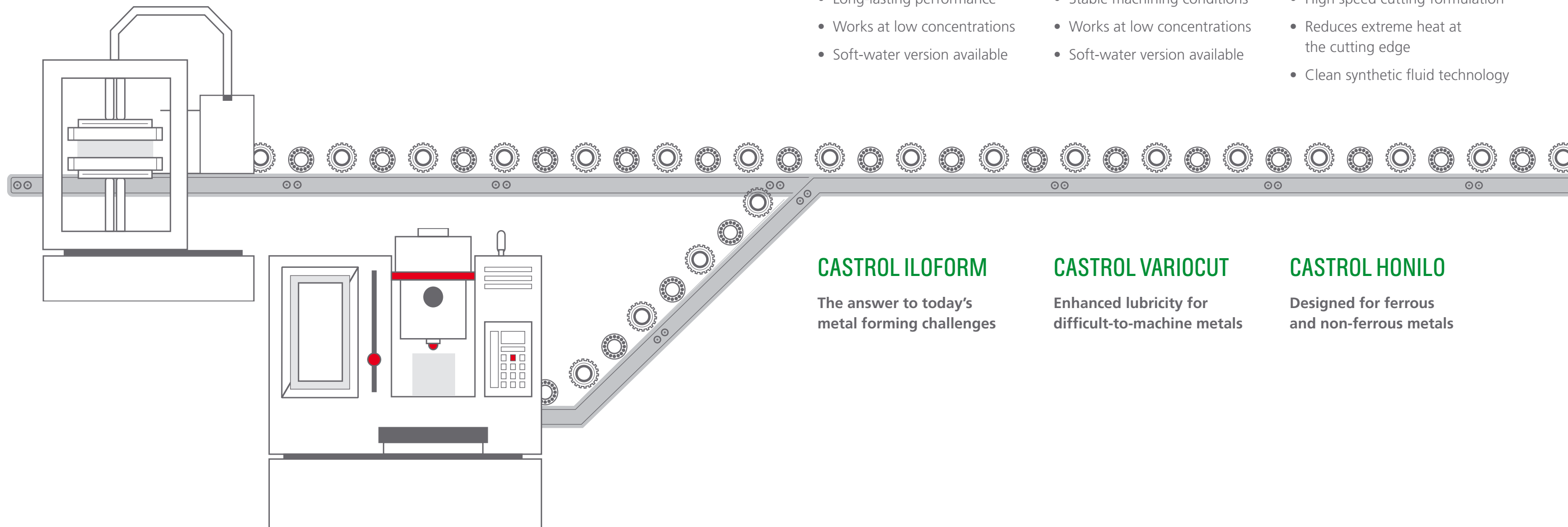
- Stable machining conditions
- Works at low concentrations
- Soft-water version available



Castrol SYNTILO

High speed performance with better finishing and tool life

- High speed cutting formulation
- Reduces extreme heat at the cutting edge
- Clean synthetic fluid technology



