TO FIND OUT HOW CASTROL'S INDUSTRY-LEADING INDUSTRIAL CLEANERS CAN BENEFIT YOU AND SUPPORT YOUR MANUFACTURING PROCESSES, TALK TO A CASTROL REPRESENTATIVE OR VISIT THELUBRICANTORACLE.CASTROL.COM

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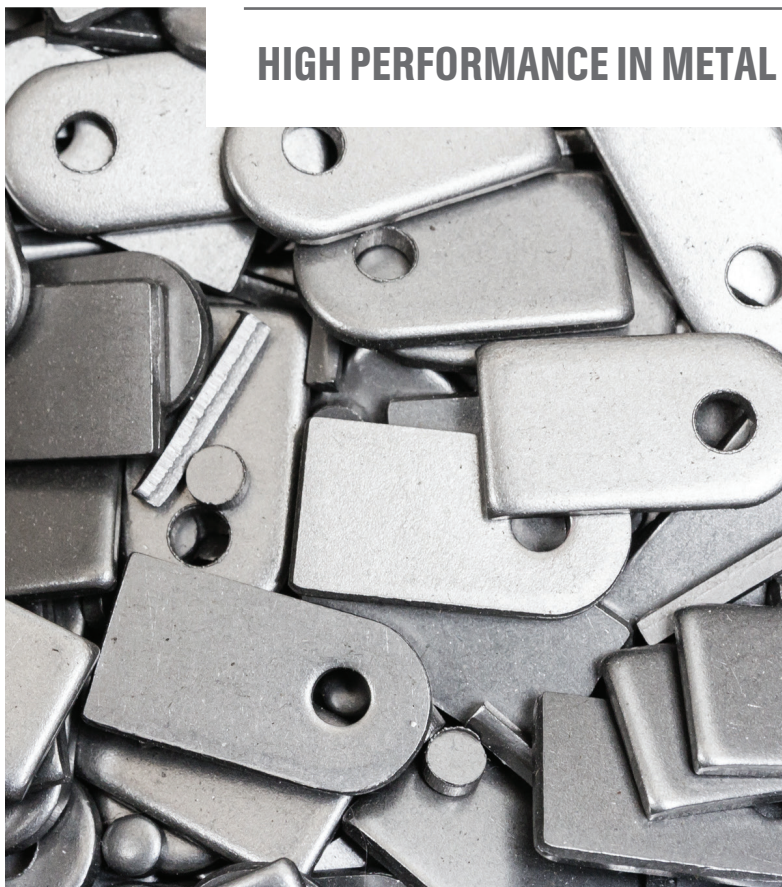
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IT'S MORE THAN JUST OIL. IT'S LIQUID ENGINEERING.™

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CASTROL ILOFORM CFX

HIGH PERFORMANCE IN METAL FORMING .... WITHOUT CHLORINE

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

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THIS IS A COMPETITIVE WORLD...

that forces continuous improvement in increasing the productivity and reducing the operational cost. Further Health & Safety concerns and legislation are placing pressure to minimise the use of hazardous components.

Traditionally, companies involved in certain forming processes have depended on chlorinated paraffin-based products as part of the production process; a material increasingly under focus due to its hazardous potential, high waste disposal cost and corrosion risk.

INSIDE CASTROL ILOFORM CFX SERIES...

the innovative extreme pressure and lubricity additive package provides excellent performance without the use of chlorinated additives, so that it can directly impact efficiency, cost-effectiveness and productivity. The performance of manufacturing depends on the performance of the lubricants in use!

FIND THE PERFECT CASTROL ILOFORM CFX VARIANT FOR YOUR SPECIFIC APPLICATION

| ILOFORM	Viscosity @ 40°C [mm²/s]	Viscosity Index	Density @ 20°C [g/ml]	Main Application
CFX 25	25	> 200	0,863	Stamping/Tube bending, Wire Drawing (Stainless)
CFX 80	80	~ 185	0,92	Deep Drawing, Fineblanking (Broaching)
CFX 160	160	~ 180	0,935	Bar- & Deep Drawing, Fineblanking
CFX 185	185	~ 170	0,995	Tube Pilgering, Deep Drawing, Fineblanking
CFX 300	300	~ 170	0,98	Bar Drawing Deep Drawing (Stainless)
CFX 6000	6000	> 200	> 1,0	Tube Pilgerung, Tube Drawing (Stainless)

CASTROL ILOFORM CFX IN ACTION

CASE STUDY:
FINEBLANKING OF AUTOMOTIVE PARTS

CUSTOMER ISSUE

This customer is manufacturing high quality parts for the automotive industry, such as clutch and lamella discs. For parts made of low alloy steel up to 16 mm and stainless steel up to 10 mm sheet thickness, as well as for complex 3D parts the customer is looking for a fineblanking oil formulated without chlorinated paraffins that provides at least equivalent drawing performance, without compromising the tool life.

RESULTS

- Higher blanking speeds possible: up to 50%
- Optimised tool life: up to 20%
- Reduced corrosion risk
- Product rationalisation as product is also suited for the deep drawing operation

TOOL LIFE

PARTS QUALITY

CUSTOMER ISSUES

CHLORINE-FREE

INVENTORY
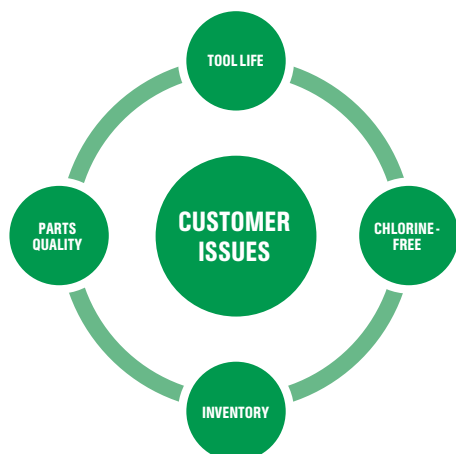
CASE STUDY:
SEAMLESS TUBE PILGERING

CUSTOMER ISSUE

This customer is manufacturing austenitic, (super) duplex, nickel base alloy and titanium tubes for the automotive, hydraulic and instrumentation industry. He needs to replace chlorinated oil due to minimal corrosion and resulting surface quality issues.

RESULTS

- No corrosion at all!
- Improved surface quality with surface roughness up to 50% lower
- No odour problems, also sulfur based
- Increased push length and stroke rate possible
- Tolerates high contamination of water, slideway oil and greases
- No issues with gearbox contamination

THE BENEFITS

⚙ PARTS QUALITY

- Excellent adhesion and wetting properties provides a homogenous highly lubricating film for an excellent surface finish and accuracy
- Significantly reduced corrosion risk vs. chlorinated products

$ OPERATIONAL COST

- High protection against wear and to enable long tool and die life, which helps to cut downtime and tool costs.
- Excellent cleaning ability and demulsifying properties allow longer bath life of downstream aqueous and cleaning systems
- High viscosity index enables lower consumption and allows greater process stability from the start

🌱 SUSTAINABILITY

- Helps to meet aspects of local legislative and waste treatment requirements that specify chlorinated additive exclusion
- Mild odour to improve operator acceptance