



IMfT & IIM Joint Workshop & Plant Tour

Venue: Mettis Aerospace Ltd., Windsor Road, Redditch, B97 6EF

For directions visit: http://www.mettis-aerospace.com/contact_location.html

Date: 30 September 2010

AGENDA

10.00 – 10.30 Arrival and Coffee

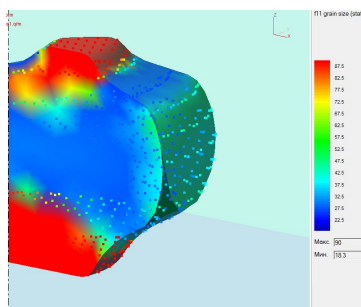
10.30 – 12.30 Workshop

A presentation/demonstration of the most recent elements of QForm preceded by a short introduction to the QForm software

Trevor Slater, Director, Micas Simulations Ltd.

QForm - Micro Structural Module

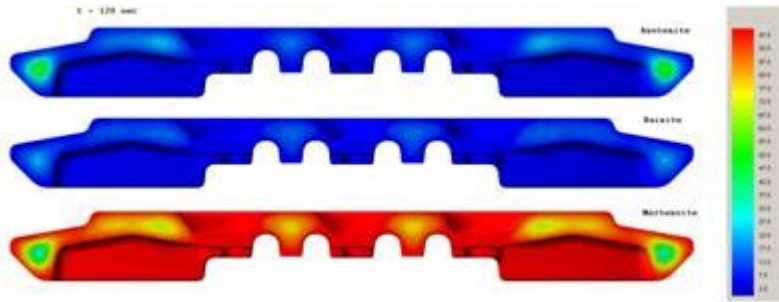
The module allows the prediction of grain size and the fraction of recrystallised grains in the forged part made of superalloys. It works for the processes even when the billet is subject to many blows with short pauses between them such as in a hammer forging. The process chain may also include several re-heats.



Variation of the grain size after deformation and cooling of the forged part made of Inconel 718

QForm – Heat Treatment Module

The new HT Simulation Module, which has used the well proven system of phase transformation during quenching of steels developed by GMT Berlin mbH, and integrated this with the simulation of cooling in QForm3D. By these means the program can predict the phase constitution in the product as well as its Hardness and Ultimate Tensile Stress and show the distributions of these parameters over the surface and in cross cuts. The module can be used in conjunction with the QForm simulation package or as a stand alone module.



Residual austenite, bainite and martensite distribution in the cross section of steel forged part after quenching

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|---------------|-----------------------|
| 12.30 – 13.30 | Lunch |
| 13.30 – 15.30 | Plant tour |
| 15.30 – 16.00 | Wrap up and departure |

Places for this interesting event are limited and will be available on a strictly first come first served basis. Mettis require names, affiliation and job title from all prospective attendees and reserve the right to refuse admission.

PLEASE NOTE!

To ensure organisational efficiency, ALL those wishing to attend this event, please communicate directly with:

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This event is organised jointly by:

Industrial Metalforming Technologies (IMfT) - www.imft.co.uk

and

The International Institute of Metalforming (IIM) - www.metalforminginstitute.org