CASTROL ILOFORM

The answer to today's metal forming challenges

CASTROL VARIOCUT

Enhanced lubricity for difficult-to-machine metals

CASTROL HONILO

Designed for ferrous and non-ferrous metals

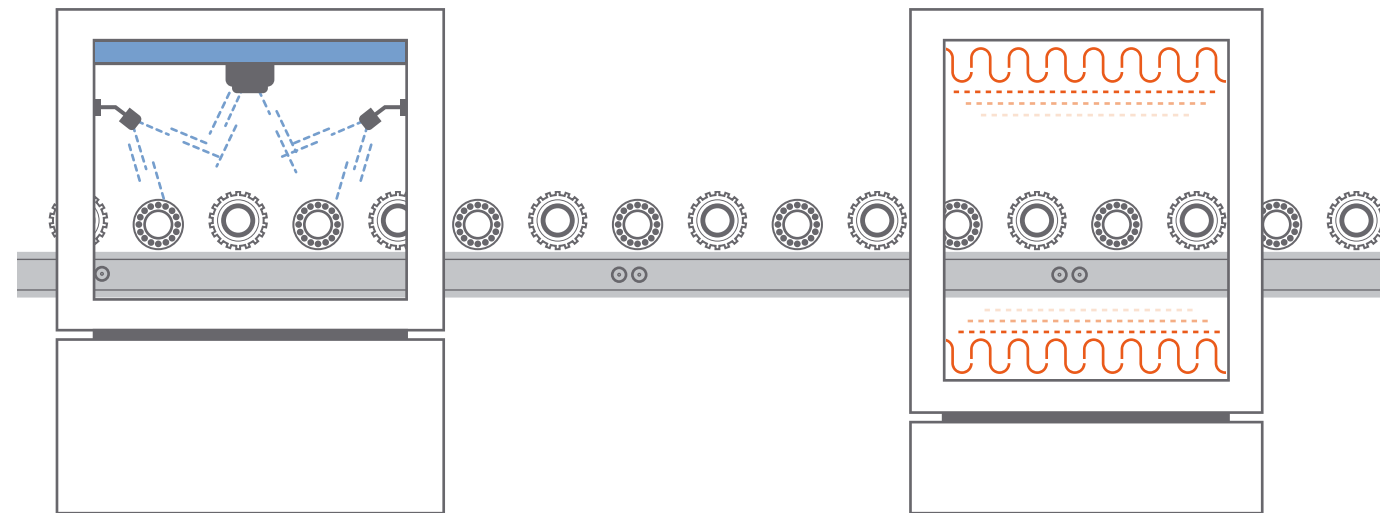
CLEANING

Choosing the right surface treatment can help you stay productive, and deliver high-quality, on-specification parts. We can help you to work faster, improve your output, and cut down on scrap and waste.

CASTROL TECHNICLEAN

Versatile precision cleaning of metalworked parts.

- Wide range of aqueous and solvent cleaners
- Long-lasting bath life
- Fast-acting cleaners to boost productivity
- Compatible with other Castrol lubricants

