

Forward

to productivity
without compromise



Introducing Castrol Alusol XBB
and Castrol Hysol XBB



Cut the compromise with Castrol XBB Technology

Traditional cutting fluids contain boron, formaldehyde-releasing agents or biocides to help keep them in good working condition.

The use of these chemicals is becoming more highly regulated across the world. It's an ongoing balancing act. Cut the compromise with XBB technology.

Controlling pH just got easier

Castrol Alusol and Hysol XBB deliver long lasting fluids for system stability without compromising your productivity. A unique technology which is formulated without boron and biocides:

Productivity for longer

- Stable fluid with pH control technology
- System cleanliness and reduce waste disposal.

Fewer interventions

- Less additive top-ups
- Eliminates or reduces biocide use
- Reduce wasted resources.

Precision performance with stability

- Lubricity – tool life, surface finish
- Reduced scraps.

Forward to productivity without compromise



Producing precision-engineered components can sometimes result in compromises to hit increasing production targets.

Discover how Castrol Alusol XBB delivers precision performance in aluminium machining without compromising productivity or the safety of your operators.



Manufacturing with ferrous alloys often means making compromises to hit increasing production targets. Performance, system conditions, constant pH, clean machines and reduced corrosion risks are just some of the choices required.

Discover how Castrol Hysol XBB helps combat these challenges and delivers long lasting fluids for system stability, with minimal maintenance and no compromise on quality.



Find your ideal cutting fluid

Castrol's XBB cutting-fluid range has been specifically developed to perform better and last longer than conventional alternatives* in a variety of environments.

The XBB technology platform has been designed to make production environments safer and keep in line with increasingly stringent Health and Safety requirements.

By using Castrol's XBB solutions, you can reduce costs without sacrificing performance, and simplify all aspects of fluid management. Take a look at the chart below to see the full spectrum of XBB products.

	Cast iron	Light alloyed steel	High alloyed steel	Aluminium
Castrol Alusol SL 61 XBB	•	• •	•	• •
Castrol Alusol SL 51 XBB	•	• •	•	• •
Castrol Alusol SL 41 XBB	•	• •	•	• •
Castrol Hysol SL 50 XBB	•	• •	•	• •
Castrol Hysol SL 45 XBB	•	• •	•	• •
Castrol Hysol SL 37 XBB	•	• •	• •	•
Castrol Hysol SL 36 XBB	• •	• •	•	•
Castrol Hysol SL 35 XBB	• •	•		
Castrol Hysol SL 30 XBB	• •	• •		
Castrol Hysol SL 20 XBB	• •	•		

• • Recommended use • Possible use

Each Castrol XBB product has been engineered to suit the needs of a particular cutting environment, so whether you're working with cast iron, aluminium or multi-metal, there's a solution for you. To discover the product best suited to your needs, check out [Castrol.com/XBB](https://www.castrol.com/XBB).

* Proven in lab tests and seen in real production conditions.



Castrol Alusol SL 61 XBB

Castrol Alusol SL 61 XBB is ideal for multi-purpose machining of aluminium alloys through to low-to-medium-alloyed steel, and is suitable for both large central systems and single-sump machines. It is designed to work well in soft- and hard-water conditions alike.

Castrol Alusol SL 51 XBB

Proven to maintain pH at a constant level,† Castrol Alusol SL 51 XBB is an excellent all-round cutting fluid particularly suited to machining aluminium with a high silicon content. It's formulated to last longer than conventional fluids and produces a high-quality finish while reducing the need for service additives.

Castrol Alusol SL 41 XBB

Castrol Alusol SL 41 XBB is a high-performance soluble cutting fluid which is formulated without boron and biocides. It contains an additive package that works in synergy to enhance machining performance and surface finish, provide good product stability and helps to lower the overall operations costs.

* Can contain traces of boron and formaldehyde-releasing agents.

** Proven in lab tests and seen in real production conditions.

† Based on Castrol XBB customer feedback.



