

Influence of thickness and notch on impact bending properties of pure tungsten plate material #15-353

Jens Reiser¹, Michael Rieth¹, Bernhard Dafferner¹ and Andreas Hoffmann²

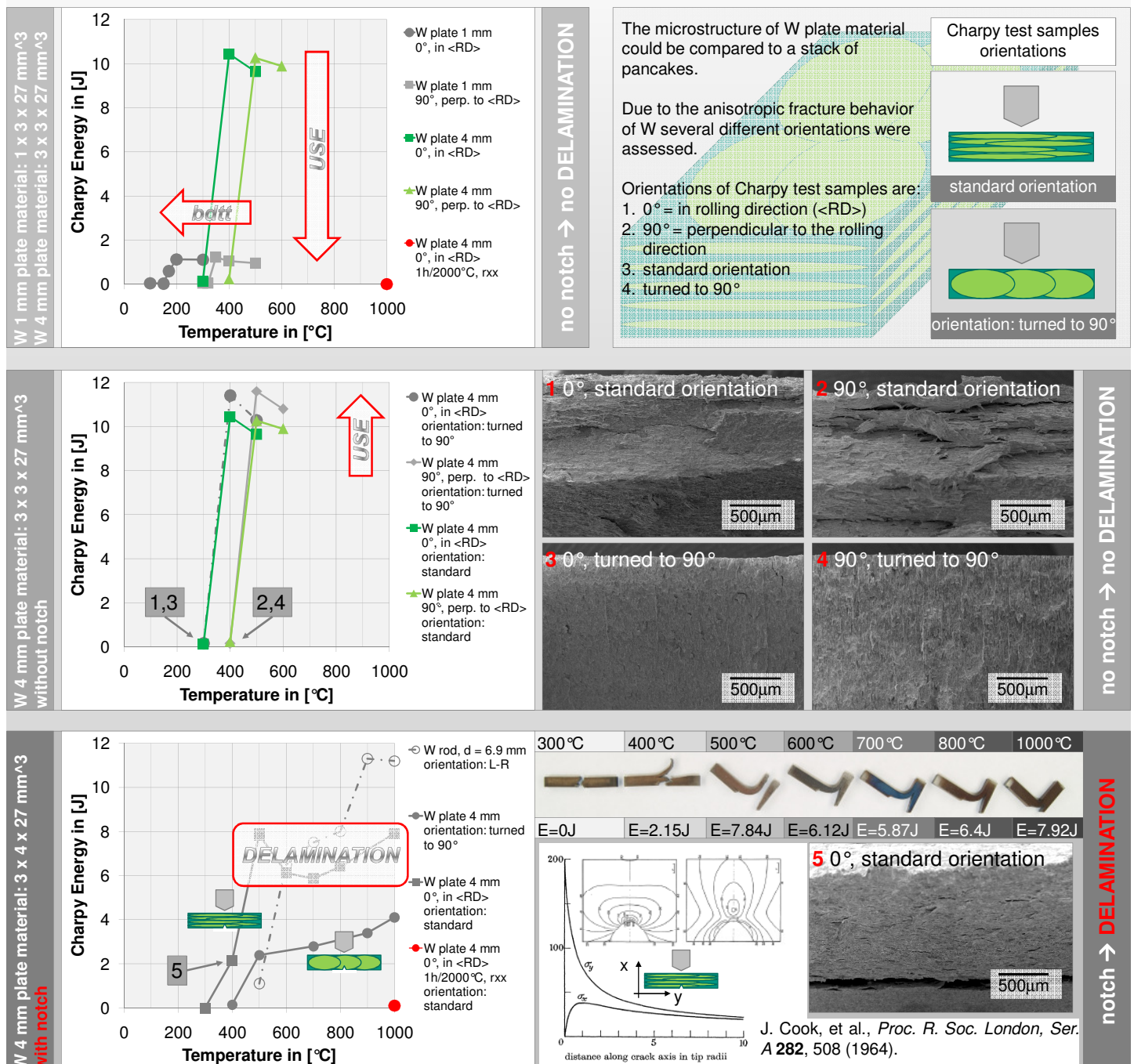
1: KIT, Institute for Applied Materials, 76344 Eggenstein-Leopoldshafen, Germany

2: PLANSEE SE, 6600 Reutte, Austria

E-mail: jens.reiser@kit.edu, Tel. +49 (0)721 608 23894

Introduction

The fracture of W is anisotropic and strongly depends on the underlying microstructure. As W rod material can not be used for W structural parts, and as pure W shows the best fracture behavior measured by Charpy (exception W-Re), pure W plate material is assessed. Previous results for W rod material showed an extraordinary fracture behavior called delamination. Does this delamination also occur on plate material? And how is the delamination behavior if the Charpy test samples are unnotched? Furthermore it is known, that the brittle-to-ductile transition temperature (bdtt) is a function of cold work and strain rate and it will be shown that the bdtt is also a function of the rolling direction.



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