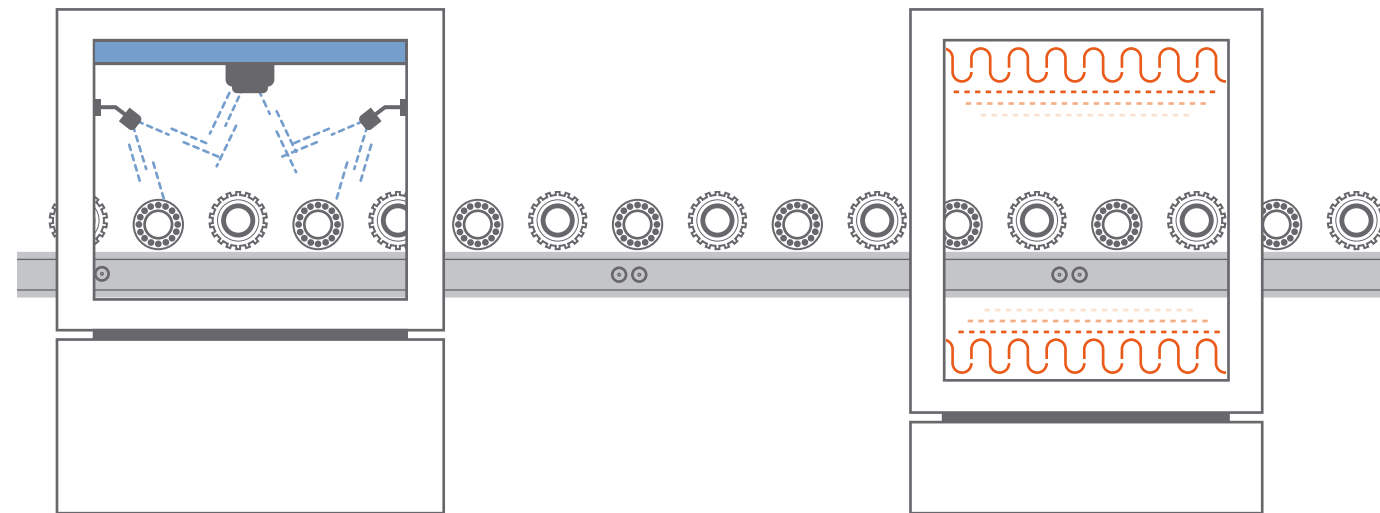


HEAT TREATMENT

The cost of inadequate heat treatment can be high – patches, spots and marbling all impact quality. Finding solutions need skill and expertise, and we can help you improve the quality of parts and extend service life with quenching fluids that have consistent and stable cooling characteristics. Our compatible oils minimise cross-contamination, too.

CASTROL ILOQUENCH

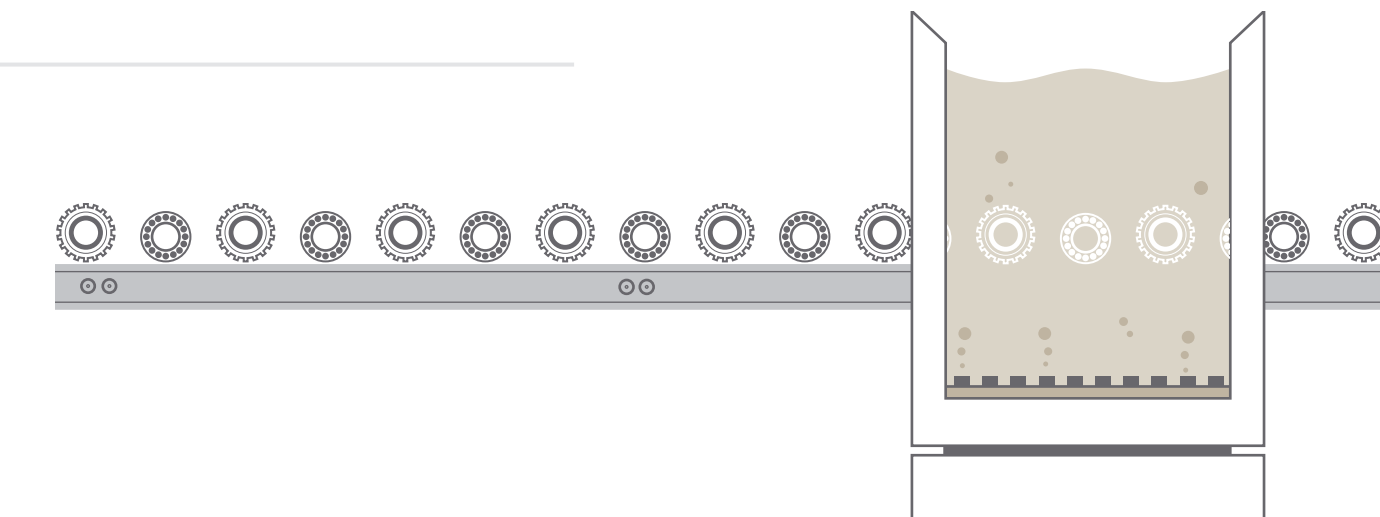
Long service life, with reduced patches, spots and marbling



CORROSION PROTECTION

We've solved rust issues for metalworking engineers worldwide, so parts can be kept as work in progress for longer. It's not uncommon for us to keep parts rust-free for ten or twenty times longer than before.

As you'd expect, we have years of experience and research into preventing corrosion – and if reworking ferrous parts is an issue, we'd like to put that expertise at your disposal.



CASTROL RUSTILO

Reliable protection for all grades of coated and uncoated steel

GREASES

More than 60% of all mechanical failures are lubrication related; most of those are caused by wear and surface degradation.

