



**Qualification Test Record  
(QTR)  
NORSOK M-650 Edition 4**

QTR No. :  
QTR Front Page-M650  
ED4-240mm-Type 6Mo  
Rev. No. 2

Manufacturer Name/ address/ Web page:	Goodwin Steel Castings Ltd Ivy House Road, Hanley, Stoke-on-Trent, Staffordshire ST1 3NR <a href="http://www.goodwinsteelcastings.com">www.goodwinsteelcastings.com</a>	
Reference standard	Norsok M-650 Edition 4	
Material designation and MDS No:	ASTM A351 Grade CK-3MCuN (Type 6Mo) NORSOK MDS M630 R16 REV.5	
Manufacturing summary doc No:	Manufacturing Summary -General production of ASTM A351 Grade CK-3MCuN	Rev. No : 2
Product and Manufacturing process:	Sand castings of Type 6Mo Austenitic Stainless Steel produced by AOD secondary refinement.  Production Route as manufacturing summary	
Mandatory conditions and sub contractors:	Castings Supplied Fully Heat Treated Heat Treatment carried out by Conmech Engineers Ltd on furnace no.8 Laboratory testing for regular production by Metal Proving Services Ltd	
Other information	Verification of heat treatment procedure using Conmech Engineers Ltd furnace no.8 complete on 28.01.2016	
Qualification Expires	17 <sup>th</sup> March 2021	

**Tested and qualified Thickness and weight**

Product and Manufacturing processes:	Test record No:	Tested Thickness (mm)	Qualified thickness (mm)	Test Piece weight (kg)	Qualified weight (kg)
AOD Processed	QTR-NORSOK M650 ED4- 240mm-Type 6Mo	240mm	240mm	440Kg	All

**Qualification / Acceptance signatures**

Manufacturer: Goodwin Steel Castings Ltd	Prepared by/ Date: Ryan Leese / 25.05.16 	Checked by / Date: Bernard Goodwin / 25.05.16 
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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 with in the essential variables of NORSOK M- 650.

Qualified / Accepted by ( Company Name / address): Lloyds Register EMEA Cunard Building, Water St, Liverpool, L3 1EG	Signature/ Date:  I. G. Smith 25 May 2016 Liverpool
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Witnessed  Monitored  Reviewed

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