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## **Net Shape Manufacture in Metals**

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### **Abstract**

As material and energy costs increase and raw materials are treated as a scarcer resource the manufacture of materials to near-to-net form with the desired properties required for service has become a pressing need. Our ability to create net shaped objects is of course as old as civilisation itself with simple cast objects recorded in the archaeological records from 4000BC, however our ability to coax materials into forms that have specific and highly localised functionality is still emergent. In this talk I will cover net-shaping technologies old, new and the highly speculative and look to see how perhaps by combining these novel means with the technologies we know and love may lead in novel directions for manufacturing and the creation of artefacts in metallic materials.