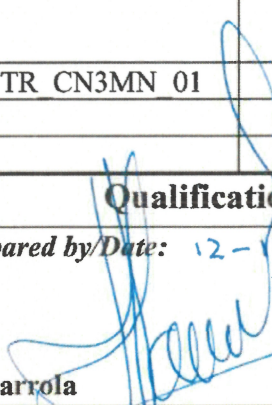


	Qualification Test Record (QTR) NORSOK M-650		<i>QTR.No.:</i> TR_CN3MN_01		
				<i>Rev. No.:</i> 2	
Manufacturer name/address/ Web page:	ACEROS MOLDEADOS DE LACUNZA, SA LAKUNTZA / ARBIZU (SPAIN) www.amlsa.com				
Reference standard	NORSOK M-650, Edition 4				
Material designation and MDS No.:	<ul style="list-style-type: none"> • ASTM A351 Gr. CN-3MN • NORSOK M-630 Ed. 6 (MDS R16, Rev. 5) 				
Manufacturing Summary doc. No.:	MS_CN3MN_01			<i>Rev. No.:</i> 3	
Products and manufacturing process(es):	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				
Mandatory conditions and sub-contractors:	<ul style="list-style-type: none"> - Castings heat treated in current furnaces (H-6) - Raw material: AOD scrap material - Not destructive tests: radiographic (subcontracted to external qualified company S.C.I.) & dye penetrant - Destructive tests (subcontracted to external qualified laboratory AZTERLAN) : tensile test & corrosion test 				
Other information:	<ul style="list-style-type: none"> • PWHT to be carried out of all weld repairs • Verification of heat treatment procedure carried out for furnaces H-6 (Arbizu), report n° IN-17761. 				
Qualification expires:	December 2023				
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
Sand casting	TR_CN3MN_01	130	130	645	All
Qualification/acceptance signatures					
Manufacturer:	Prepared by/Date: 12-12-2018  I. Ibarrola		Checked by/Date: 12-12-2018  C. Blazquez		
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/Accepted by (company name /address):  Aker Solutions™ Aker Engineering & Technology AS Reg.nr. 879 817 552			Signature/Date: 12/12/2018 