


<b>Qualification Test Record (QTR)</b>		QTR. No.:003			
<b>NORSOK M-650</b>		Rev. No.:00			
<b>Manufacturer name/address/ Web page:</b>	Hydrobolt Group, Monmore Business Park, Dixon Street, Wolverhampton, WV2 2EE www.hydroboltgroup.com				
<b>Reference standard</b>	NORSOK M-650, Edition 4				
<b>Material designation and MDS No.:</b>	ASTM A1082, MDS D59 Rev 2, UNS S32760				
<b>Manufacturing Summary doc. No.:</b>	NMS – 003	Rev. No.: 00			
<b>Products and manufacturing process(es):</b>	Bar Turned / Thread Rolled Stud Bolts				
<b>Mandatory conditions and sub-contractors:</b>	<ul style="list-style-type: none"> <li>Original Bar Manufacturer must be BGH Edelstahl Freital GmbH</li> <li>Will not be subject to any further heat treatment or pickling operations</li> <li>Strain Hardened Bar to be supplied by Zapp and Drawn by S S Bright Drawers</li> </ul>				
<b>Other information:</b>	<ul style="list-style-type: none"> <li>NDE Inspection by Scantech, Fens Pool Avenue, Brierley Hill, DY5 1QA</li> <li>Mechanical Testing will be conducted at ;               <ol style="list-style-type: none"> <li>Special Testing, Bacon Lane, South Yorkshire, S9 3NH</li> <li>Element Materials Technology, Nursey Street, South Yorkshire, S3 8GP</li> </ol> </li> <li>"This QTR applies to machining / thread rolling of stud bolts from strain hardened bar drawn using verified procedure. Qualification testing has been carried out to demonstrate that the product fulfil the specified product requirements after machining."</li> <li>Max hardness 3mm under threads measured to 37.8 HRC</li> </ul>				
<b>Qualification expires:</b>	<b>March 2023</b>				
<b>Tested and qualified thickness and weight</b>					
<b>Products and manufacturing process(es):</b>	<b>Type of Material</b>	<b>Type of component</b>	<b>Tested Thickness (T) inch</b>	<b>Qualified thickness</b>	<b>Sacrificial component for qualification testing</b>
Thread Rolled Stud Bolts	SS, Type 25Cr duplex MDS D59 Rev. 2	Stud Bolt	5/8	Studbolts : M12 (1/2inch) To M48 (2inch)	Yes
			1.1/4		
			2.00		
<b>Qualification/acceptance signatures</b>					
<b>Manufacturer:</b> Hydrobolt	<b>Prepared by/Date:</b> P Mulligan 20/3/18		<b>Checked by/Date:</b> P Mulligan 20/3/18		
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.					
<b>Qualified/Accepted by (company name /address):</b>  Aker Engineering & Technology AS Reg.nr. 879 817 552			<b>Signature/Date:</b> 21/3/2018 