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Your Ref: 9936  
Our Ref: 09/150  
Date: 05.05.09

**Cares Report No. 10378**

**CARBON STEEL REINFORCING BAR SAMPLES FOR FATIGUE TESTING**

<b>Certificate Number</b>	<b>35856/1</b>	
<b>Date of Receipt</b>	30.03.09	<b>Date of Test</b> 27.04.09 to 02.05.09
<b>Source</b>	OJSC Arcelor Mittal Kryviy Rih. (Kryviy Rih, Ukraine)	
<b>Description</b>	8mm dia. Bar (QST)	
<b>Identified</b>	Cast Number - 22850	
<b>Material</b>	BS 4449:1997/2005 Grade 460B/B500B	

**Test Specimens.**

Twelve lengths of reinforcing bar, as described above, were submitted to our laboratories for fatigue testing in accordance with BS 4449:1997 Annex F. & BS EN ISO 15630:1 Clause 8

**Test Procedure.**

The tests have been conducted in accordance with our Technical Work Procedure TP20-MET dated May 2006. This procedure details the method adopted to enable fatigue testing of reinforcing steels to BS 4449:1997 Annex F.  
As specified in BS 4449:97/05, a stress range of 200 N/mm<sup>2</sup> was used giving test loads of 2.5 kN minimum and 12.6 kN maximum.  
The apparatus used to conduct the tests was an Amsler Vibrophore 100kN machine with Howden electronic conversion package. This equipment was calibrated in accordance with BS EN ISO 7500:1:2004

**Test Results.**

The tests were conducted on five samples.  
All five samples tested completed 5 x 10<sup>6</sup> cycles without fracturing.

**Conclusions.**

The samples submitted, as described above, all comply with the requirements of BS 4449:1997 Annex F & BS 4449:2005 (BS EN ISO 15630:1:2001 Clause 8)

G P Grant  
Senior Mechanical Test Engineer

**End of Report**

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