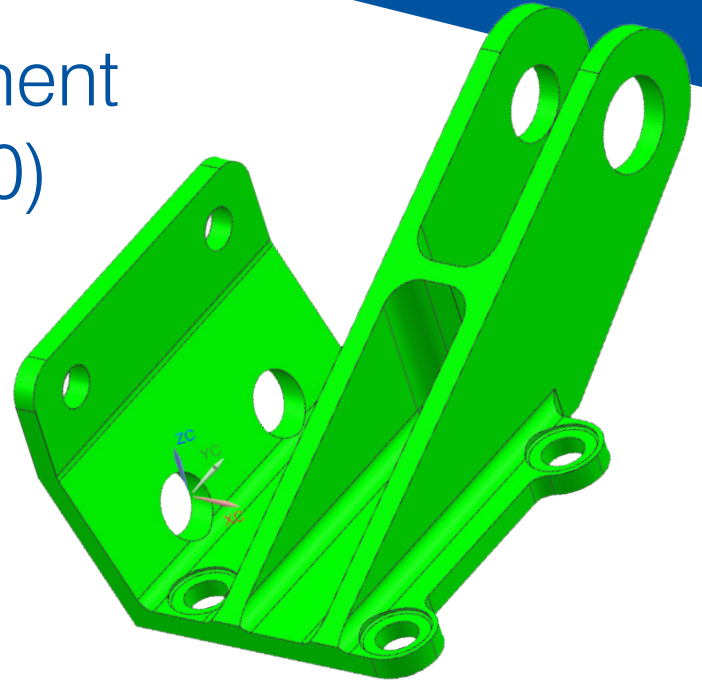


Case Study Accrofab

Clevis Bracket component (Rolls-Royce Trent 1000)

As part of the Sharing in Growth Programme, the AMRC with Boeing has worked with class-leading manufacturer of engineered parts for the aerospace industry, Accrofab, to introduce modern manufacturing techniques to reduce house cycle/setting times on a Clevis Bracket component for the Rolls-Royce Trent 1000 engine.



In order to increase production and fulfil demand, Accrofab needed to reduce cycle and set up time by a minimum of 20%.

Approach

To meet the technical challenge, engineers at the AMRC with Boeing completed a full machining Method of Manufacture (MOM) review on the Clevis Bracket component, as well as implementing a training programme on modern manufacturing techniques.

Results

The review resulted in a full redesign of the fixturing to improve throughput and a standardisation of cutting tools.

As a result of this:

- Tooling suite reduced from 37 to 26
- Component prove out to first off
- Machining set-up times were reduced by 50%
- Cycle times were improved by 50% – from 366 mins to 182 mins.

Business Benefits

The work undertaken with the AMRC has resulted in an annual machining cost saving of £52K for Accrofab and has also increased their machine capacity by over 1000 hours at a cost saving of £60K.

The new machining methods can also be applied to existing components, which could deliver similar results for Accrofab.



The AMRC has reduced the machining cycle time by

50%