



QTR
Qualification Test Record
NORSOK M-650

QTR. No.:
GG-N-QTR-1100

Rev. No.: A

<i>Manufacturer Name/address/ Web page:</i>	Gustav Grimm Edelstahlwerk GmbH & Co. KG Ronsdorfer Str. 172-174 D - 42855 Remscheid	www.gustav-grimm.de
<i>Reference standard</i>	NORSOK M-650 Edition 4 - September 2011	
<i>Material designation and MDS No.:</i>	ASTM A 479, UNS S31803, MDS D47 Rev. 5 ASTM A 479, UNS S32205, MDS D47 Rev. 5	
<i>Manufacturing summary doc. No.:</i>	GG-N-MS-1110 - Forged bars - 1.4462 (Type 22Cr Duplex)	Rev. No.: B
<i>Products and manufacturing process(es):</i>	Forged bars suitable for machining of components without welding ends Production route: Forging by press	
<i>Mandatory conditions and sub-contractors:</i>	Heat treatment furnace No. 6 Heat treatment according to GG-N-DHTF-0000 and GG-N-HTI-1000 Rev. No.: B Start material: Silbitz Guss GmbH Metallographic examination and corrosion testing: Germanischer Lloyd Prüflabor GmbH, Herne	
<i>Verification of heat treatment procedure</i>	GG-N-HTV-0002-TR01 Rev. No.: B Date: 15. June 2015 Temperature: 1120°C	
<i>Other information:</i>	<u>Delivery conditions:</u> ➤ semi-finished products pre-machined ➤ no-finished surfaces	
<i>Qualification expires:</i>	March 2021	

Tested and Qualified Thickness and Weight

<i>Products and manufacturing process(es):</i>	<i>Test record No.</i>	<i>Tested thickness (mm)</i>	<i>Qualified thickness (mm)</i>	<i>Test piece weight (kg)</i>	<i>Qualified weight (kg)</i>
Forged bars (round and square)	GG-N-QTR-1100	350 mm	350 mm	app. 1500 kg	all

Qualification/Acceptance signatures

Manufacturer:	Prepared by/Date: Karsten Voigt 09.03.2016 <i>Karsten Voigt</i>	Checked by/Date: Roland Winter 09.03.2016 <i>Roland Winter</i>
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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/Acceptor: Aker Solutions Aker Engineering & Technology AS Reg.nr. 579 817 552	Signature/Date: 09/03/2016 <i>Erling Ryege</i>
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