

## QUALIFICATION TEST RECORD NORSOK M-650 EDITION 4

## Manufacturing Procedure Conformity Record ISO 17782-2018

QTR No.: QTR 004 MPCR No.: 004

Revision No.: 08

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Manufacturer Name / Address /Web Page:	Hammerschmiede Jäckel Essen GmbH Ripshorster Straße 460, D-45357, Essen, Germany www.hje.gmbh				
Reference Standard:	NORSOK M-650 Edition 4, ISO 17782-2018				
Material Designation and MDS No.:	ASTM A182 F53 (UNS S32750) - NORSOK M-630 MDS D54 Rev. 6 +MDS DH54 Rev. 1				
Manufacturing Summary Doc. No.:	QTR004-MS	Rev. No.: 02			
Products and Manufacturing Process(es):	Die Forged Flanges < 80kg Die Forged Rings  Eorged Rings				
Mandatory Conditions and Sub-Contractors:	Heat Treatment carried out in-house (Furnace no. 5) Laboratory Material Testing carried out by 3 <sup>rd</sup> Party ISO 17025 Accredited Supplier				
Other Information:	Pickling & Passivation carried out by 3 <sup>rd</sup> Party Approved Supplier Forging Process for Large Items (≥ 80kg) : Ossenberg & Cie GmbH, Altena (Optional)				
Qualification Expiry Date:	29/09/2027				

Tested and Qualified Thickness and Weight

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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: Prepared by / Date : 01.09.2022 Checked by / Date : 01.09.2022
Hammerschmiede

Jäckel Essen GmbH
Essen, Germany

Matthias Vogt
Head of Quality Department

Andrea Jäckel
CEO

## Remarks / Special Remarks:

- 1. The manufacturer and this QTR/MPCR are evaluated and found to be in conformity with the requirements of NORSOK M-650/ISO 17782 for supply of the above listed products and materials.
- 2. 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/ISO 17782.

Qualified / Accepted by (Company Name / Address):

Signature / Date :

Taux 29.09.2022

