



	<b>Qualification Test Record (QTR)</b> <b>NORSOK M-650</b>		<i>QTR.No.:</i> TR_CN3MN_01		
	<i>Rev. No.:</i> 1				
<i>Manufacturer name/address/ Web page:</i>	ACEROS MOLDEADOS DE LACUNZA, SA LAKUNTZA / ARBIZU (SPAIN) <a href="http://www.amlsa.com">www.amlsa.com</a>				
<i>Reference standard</i>	NORSOK M-650, Edition 4				
<i>Material designation and MDS No.:</i>	<ul style="list-style-type: none"> <li>• ASTM A351 Gr. CN-3MN</li> <li>• NORSOK M-630 Ed. 6 (MDS R16, Rev. 5)</li> </ul>				
<i>Manufacturing Summary doc. No.:</i>	<b>MS_CN3MN_01</b>			<i>Rev. No.:</i> 1 <sup>1</sup>	
<i>Products and manufacturing process(es):</i>	CASTINGS (sacrificial component valve body DN450 (18") Cl. 600) Sand Molding with Furan Binder AOD route: remelting of 100% AOD refined charge material Production to follow the process of the approved QTR				
<i>Mandatory conditions and sub-contractors:</i>	<ul style="list-style-type: none"> <li>- Castings heat treated in current furnaces (H-05 and/or H-06)</li> <li>- Raw material: AOD scrap material</li> <li>- Not destructive tests: radiographic (subcontracted to external qualified company S.C.I.) &amp; dye penetrant</li> <li>- Destructive tests (subcontracted to external qualified laboratory AZTERLAN) : tensile test &amp; corrosion test</li> </ul>				
<i>Other information:</i>	<ul style="list-style-type: none"> <li>• PWHT to be carried out of all weld repairs</li> <li>• Verification of heat treatment procedure carried out for furnaces H-5 (Lakuntza) and H-6 (Arbizu), reports n° IN-8513 &amp; IN-8512 respectively.</li> </ul>				
<i>Qualification expires:</i>	December 2018				
<b>Tested and qualified thickness and weight</b>					
<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>
Sand casting	TR_CN3MN_01	130	130	645	All
<b>Qualification/acceptance signatures</b>					
<i>Manufacturer:</i>	<i>Prepared by/Date:</i> 23-06-2014  <b>I. Ibarrola</b>		<i>Checked by/Date:</i> 23-06-2014  <b>C. Blazquez</b>		
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. <i>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.</i>					
<i>Qualified/Accepted by (company name /address):</i>  <b>AkerSolutions</b> Aker Engineering & Technology AS Reg.nr. 879 817 552			<i>Signature/Date:</i> 27/06/2014  <b>E. Rjenge</b>		

<sup>1</sup> Rev.1: MS revised because of revision of heat treatment procedure (June the 23<sup>rd</sup>, 2014)