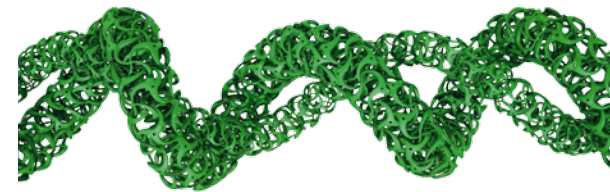
Where equipment failure is not an option, you can count on our high-performance grease formulations to stay in place, stay stable, and protect your machine.



Castrol MOLUB-ALLOY

The strongest lubricants for the heaviest loads

- Heavy duty greases
- Solid layer absorbs extreme pressure
- Designed to work under extreme stress



Castrol TRIBOL

Adaptive protection for equipment reliability

- Advanced industrial lubricant range
- Active molecules adapt to conditions
- Reduces wear and helps prevent unplanned failures

CASTROL SPHEEROL

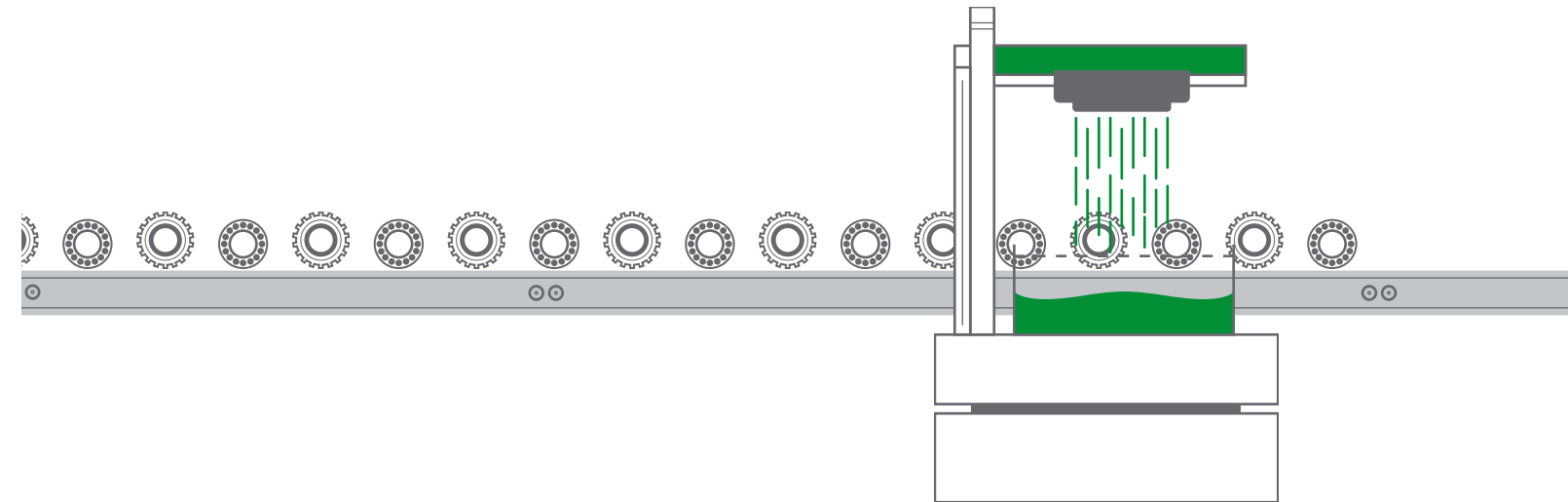
Formulated to provide good film strength under medium to high loads

FACT:
a European auto manufacturer saved 50% on spindle lubricant⁴, by switching to a Castrol Tribol grease compatible with its metalworking fluid.

“Ultimately, for businesses operating in tough environments, Castrol Molub-Alloy represents peace of mind. And that’s one less thing to worry about.”

