

A Perspective: Why Magnesium?

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Abstract

Meridian Lightweight Technologies UK (MLTUK) are part of Meridian Technologies Inc., which is part of the Wanfeng Auto Holding Group. MLTUK are the leading full service supplier of innovative lightweight Magnesium die cast components and assemblies in the global automotive market.

MLTUK was set up in 1999 and have a passion for Magnesium - regularly campaigning for industry and engineers to have a better understanding of Magnesium to allow it to take its rightful place alongside other less suitable structural materials in use today.

MLTUK is working in partnership with Birmingham City University (BCU) to improve industry understanding and assist in increasing the opportunities across the industry spectrum. Academics at BCU will provide Meridian and industry with a greater scope of application ideas.

Why Magnesium? Magnesium, designed and optimised in the correct manner, will provide an enhanced strength, stiffness and stability, and will deliver a higher specific yield strength and specific modulus than nearly all other structural metals.

Magnesium is readily available, as it is the 8th most abundant natural metal. Its excellent strength/stiffness to weight ratio surpasses most other natural metals, allowing it to be a metal of choice when looking for a very light (up to 50% lighter than aluminium), stiff, energy efficient and recyclable natural material for our modern day design needs.

Our partnership is committed to improving the industry understanding of Magnesium and will encourage the automotive industry to improve. The industry is increasing its use of Magnesium yearly and our partnership intends to lead the industry, which presently lacks the skills and expertise regarding the do and don'ts necessary when designing and developing in Magnesium. These judgements can lead to ill-advised dangerous decisions being made during the design stages. Misconceptions are still rife at OEM Engineering level. MLTUK are committed to tackling this issue wherever we can, and in the most professional manner, in partnership with BCU.

Want to understand more about the potential of Magnesium for your business?
[Register free for Birmingham City University's Magnesium Symposium on 20th July.](#)