



	<b>Qualification Test Record (QTR)</b> <b>NORSOK M-650 Edition 4</b>			QTR No. : M650 ED4-300mm-4A	
				Rev: 0	
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 A995 Grade 4A NORSOK M-630 MDS D46 Rev.5				
Manufacturing summary doc No:	MS-D46 Rev.5			Rev: 1	
Product and Manufacturing process:	Sand castings Electric melting followed by AOD secondary refinement				
Mandatory conditions and sub contractors:	Heat Treatment to WIP641 on Furnace no.5 Weld repairs for minor defects according to PQR 317 Weld repairs for major defects according to PQR 297A Laboratory testing for regular production by Metal Proving Services Ltd				
Other information					
Qualification Expires	June 2023				
<b>Tested and qualified Thickness and weight</b>					
<b>Product and Manufacturing processes:</b>	<b>Test record No:</b>	<b>Tested Thickness (mm)</b>	<b>Qualified thickness (mm)</b>	<b>Test Piece weight (kg)</b>	<b>Qualified weight (kg)</b>
AOD Refined	L10349 / L10350 / L10415 / L10351	300	300	1,768	All
<b>Qualification / Acceptance signatures</b>					
Manufacturer: Goodwin Steel Castings Ltd	Prepared by/ Date: Ryan Leese / 29.05.18 		Checked by / Date: Steve Birks / 29.05.18 		
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.					
3 <sup>rd</sup> Party Witness ( Company Name / address):  Lloyds Register EMEA Cunard Building, Water St, Liverpool, L3 1EG			Signature/ Date: 29/5/2018.  DAVID J.K MORRIS  PRJ 11073726		
Qualified / Accepted by ( Company Name / address):  Equinor, Norway 			Signature/ Date: Hans Martin Jahren /		