Castrol Hysol SL 50 XBB

Castrol Hysol SL 50 XBB is a multimetal soluble cutting fluid designed primarily for heavy-duty operations. It is suitable for a wide range of applications and formulated without boron and biocides. Castrol Hysol SL 50 XBB helps manufacturers meet machine specifications and complies with health and safety regulations. Castrol Hysol SL 50 XBB provides an optimum long-life cutting fluid solution to help future-proof production and reduce waste and inefficiencies.

Castrol Hysol SL 45 XBB

Created specifically for the aerospace industry, Castrol Hysol SL 45 XBB gives outstanding machining performance with titanium, aluminium and low-alloyed steel. Approved by major aerospace manufacturers, its formulation without boron or biocides means* that there's no need to choose between safety and surface finish.

Castrol Hysol SL 37 XBB

A true all-round performer, Castrol Hysol SL 37 XBB is ideal for plants working across a range of alloys, who want to rationalise lubricants or reduce additive top-ups. It provides long-lasting, high precision performance for Inconel, aluminium, steel alloy and titanium alloys – even in soft water.

Castrol Hysol SL 36 XBB

A cutting fluid for ferrous alloys, formulated without boron or formaldehyde-releasing agents.* Tried and tested by plant managers. Castrol Hysol SL 36 XBB is ideal for machining cast iron and low-alloyed steel, and has also been used successfully with aluminium. It's proven to maintain pH levels in both large central systems and single-sump machines. This fluid is also designed to reduce foaming in soft-water environments.

Castrol Hysol SL 35 XBB

Castrol Hysol SL 35 XBB is a semi-synthetic metalworking fluid, formulated without boron or formaldehyde-releasing agents,* ideal for grinding steel and machining low-alloyed steel and cast iron. It is formulated to help deliver a long system life, and remains effective for longer than conventional alternatives** thanks to its resistance to pH change.

Castrol Hysol SL 30 XBB

Castrol Hysol SL 30 XBB is the answer to the industry for high levels of anti-corrosion performance in cast iron machining, and is suitable across a broad range of water qualities. It is formulated without boron, secondary amines and formaldehyde-releasing agents to meet the highest regulatory standards. Castrol Hysol SL 30 XBB has been specifically developed to help the bearing industry overcome the severe requirements of foam, long emulsion stability and anti-corrosion performance.

Castrol Hysol SL 20 XBB

Castrol Hysol SL 20 XBB is a high performance semi synthetic metalworking fluid which is formulated without formaldehyde releasing agent and boron. It contains an additive package that works in synergy to help enhancing machining performance and surface finish, provide excellent product stability and lower the overall operations costs.

Castrol Alusol SL 61 XBB

Cut out the interruptions with a fluid that performs, longer.

Castrol Alusol SL 61 XBB builds on the success of Alusol SL 51 XBB, extending the capabilities of this leading product for those working with a wider range of metals or in soft-water areas.



Castrol's unique formulation, without boron or formaldehyde-releasing agents,* has been proven to maintain pH at a constant level (neutralising up to 44% more acidic material**), ensuring Alusol SL 61 XBB performs better for longer.

It is ideal for demanding aluminium work, including low-silicon alloys, with the high lubricity keeping the cutting edge clean, reducing downtime and improving surface quality. With Castrol Alusol SL 61 XBB, not only can you achieve great results at lower concentrations; you can also make big savings.

Ultimately you have less maintenance, less expense and a safer working environment, without ever compromising on performance.

Perform better, for longer

Castrol Alusol SL 61 XBB performs better for longer than standard cutting fluids,** thanks to a pioneering formulation designed to be more resistant to changes in pH caused by microbiological build-up. This means fewer additive top-ups, better results, and more efficient production at a lower cost.

