
	<b>Qualification Test Record (QTR) NORSOK M-650</b>				QTR. No.: F51- Hollow Forging
					Rev. No.:00
<b>Manufacturer name/address/ Web page:</b>	Brück GmbH, Brückstr. 16, 66131 Ensheim - Germany www.bruck-forgings.com				
<b>Reference standard</b>	NORSOK M-650, Edition 4				
<b>Material designation and MDS No.:</b>	ASTM A182 Gr. F51; MDS D44, Revision 4.				
<b>Manufacturing Summary doc. No.:</b>	MS-F51-Hollow Forging				Rev. No.:01
<b>Products and manufacturing process(es):</b>	Hollow Forging, produced by backward extrusion, without subsequent ring rolling in excess of 50 mm change in inner diameter				
<b>Mandatory conditions and sub-contractors:</b>	Heat treatment furnaces No. 5 and 6 Quench basin No. 4				
<b>Other information:</b>	Present qualification is based on VA-QS-5130 Rev.01 i.e. Murakami etchant (No. 98, ASTM E 407). For all future orders VA-QS-5130 Rev. 02 i.e. 20% NaON (No.220) will be used, unless otherwise agreed with the customer.				
<b>Qualification expires:</b>	21.01.2018				
<b>Tested and qualified thickness and weight</b>					
<b>Products and manufacturing process(es):</b>	<b>Test record No.</b>	<b>Tested thickness mm</b>	<b>Qualified thickness mm</b>	<b>Test piece weight kg</b>	<b>Qualified weight kg</b>
Hollow Forgings	E 3387	195	195	1163	All
<b>Qualification/acceptance signatures</b>					
<b>Manufacturer:</b>	<b>Prepared by/Date:</b> D. Mohr, 18.12.2012		<b>Checked by/Date:</b> D. Baud, 18.12.2012		
<p>The manufacturer and this QTR are evaluated and found to be in compliance with the requirements of NORSOK M-650 for supply of the above listed products and materials. This acceptance does not exempt any purchaser from his responsibility to ensure that this qualification is valid for his products within the essential variables of NORSOK M-650.</p>					
<b>Qualified by (company name /address):</b>	 <b>Aker Solutions</b> Aker Engineering & Technology AS Reg.nr. 879 817 552		<b>Signature/Date:</b> 21/01/2013 Erling Ryenge		