

# CASE STUDY: TRI-Logic HPX – ALCON COMPONENTS

Performance you can trust



## LOCATION

Alcon Components, Tamworth

## CURRENT PRODUCT IN USE

Competitor Cutting Fluid

## BACKGROUND

Alcon components are a manufacturer for Automotive OEM and performance after-market sectors. Whilst machining components for a large automotive manufacturer, the customer experienced issues with threads wearing out quickly. The substrate was Aluminium LM25 and the coolant was causing threads to break, resulting in downtime and scrapped parts. Both of which were unacceptable in the demanding motorsport sector.

## CHALLENGE

The competitor cutting fluid was not providing enough lubricity at the cutting edge and didn't contain enough EP (Extreme Pressure) additives. This resulted in a significant amount of built up edge on the threads and excessive heat in the tools which lead to breakages and snaps whilst in mid operation. This was something that needed resolving quickly as the main production run was due to start in the coming weeks.

## THE Rocol SOLUTION

TRI-Logic<sup>®</sup> HPX was specified and introduced to one of the 5-axis machining centres running this job and it proved itself instantly.

## WHY?

TRI-Logic HPX is designed for heavy duty machining operations on a wide variety of metals such as steel, stainless steel, aluminium and its alloys. The combination of lubricity and extreme pressure additives offers the following benefits enabling true cost efficiency

- Extended tool life and excellent surface finish.
- TRI-Logic HPX has excellent inherent stability providing a long and predictable sump life.
- TRI-Logic HPX provides excellent residual corrosion protection.
- TRI-Logic HPX prevents built-up edge and extends tool life particularly on roll tapping.
- TRI-Logic HPX is chlorine free and is suitable for use in hard and soft water areas.

## CUSTOMER FEEDBACK

TRI-Logic HPX has been so effective that the customer has been able to run the entire operation without stopping to change threads. It hasn't only solved a potentially disruptive problem but has also provided significant cost savings in the process. TRI-Logic HPX has now been rolled out to all machines and has been used successfully for several years.