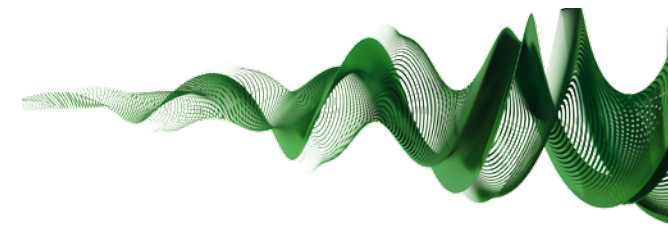
– Soman Dhar, Global Product Manager, Greases

⁴ Castrol Tribol: The Expert’s View



GEAR OILS

Friction is one of the main reasons gears fail. With advanced, long-lasting gear oils to choose from, our Liquid Engineers will make sure you always have the best lubricant for the job. That means less downtime, longer service life, and potentially higher running speeds.



Castrol OPTIGEAR

Low-friction gear oils that optimise efficiency

- Advanced formulation with MFT Plastic Deformation
- Proven to lower friction coefficient by up to 60%
- Reduces gearbox operating temperature
- Actively resists wear and pitting

FACT:
Castrol Optigear has been proven to reduce friction by 30%⁵ and generates up to 28% less foam than competitors⁶.

⁵ The SRV friction (Sae) Test, 2016/2017.
⁶ 3 year field trial – 2013.

CASTROL ALPHA

Extreme pressure gear lubricants to prevent scuffing

“For us, Castrol Optigear stands for maximum operational efficiency. It reduces running-in time, protects against corrosion and extends gears’ service life.”

– Daryl Luke, Global Product Manager, Castrol Optigear

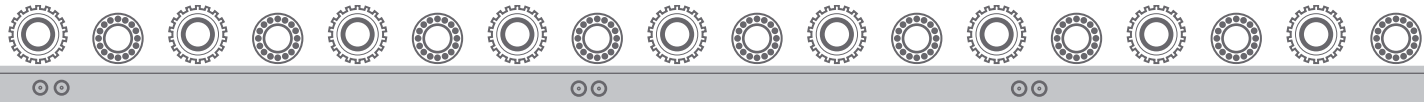
CHAIN OILS, HYDRAULICS & SLIDEWAYS

Preventative maintenance is an absolutely critical application.

Ensuring your machinery runs smoothly has a significant influence on productivity – and extending component life means you’re more efficient and cost-effective.

For example, the longer you can extend the service life of your chain drives – and the better you can combat corrosion, wear and deposit buildup in your hydraulic systems – the more productive and profitable you’ll be.

Likewise, solving slideway stick-slip issues can improve precision – reducing reworks – and prevent unplanned downtime.



Adaptive protection for equipment reliability

- Advanced industrial lubricant range
- Active molecules adapt to conditions
- Reduces wear and helps prevent unplanned failures

CASTROL HYSPIN

Long-lasting, OEM-approved hydraulic fluids

CASTROL VISCOGEN

Designed to suit difficult environmental conditions

CASTROL MAGNA

All-round stick-slip and load carrying performance

FACT:
a US print company
cut downtime by
93 hours per year,
using Castrol Tribol
lubricants.

“Castrol Tribol succeeds because it’s proven to make a positive impact on Total Cost of Ownership (TCO). Customers that use them experience less downtime, fewer service intervals and greater productivity.”

– Phil Booker, Application Engineer, Castrol



WE'RE HERE TO HELP

Instead of multiple lubricant decisions, make one smart one.
Call our Liquid Engineers, and we'll take care of it for you.

YOUR OWN, PERSONAL LIQUID ENGINEER

At Castrol, we focus on choosing the right lubricant at every stage of gear and bearing production – so you don't have to.
Give us a call today.

For professional advice about Castrol Products, call our:

Technical Help Line Australia: 1300 557 998

To make any comments about Castrol Products and services, call:

Customer Service and Orders: 1300 554 890

Castrol Australia Pty Limited
132 McCredie Road
Guildford NSW 2161

Tel (02) 9795 4800

Fax: (02) 9795 4911

www.castrol.com.au

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