Give productivity a boost

The big benefit of extended fluid life is less downtime and fewer interventions. Many cutting fluids need topping up with additives to maintain fluid condition. But Castrol's Alusol SL 61 XBB has been proven to perform continuously without these measures for longer than conventional alternatives.†

This not only gives you constant working conditions so you can achieve consistently good results, but also safeguards the health and safety of your workers.



* Can contain traces of boron and formaldehyde-releasing agents.
 ** Proven in lab tests and seen in real production conditions.
 † Based on Castrol XBB customer feedback.

Experience precision performance

Castrol Alusol SL 61 XBB performs for longer, it preserves the cutting edge and helps to prevent build-up on the tool and part, resulting in a cleaner, more accurate finish. Its excellent lubricating properties prevent swarf build-up, and pH control reduces acid corrosion. Ultimately this results in lower scrappage rates and tooling costs, and improved production quality.

Product advantages

- Castrol Alusol SL 61 XBB delivers precision performance because it performs for longer
- It preserves the cutting edge and helps to prevent build-up on the tool and part, resulting in a cleaner, more accurate finish
- Its excellent lubricating properties help to prevent swarf build-up, and pH control reduces acid corrosion
- This results in lower scrappage rates and tooling costs, and improved production quality.

* Proven in lab tests and seen in real production conditions.

What our users say

With Castrol Alusol SL 51 XBB, the predecessor to Castrol Alusol SL 61 XBB, a European automotive manufacturing company was able to:

- Make savings on fungicides of around 1.8 tonnes
- Reduce the lubricant usage by 34%.

Proven to work
44% longer

In laboratory tests, Alusol SL 61 XBB was proven to maintain a stable pH up to 44% longer than other cutting fluids.*

Castrol Alusol SL 51 XBB

There is a different approach to system maintenance.

When producing precision components for the automotive, machinery and fabricated metal goods industries, there are many demands and challenges.

It is a daily requirement to hit increasingly high production targets, deal with pressure to refine schedules and reduce downtime.

Daily compromise

- Performance balanced with the need for antibacterial treatments
- Biocide use balanced with Health and Safety requirements
- pH stability balanced with fluid maintenance.



Castrol's experts have been working to help combat these conflicting challenges to enable you to manage your cutting fluid maintenance without compromising overall performance. Castrol has formulated Castrol Alusol SL 51 XBB – a technology formulated without boron or formaldehyde-releasing agents* that ensures:

Productivity for Longer

- Stable fluid with pH control technology
- System cleanliness and reduce waste disposal.

Fewer interventions

- Fewer additive top-ups
- Biocide use eliminated or reduced
- Less manpower.

Precision performance with stability

- Lubricity – tool life, surface finish
- Reduced scrap.

* Can contain traces of boron and formaldehyde-releasing agents.



Product advantages

- Formulated without boron* to meet boron-free waste requirements
- Organic chlorine- and formaldehyde-free formula,* which may help you to fulfil aspects of legislative and waste-treatment requirements that specify that these chemicals be excluded
- Extended fluid life to help reduce maintenance and machine downtime
- Low foam in recommended water conditions
- Lubrication package designed to try to help enhance tool life and improve surface finish on aluminium machining
- Good wetting properties to help reduce coolant drag-out and help deliver cleaner machine tools and components
- Suitable for a wide range of materials and applications to provide the opportunity for product consolidation.

* Can contain traces of boron and formaldehyde-releasing agents.

Castrol Alusol SL 41 XBB

High performance soluble cutting fluid.

Castrol Alusol SL 41 XBB is a high-performance soluble cutting fluid which is formulated without boron and formaldehyde releasing agent.

It contains an additive package that works in synergy to enhance machining performance and surface finish, provide good product stability and helps to lower the overall operations costs. Alusol SL 41 XBB is suitable for large central systems and single sump machines.

Application

Alusol SL 41 XBB is especially designed for machining of aluminium alloys. The product can also be used for machining of ferrous alloys.



