Accepted Manuscript

Processing of Ti-5553 with improved mechanical properties via an in-situ heat treatment combining selective laser melting and substrate plate heating

H. Schwab, Matthias Bönisch, Lars Giebeler, Tobias Gustmann, Jürgen Eckert, Uta Kühn

PII: S0264-1275(17)30475-6

DOI: doi: 10.1016/j.matdes.2017.05.010

Reference: JMADE 3034

To appear in: Materials & Design

Received date: 8 March 2017 Revised date: 7 April 2017 Accepted date: 5 May 2017

Please cite this article as: H. Schwab, Matthias Bönisch, Lars Giebeler, Tobias Gustmann, Jürgen Eckert, Uta Kühn, Processing of Ti-5553 with improved mechanical properties via an in-situ heat treatment combining selective laser melting and substrate plate heating, *Materials & Design* (2017), doi: 10.1016/j.matdes.2017.05.010

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



ACCEPTED MANUSCRIPT

Processing of Ti-5553 with improved mechanical properties via an in-situ heat treatment combining selective laser melting and substrate plate heating

H. Schwab¹, Matthias Bönisch¹, Lars Giebeler¹, Tobias Gustmann¹, Jürgen Eckert¹⁺, Uta Kühn¹

¹ IFW Dresden, Institute for Complex Materials, D-01069 Dresden, Germany

Corresponding author: h.schwab@ifw-dresden.de

⁺Present address: Erich Schmid Institute of Materials Science, Austrian Academy of Sciences (ÖAW), Jahnstraße 12, A-8700 Leoben, Austria and Department Materials Physics, Montanuniversität Leoben, Jahnstraße 12, A-8700 Leoben, Austria

Keywords: Selective laser melting, additive manufacturing, Ti-based alloys, Ti-5553, in situ heat-treatment, substrate heating

Download English Version:

https://daneshyari.com/en/article/5023153

Download Persian Version:

https://daneshyari.com/article/5023153

<u>Daneshyari.com</u>