

Wall Colmonoy Limited (UK) Gets it Right the First Time with ESI ProCAST



WALLCOLMONOY

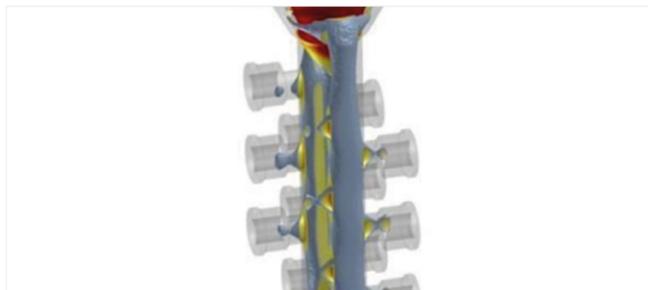


Challenge

Before utilizing simulation software, Wall Colmonoy Limited (WCL), based in Pontardawe, South Wales, UK, used to leverage their engineering manpower, and brainpower, in order to produce perfect castings. Not only did running physical trials consume valuable time and resources but it did not guarantee they would achieve a defect-free part in the end.

Benefits

By introducing ESI ProCAST into their part development process, Wall Colmonoy Limited (WCL) has been able to manufacture their casting right the first time; an objective they strive for every time. They no longer consume time and resources making physical prototypes on the shop floor. Instead, they validate and optimize the manufacturing process before hitting the shop floor.



Solidification mode of Investment Casting Chucks for Canning Industry

"We did a lot of research into the different virtual prototyping software companies out there, but for us, ESI came out at the top as they could provide the best software that met our requirements. The introduction of ESI ProCAST has allowed us to optimize our product development process - delivering new products quicker and expanding our capabilities."

Michael Shreeve
Process Improvement Engineer
Wall Colmonoy Limited

Story

Wall Colmonoy is a leading global materials engineering group of companies engaged in the manufacturing of surfacing and brazing products, castings, and engineered components across aerospace, automotive, oil & gas, mining, energy, and other industrial sectors. WCL manufactures precision cast components, predominately by investment and sand casting.

Until recently, like most other casting companies, WCL leveraged their vast engineering experience and knowledge and ran physical trials as they sought after the most efficient manufacturing process. However, increasingly complex part shapes, challenging performance requirements, and the demand for shorter turnaround introduced challenges when developing new products; consuming not only engineers' time but also materials and other resources. The company knew there must be a better way.

In 2016, Wall Colmonoy Limited (UK) began using ESI ProCAST, the widely trusted casting simulation software for the foundry industry, to address the roadblocks they faced. They quickly realized that their engineering expertise coupled together with ESI ProCAST allowed for flexibility, process control, speed to manufacture and ultimately optimal product quality for customers. They could optimize and more efficiently manufacture their castings. ESI ProCAST gave them the ability to engineer quality products in the early stages of development - getting it right the first time. WCL was able to validate and improve their manufacturing processes virtually, without the need for physical trials.

Not only has the software solution aided them in the manufacturing of their existing product line, it will benefit WCL in targeting other markets, including automotive and aerospace, as they typically require more intricate cast components. Wall Colmonoy now looks to deploy ProCAST at other divisions within their company, including Franklin Bronze Precision Components (FBPC) located in Pennsylvania, USA. FBPC manufactures investment castings for glass container and many other industrial sectors including food, automotive, drilling & mining, marine, steel, and valve & pump.



for more information
www.wallcolmonoy.co.uk