Product advantages

- Alusol SL 41 XBB is formulated without boron or formaldehyde releasing agents / biocides. This can help you to fulfil aspects of legislative requirements and waste treatment requirements that specify that these chemicals are excluded
- Formulated to help protect machine tools and produce a high-quality finish when machining alloyed steel and aluminium alloys
- Good compatibility with major aluminium alloys*, reduces the risk of corrosion to improve the yield of finish parts
- Helps to reduce the use of additives and facilitate the operation activities in the field, which can generate a higher worker acceptancy.



* Consult with Castrol to get the recommendations.

Castrol Hysol SL 50 XBB

Safer and more efficient long-life fluid solution.

Multimetal soluble cutting fluid without boron or formaldehyde-releasing agents provides a safer and more efficient long-life fluid solution and reduces waste.

Manufacturing companies are always looking for ways to improve efficiency by purchasing the latest lubricants. Having a single lubricant that can last and perform across multiple applications reduces the need for inventory – and the potential for mishaps related to tank-side additions of an incorrect product.



The ideal long-life solution for heavy-duty operations

Based on Castrol's XBB technology, Castrol Hysol SL 50 XBB is formulated without boron and biocides, to help manufacturers meet machine specifications and comply with health and safety regulations. Castrol Hysol SL 50 XBB provides an optimum long-life cutting fluid solution to help future-proof production and reduce waste and inefficiencies.

Castrol Hysol SL 50 XBB also delivers very long system life without the need for additives. This characteristic helps to prevent problems such as foul odours, which may be caused by bacteria and their

by-products in the sump. This resistance to coolant breakdown also lowers the risk of poor machining performance or equipment corrosion.

In field trials, Castrol Hysol SL 50 XBB has repeatedly been shown to extend system life compared to the metalworking fluids previously used. Extending system life helps reduce unproductive downtime for recharging, and means that less fluid is required, and less waste is generated.

Product advantages

- Achieves excellent machining performance across a wide variety of metals
- Castrol Hysol SL 50 XBB is formulated to help achieve a high quality finish when machining low-to-medium-alloyed steel, aluminium alloys and some exotic alloys
- The machining performance of Castrol Hysol SL 50 XBB means a single product can be used across numerous applications and metals while delivering high quality parts
- In addition, the excellent lubricating properties of Castrol Hysol SL 50 XBB can reduce scrap rates by producing parts with consistently accurate tolerances and surface finishes. Making it the ultimate multimetal soluble cutting fluid for any heavy-duty operation.

Castrol Hysol SL 45 XBB

Safe, long-lasting productivity with aerospace alloys.

As an aerospace engineer, you deliver precise, lightweight parts – in advanced metals – to the tightest tolerances. But you can't compromise on productivity or safety on the machining floor.



New environmental constraints and safety regulations like the European Union's 10th Adaptation to Technical Progress (ATP) to the CLP (classification, labelling and packaging of substances and mixtures) Regulation are making it harder than ever to deal with bacterial and fungal growth in cutting fluids.



Manufacturers increasingly need an alternative to cutting fluids with boron, biocides and formaldehyde-releasing agents (FRAs) – without sacrificing part quality or system life.

The ideal solution for aerospace

Castrol Hysol SL 45 XBB was specifically created to address these challenges, while delivering outstanding machining performance on a wide range of modern aerospace alloys.

Based on Castrol's proven XBB technology platform, it maintains stable, productive manufacturing conditions for longer than conventional cutting fluids* – and is formulated without boron or formaldehyde-releasing agents. In tests, aircraft manufacturers have also eliminated service additive top-ups, giving a cost saving while improving safety.

And far from compromising part quality, Castrol Hysol SL 45 XBB has demonstrated excellent wetting properties when deployed in the field, resulting in cleaner machines and working environments. It also improves machining performance and surface finish,** while reducing drag-out.

