

Sector focus Aerospace



Goodfellow
Your global supplier for materials

Goodfellow has provided bespoke alloys for use by a world-leading aerospace manufacturer focused on satellites and engines. The client develops, produces and sells engines for commercial and military aircraft and satellites as well as offering a complete range of support services to airlines, armed forces and other operators, including fleet management.

Part of international and high-tech groups, it is behind some of the world's most innovative technological developments. Research and Development is a key part of the aviation industry's goal of achieving ambitious environmental protection objectives by developing aircraft engines that are increasingly quiet and economical.

Challenge

The time invested in this project meant the purity of the alloys was vital as the client required the materials to be of the highest possible quality. If the purity had a 0.001% difference compared with a similar alloy, it could potentially compromise the whole project. Goodfellow's sales, purchasing and quality departments invested a huge amount of time to understand and supply materials that would confirm with the demanding standards.

Goodfellow also had to ensure the materials were right first time in order to avoid errors and further investment. Sound testing and test analysis communication was carried out by Goodfellow and ensured the materials sourced were the correct weight and density. A crucial requirement within the Aerospace sector is that the materials are of increasingly lower weights to reduce fuel consumption.

The packaging and handling of goods was another challenge as it's important to ensure the materials arrive in one piece without any damage and any documents missing. Due to the nature of the final product the properties of the alloys needed to include corrosion resistance, fade amending environments and high resistance in order to perform well in onerous surroundings e.g. in Space.



Solution

Goodfellow has worked over a period of several years to improve the quality support for the client and has ensured that suppliers met the necessary compliance standards for the sourcing of alternative and bespoke materials within the Aerospace sector. Throughout the project, Goodfellow has supplied low to medium quantities (in varying amounts of kilos) of specific types of alloys including Tungsten, Molybdenum, TZM, Tantalum, Molybdenum Rhenium and Niobium. The materials and support provided have played a vital role in the development production of the next generation of aircraft engines.