

GKN Aerospace agrees strategic 'additive manufacturing' partnership with Arcam



Photo caption: GKN Aerospace and ARCAM engineers will work with Arcam Q20 machines to create the next generation of EBM equipment, able to manufacture complex titanium structures at the high volumes required to meet future demand.

GKN Aerospace has entered a strategic partnership with additive manufacturing specialist, Arcam AB, to develop and industrialise one of the most promising of the new 'additive' processes to meet the needs of the expanding future aerospace market.

The joint technology development (JTD) partnership is focused on developing electron beam melting (EBM), a process in which metal components are built up, layer-by-layer, using a metal powder that is melted by a powerful electron beam. EBM is able to produce very precise, complex, small to medium-sized components that require very little finishing.

As part of this agreement, GKN Aerospace has ordered two ARCAM Q20 EBM machines to be installed at GKN Aerospace's Bristol, UK additive manufacturing (AM) centre. GKN Aerospace and ARCAM engineers will then work together to create the next generation of EBM equipment, able to manufacture complex titanium structures at the high volumes required to meet future demand.

Russ Dunn, Senior Vice President Engineering & Technology, GKN Aerospace explains: "We have been working with Arcam for some time exploring what we believe to be one of the most promising of the additive processes. Our aim has been to fully understand how EBM can be applied to our future aerostructures and aero engines portfolio. Through this new strategic partnership with ARCAM our combined additive manufacturing teams will now take the next steps towards fully industrialising this AM technology."