Product advantages

Castrol Hysol SL 45 XBB gives aerospace engineers the opportunity to avoid the compromise between safety, quality, productivity and cost:

- Minimise downtime, cleaning and tool costs by extending your fluid performance
- Enhance productivity with stable, consistent machining conditions
- Comply with current and incoming local disposal regulations around boron, and safety regulations around biocides and FRAs
- Save money and improve safety by reducing or eliminating service additive top-ups
- Rationalise your cutting fluids, due to Castrol Hysol SL 45 XBB's excellent performance across aluminium and titanium alloys
- Reduce fluid consumption due to less drag-out.

Proven on test: safety, performance and cost

A global aircraft manufacturer tested Castrol Hysol SL 45 XBB to stay ahead of new EU regulations. By eliminating boron and formaldehyde-releasing agents, it found:

- Higher cutting performance than its existing cutting fluid
- Happy machine operators due to new, safer formula and enhanced surface finish
- Lower system costs from eliminating service additive top-ups.

To learn more about our current OEM approvals get in touch with your sales contact

* Castrol Hysol SL 45 XBB outperformed other cutting fluids in laboratory emulsion stability tests. Customers have been able to eliminate the use of all biocide and fungicide additives with no adverse effects.

** Tapping torque test shows superior performance than common alternatives – typically improving tool life and surface finish. These results are supported by customer feedback, where Castrol Hysol SL 45 XBB has outperformed other fluids.

Castrol Hysol SL 37 XBB

Long-lasting, all-round performance for the most challenging alloys.

Machining high-performance Inconel, aluminium, steel alloy and titanium alloys is tough enough, without cutting fluid contamination, foaming and tool breakage hampering productivity and quality.

But new safety regulations – like Europe’s 10th Adaption to Technical Progress – mean you don’t just need your coolant to be long-lasting, and to preserve surface quality. You also need it to be safe.

Castrol Hysol SL 37 XBB is the alternative. And following lab tests* and successful use in real production conditions, it’s proven to give excellent performance across a wide variety of metals and water conditions – formulated without boron or formaldehyde-releasing agents.**

Perfect for lubricant rationalisation

Castrol Hysol SL 37 XBB offers high precision performance across a wide range of performance alloys, without compromising productivity or surface quality. That delivers significant benefits for plants working across a variety of metals.

Customers have found it eliminates the need for service additive top-ups, while still preventing common issues with microbiology, tool breaks and foam – regardless of water softness.

And like all cutting fluids with XBB technology, its chemical buffer works to prevent PH changes due to bacteria. It lasts longer,* so you use less fluid, save on disposal costs, and reduce downtime.

Product advantages,

Castrol Hysol SL 37 XBB is proven on the cutting room floor† and can offer significant increase in system life. For example, one customer switched from boron and amine-free competitor, which had needed service additives every four weeks to overcome issues with foam, microbiology, an emulsion stability at pressure. System life had averaged between six and twelve months, while used concentration was as high as 15%. After introducing Castrol Hysol SL 37 XBB to their cutting floor, the engineer found:

- System life exceeded 24 months
- Machines were clean
- No service additives were needed
- Foam was non-existent
- Used concentration 7–10%.

* Proven in lab tests and seen in real production conditions.
 ** Can contain traces of boron and Formaldehyde-releasing agents
 † See Case Study in Sales Presenter



Safe, efficient and productive

Castrol Hysol SL 37 XBB is formulated without:

- Boron**
- Formaldehyde releasing agent
- Organic chlorine
- Secondary amines.

This helps you to comply with the coming safety regulations, while increasing your protection against foam, corrosion, and the effects of contamination. The result is reduced maintenance, lower costs, and minimal waste.



** Can contain traces of boron and formaldehyde-releasing agents

Castrol Hysol SL 36 XBB

No biocide? No problem.

Based on the success of Castrol Hysol SL 35 XBB, this addition to the XBB range provides a solution perfect for those machining cast iron and alloyed steel, even in soft-water areas.

