


		QUALIFICATION TEST RECORD NORSOK M-650 EDITION 4			QTR No.: QTR 004	
					Revision No.: 06	
Manufacturer Name / Address / Web Page:		Hammerschmiede Jäckel Müller GmbH Ripshorster Straße 460, D-45357, Essen, Germany www.hjm.gmbh				
Reference Standard:		NORSOK M-650 Edition 4				
Material Designation and MDS No.:		ASTM A182 F53 (UNS S32750) - NORSOK M-630 MDS D54 Rev. 5				
Manufacturing Summary Doc. No.:		QTR004-MS			Rev. No.: 01	
Products and Manufacturing Process(es):		Die Forged Flanges < 80kg Die Forged Flanges ≥ 80kg Forged Rings				
Mandatory Conditions and Sub-Contractors:		Heat Treatment carried out in-house (Furnace no. 5) Laboratory Material Testing carried out by 3 rd Party ISO 17025 Accredited Supplier				
Other Information:		Pickling & Passivation carried out by 3 rd Party Approved Supplier Forging Process for Large Items (≥ 80kg) : Ossenberg & Cie GmbH, Altena (Optional)				
Qualification Expiry Date:		29/09/2022				
Tested and Qualified Thickness and Weight						
Products and Manufacturing Process(es):	Test Record No.	Tested Thickness (mm)	Qualified Thickness (mm)	Test Piece Weight (kg)	Qualified Weight (kg)	
Die Forged Flanges (< 80kg)	QTR004-QUALTS01	62	62	43	86	
Die Forged Flanges (≥ 80kg)	QTR004-QUALTS02	80	80	99	198	
Die Forged Flanges (≥ 80kg) - Ossenberg	QTR004-QUALTS03	170	170	400	All	
Forged Rings	QTR004-QUALTS04	200	200	363	All	
Qualification / Acceptance Signatures						
Manufacturer: Hammerschmiede Jäckel Müller GmbH Essen, Germany		Prepared by / Date : 01.12.2018 <i>Matthias Vogt</i> Head of Quality Department		Checked by / Date : 01.12.2018 <i>Peter Müller</i> CEO		
Remarks / Special Remarks:						
<ol style="list-style-type: none"> 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. 						
Qualified / Accepted by (Company Name / Address):				Signature / Date :		
 APPROVED  <small>partner in material technology and innovation</small>				 Peter Müller 21.12.2018		