

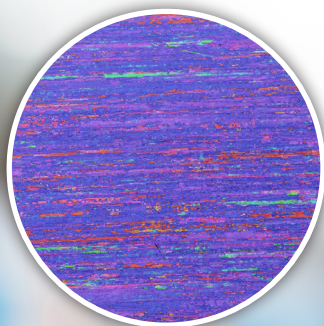
Pushing the boundaries

Introduction

Customers increasingly demand more from their materials and expect performance beyond recognised capabilities. Nicofe brings a different perspective and has the experience, knowhow and methodologies to push the boundaries of what can be achieved.

Requirement

Materials from different mills produced to the same specification frequently show variations in properties and performance. This can lead to challenges when machining to precise tolerances and can result in component failure, excessive wastage or expensive reworks.





Sheet



Round Bar



Wire



Plate



Coil

Approach

Nicofe helps customers save time, effort and money by ensuring that materials perform in the most effective way. Organisations value our unique blend of deep metallurgy knowledge, specialist industry experience and stringent quality control processes.

From quality assessment in our metrology lab and extensive material testing under operational conditions, to the care taken with component packaging and delivery, we ensure every item we ship is fit for purpose.

Nicofe is also a pioneer in originating new approaches to tackle industry challenges and we continually invest in developing practical solutions for our customers that support the performance expectations of their materials.

Solution

We commissioned a scientific study through the University of Plymouth and supported a student to examine the causes of discrepancies in material properties and performance. This involved analysing material supplied to the same specification from three different mills.

By comparing this analysis with the reported chemistry, grain structure, non-metallic inclusions, residual stresses, and other key material characteristics, the work highlights the extent and impact of production differences between mills.

Result

The findings are being used to evaluate the performance and reliability of materials from different sources and equip buyers with a practical tool they can use to make informed sourcing decisions that help mitigate downstream manufacturing risks.



About Nicofe

Nicofe is one of Europe's leading suppliers of premium quality refractory metals and alloys, soft magnetic alloys, and controlled expansion alloys. Our customers benefit from a diverse range of capabilities that help them address their needs more effectively, especially in the aerospace, defence, electronics and automotive sectors.

With top accreditations, comprehensive workshop facilities, and a deep technical understanding we help our customers get the most out of their materials.



Discover how we can **optimise** operational performance

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Nicofe Materials

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