Its dual-buffer technology resists pH changes caused by bacterial build-up in your cutting fluid, meaning it performs better for longer than standard cutting fluids.*

Castrol Hysol SL 36 XBB is formulated without boron or formaldehyde-releasing agents,** ensuring a far safer working environment while still delivering the efficiency and competitiveness you need.



Take control of pH

Castrol Hysol SL 36 XBB is a cutting fluid that is shown to perform better for longer, thanks to a formula that is more resistant to changes in pH than conventional alternatives.*

This means your production environment is less often interrupted by fluid performance issues and unscheduled maintenance, corrosion is less of an issue, and it's far easier to meet your production goals and keep down costs.

* Based on titrating seven fluids until a pH of 7 is reached.
 ** Can contain traces of boron and formaldehyde-releasing agents.



Top performance; fewer top-ups

The fact that Castrol Hysol SL 36 XBB is formulated without boron or formaldehyde-releasing agents** improves operator conditions and your Health and Safety profile, and also results in fewer interventions and less monitoring and management of cutting fluids.

Where other coolants need topping up with service additives to keep working well, cutting fluids with Castrol's XBB technology have been proven to perform without these measures for longer than conventional alternatives.†

The fluid's excellent emulsion stability properties result in lower costs, and less time spent maintaining standards – which means more time for production.

** Can contain traces of boron and formaldehyde-releasing agents.
 † Proven in lab tests and seen in real production conditions.

Product advantages

- Castrol Hysol SL 36 XBB's carefully engineered formula helps to protect against corrosion even at lower concentrations
- Resulting in less machine maintenance, lower costs and fewer rejected products.

Castrol Hysol SL 35 XBB

Controlling pH just got easier.

Ferrous alloys like cast iron are robust materials that can corrode and often cause difficulty and costly problems to resolve on the shop floor. Leaching of alloy components and bacterial growth can lead to instability in fluid emulsion.

It is a daily requirement to hit increasingly high production targets, deal with pressure to refine schedules and reduce downtime.



Daily compromise

- Performance balanced with the need for anti-bacterial treatments
- biocide use balanced with health and safety requirements
- pH stability balanced with fluid maintenance.

Castrol's experts have been working to help combat these conflicting challenges to enable you to manage your cutting-fluid maintenance without compromising overall performance.

Castrol has formulated Castrol Hysol SL 35 XBB – a technology formulated without boron or formaldehyde-releasing agents* that ensures:

Productivity for longer

- Stable fluid with pH control technology
- System cleanliness and reduce waste disposal.

Fewer interventions

- Can help to reduce fluid additive top-ups
- Eliminates or reduces biocide use
- Lessens manpower.

Product advantages

- Extended fluid life can help to reduce maintenance and downtime
- Low foam in recommended water conditions
- Excellent anti-corrosion properties to protect machine tools and parts
- Good wetting properties can help to reduce coolant drag-out and help deliver cleaner machine tools and components
- Formulated without boron* to meet boron-free waste requirements where applicable
- Formulated without organic chlorine and formaldehyde-releasing agents,* to help you fulfil aspects of legislative and waste-treatment requirements where applicable.

* Can contain traces of boron and formaldehyde-releasing agents.

Castrol Hysol SL 20 XBB

High performance semi-synthetic metalworking fluid.

As an metalworking manufacturer, you deliver precise, lightweight parts – in advanced metals – to the tightest tolerances. But you can't compromise on productivity or safety on the machining floor.

Castrol Hysol SL 20 XBB is a high performance semi-synthetic metalworking fluid which is formulated without formaldehyde releasing agent and boron. It contains an additive package that works in synergy to help enhance machining performance and surface finish, provide excellent product stability and lower the overall operations costs.

Hysol SL 20 XBB is suitable for large central systems and single sump machines.



* Can contain traces of boron and formaldehyde-releasing agents.

Application

Hysol SL 20 XBB is especially designed for machining of cast iron and low-medium alloyed steel.



