

INNOVATION

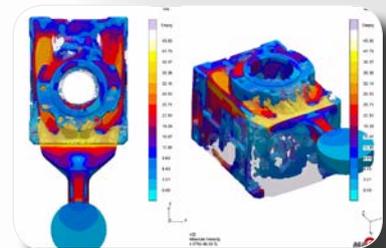
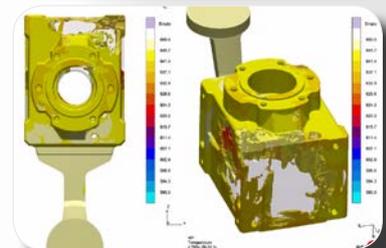
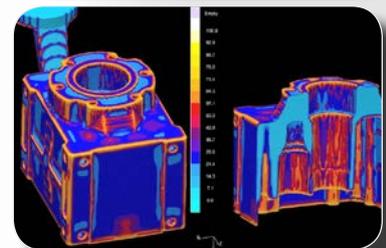
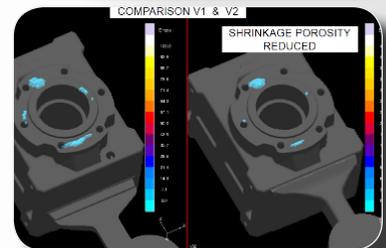
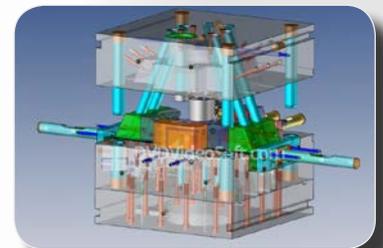
Pro-active mould re-design

Innovative mould designs can deliver a host of productivity and value benefits, streamlining casting and expediting subsequent production processes. As the mould life had come to an end, Aluminium Die Casting SRL carried out a total mould redesign for Bauer Gear Motor, delivering compound benefits of increased longevity, ease of production, lean maintenance, reduced wastage and improved cost-effectiveness.

Aluminium Die Casting SRL created a bespoke mould that incorporated support for three different component versions. This enabled an 83% time saving in machine set-up, greatly reducing the production time of each casting. Smaller batch sizes, less stock and a higher flexibility resulted. Wear and tear parts of the mould were specifically designed to be easily exchanged in-situ without taking the entire assembly out of the machine, greatly reducing maintenance requirements.

The overall lifetime of the mould was also extended thanks to a run of simulations using 3D models. This increased lifetime means each run of castings is more cost-effective, as the intervals between mould changes is longer. Aluminium Die Castings SRL's total process view allowed a shift of processes from machining to casting, resulting in cost savings.

Redesigning moulds allows customers to take a total process view, enabling total mould optimisation to the needs of each production requirement. Via this approach; value, speed, quality and efficiency can be maximised throughout the casting process. Furthermore, pro-active mould re-design allows for scrap reduction and thus a positive environmental impact on top.



Aluminium Die-Casting mould redesign delivered:

- » 1 mould for 3 separate components
- » Increased mould lifetime for improved cost-effectiveness
- » Expedited casting process for reduced lead times
- » In-situ mould interchangeability for minimal maintenance requirements
- » Reduced scrap and machining post casting