



QTR
Qualification Test Record
NORSOK M-650

QTR. No.:
GG-N-QTR-1200


Rev. No.: A

Manufacturer Name/address/ Web page:	Gustav Grimm Edelstahlwerk GmbH & Co. KG Ronsdorfer Str. 172-174 D - 42855 Remscheid	www.gustav-grimm.de
Reference standard	NORSOK M-650 Edition 4 - September 2011	
Material designation and MDS No.:	ASTM A 479, UNS S31803, MDS D47 Rev. 5 ASTM A 479, UNS S32205, MDS D47 Rev. 5	
Manufacturing summary doc. No.:	GG-N-MS-1210 - Rectangle forged bars - 1.4462 (Type 22Cr Duplex)	Rev. No.: B
Products and manufacturing process(es):	Rectangle forged bars suitable for machining of components with welding ends Maximum thickness: 250 mm Maximum width: 500 mm Production route: Forging by press	
Mandatory conditions and sub-contractors:	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	
Verification of heat treatment procedure	GG-N-HTV-0002-TR01 Rev. No.: B Date: 15. June 2015 Temperature: 1120°C	
Other information:	<u>Delivery conditions:</u> <ul style="list-style-type: none"> ➤ semi-finished products pre-machined ➤ no-finished surfaces 	
Qualification expires:	March 2021	

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)
Rectangle forged bars	GG-N-QTR-1200	250 x 500 x L mm	250 x 500 x L 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>
<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>		
Qualified/Accepted by (company name/address):  Aker Solutions™ Aker Engineering & Technology AS Reg.nr. 879 817 552	Signature/Date: 01/04/2016 <i>Erling Ryeng</i>	