Product advantages

- Extended fluid life can help to reduce maintenance and downtime
- Low foam in recommended water conditions
- Good anti-corrosion properties help to protect machine tools and parts
- Good wetting properties can help to reduce coolant drag out and help deliver cleaner machine tools and components
- Formulated without formaldehyde releasing agent and boron which help you to fulfil aspects of legislative requirements and waste treatment.

Castrol Hysol SL 30 XBB

System stability without compromise.

Castrol Hysol XBB cutting fluids deliver long-lasting system stability, with minimal maintenance and no compromise on quality. They're ideal for machining cast iron and low alloy steel – and suitable for large central systems and single sump machines.

Until now, cutting fluids for ferrous metals have needed particular care and attention to keep them in good working condition – avoiding poor sump life, increased additive usage, bacterial or fungal infections, bad odours and unpleasant working environments and, ultimately, high rejection rates.

To achieve this, traditional cutting fluids contain boron and formaldehyde-releasing agents. But using these chemicals is increasingly at odds with health and safety regulation.

It's an ongoing balancing act – one Castrol's technical experts have overcome with XBB: a unique formulation method that prolongs the life of cutting fluids without the use of additives.



Product advantages

- Castrol Hysol SL 30 XBB is the answer to industry for the highest levels of anti-corrosion performance in cast iron machining in all water qualities
- It is formulated without boron, secondary amines and formaldehyde release agents to meet the highest regulatory standards
- Castrol Hysol SL 30 XBB has been specifically developed to help the bearing industry overcome the severe requirements of foam, long emulsion stability and anti-corrosion performance
- Maintains pH at a constant level.



Application guidance and technical data of Castrol Hysol SL 30 XBB

	Cast iron	Light alloyed steel	High alloyed stainless steel	Aluminium alloys	Yellow metals	Concentrate	
Grinding	• •	• •	• •			Mineral oil (%)	30
Milling, turning (general machinery)	• •	• •	•			EP/AW-Additive	Yes (P)
Drilling	• •	• •				Boron/Formaldehyde	Free
Reaming, tapping	• •	•				Emulsion	
Broaching	• •	•				Appearance	Translucent to Milky
						pH-value (4%)	9,7

* Possible application, please consult Castrol representative prior to use
 ** Suggested core application

Grinding general machining water range 4-6%
 5-10%
 200-800 ppm CaCO3

Long system life and cleaner machines

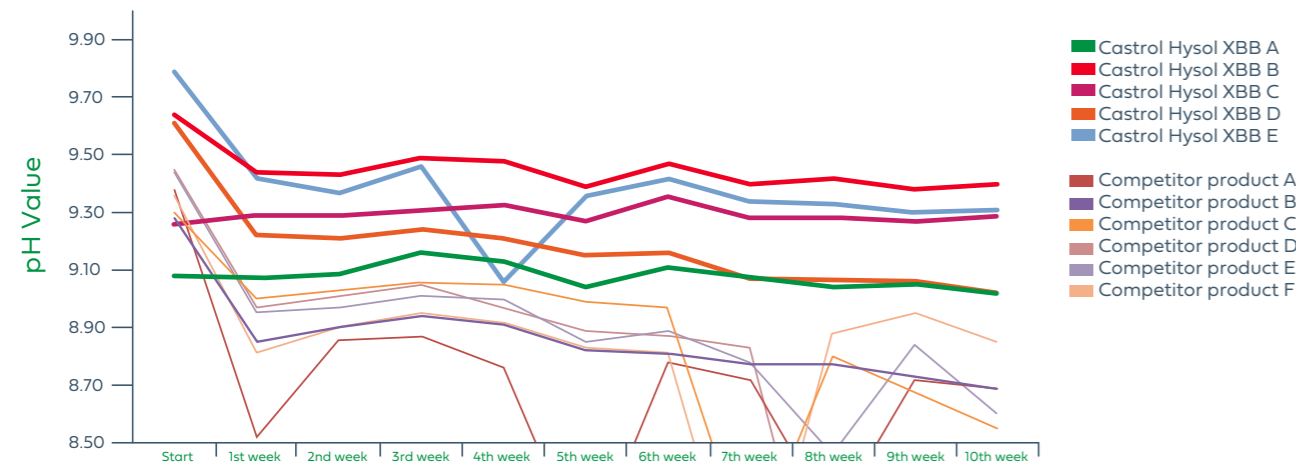
Controlling pH with XBB.

Castrol Hysol XBB is formulated to help you achieve long system life and cleaner machines by maintaining pH levels for longer.

This helps reduce maintenance interventions and reduce machine downtime, as well as minimising cutting fluid consumption and helping reducing waste.

pH development during microbiological lab testing*

Castrol Hysol XBB maintains pH at a constant level, assuring consistent productivity for longer**



* Castrol in-house microbiological test method. Occupation with bacteria and fungi isolated from field used oil samples.
** Proven in lab tests and seen in real production conditions.



One of the world's leading suppliers of hydraulic brake systems enjoys the benefits of using Castrol Alusol SL 51 XBB.

The situation

This major supplier produces brake parts for the automotive market. With a total volume of 15kl, it has two large transfer lines (2 x 6m³) with individual filtrations.

The company was using a leading competitor's product for all its machining operations, including turning, tapping and reaming. It machines Al-Si alloy 6082, and has a soft water quality of 3 to 5°dH.

The company was seeking a new aluminium coolant to improve its cleanliness and reduce its costs, specifically by reducing foaming. It needed a product that is formulated without boron to meet its HSSE requirements.

The benefits


By using Castrol Alusol SL 51 XBB, the company:

- Enjoyed the same machining performance with a lower product concentration (7%, as opposed to 10%)
- Benefited from a cleaner and safer working environment
- Eliminated foaming in critical situations
- Sped up production
- No longer needed anti-foams
- Reduced coolant consumption
- Cut costs as a result of reduced downtime and no expenditure on anti-foam additive.


The solution

Castrol proposed Alusol SL 51 XBB as an alternative milky, metalworking fluid formulated without boron and biocides.


By switching to Castrol, machining performance wasn't compromised – it was actually improved. In addition, there were benefits to the working environment, productivity and consumption.




Increased productivity



Reduced coolant concentration



Safer operating environment

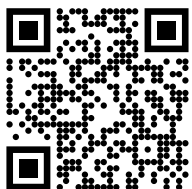


No foaming



Forward

on your industrial
evolution



Find out more at
[castrol.com/xbb](https://www.castrol.com/xbb)

Trial XBB technology for yourself

Don't take our word for it: put our Castrol XBB range to the test in your own plant, and see the difference they make. To arrange a trial, contact Castrol today.

Castrol (UK) Limited, PO BOX 352, Chertsey Road, Sunbury on Thames, Middlesex, TW16 9AW

Orders/Enquiries: 0845 9645111 Technical Enquiries: 0845 9000209 www.castrol.com/industrial

Castrol and the Castrol logo are trademarks of Castrol Limited used under licence.

This publication and the information contained therein must be seen applicable at the time it was printed. No express or implied warranty or assurance is given for the accuracy and completeness of the data and information contained in this publication. The data provided are based on the standardised test methods under laboratory conditions and serve as reference values only. The operator is responsible for evaluating and using the products with the required care, for judging their suitability for the intended application and for complying with all applicable laws and regulations. For information about health, safety and environmental aspects, please request a material safety data sheet. It includes particulars about storage, safe handling and disposal of the products. The BP Group shall not be liable for damages and injuries caused by the use of these products, which are generally not foreseeable, which are caused by not following recommendations or which are based on the hazards in connection with the nature of the product. Our General Delivery Terms and Conditions including the liability provisions contained therein apply to all deliveries. For further product information, please contact Technical Services at BP Europe.

As of August 2024 • Subject to technical modifications