




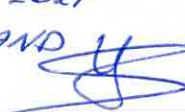


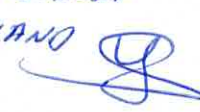





ACERALAVA TUBACEX <small>GROUP</small>	QTR Qualification Test Record NORSOK M-650 EDITION 4				QTR. No.: 1	
					Rev. No.: 9	
Manufacturer name/address/ Web page:	ACERIA DE ALAVA, S.A.U. (ACERALAVA) Tres Cruces, 8 01400 Llodio (Alava) Spain www.tubacex.com				PLANT: Polígono de Saracho s/n 01470 Amurrio (Alava) Spain	
Reference standard	NORSOK M-650 EDITION 4 ASTM A479, A276, A182					
Material designation and MDS No.:	BARS UNS S 31803 / UNS S 32205 NORSOK M-630 edition 7: MDS D47-rev. 6					
Manufacturing summary doc. No.:	1. MS 31803 HR HOLD- pending new qualification tests 2. MS 31803 HFR HOLD- pending new qualification tests 3. MS 31803 HF				Rev. No.: 5 Rev. No.: 5 Rev. No.: 3	
Products and manufacturing process(es):	1. HOT ROLLED BARS HOLD- pending new qualification tests 2. FORGED & ROLLED BARS HOLD- pending new qualification tests 3. FORGED BARS					
Mandatory conditions and sub-contractors:	Heat treatment carried out in Guinea Furnace for solution annealing (HRC-G-E-6X100) in Acerálava. Heat treatment of UNS S31803 bar according to heat treatment procedure 04.02- C000.00TT-P.001-EN.					
Other information:	This new QTR no. 1 Rev 9., is made with the aim of suiting its content to the new Norsök, M630 Ed.7 requirements (following ISO 17781 Ed 2017). Only those items/processes where results are in accordance with the required in this new edition are considered for requalification. Qualification testing 636375 FORGED BARS, meets requirements of MDS D47 rev.6. Qual. testing 563327, 558007 & 592257 are included as historical documentation, because meet requirement of MDS D47 rev. 5 but not rev.6. These processes are on hold pending new qualification tests. Heat treatment witnessed by SFF (report VHTA-01) and Lloyd's Register (VHTA-02). TTI-ACERALAVA do have in house testing facilities to cover all the testing required by 22Cr and 25Cr reference standards. Laboratory is ISO 17025:2017 accredited for tensile, impact, flattening and hardness testing.					
Expiry date	28.05.2026					
Tested and Qualified Thickness and Weight						
Products and manufacturing process(es):	Test record No.	Test date	Tested Thickness (mm)	Qualified thickness (mm)	Test piece weight (kg)	Qualified weight (kg)
4	563327	08/11/2012	282	282	NA	NA
2	558007	06/11/2012	282	282	NA	NA
3	592257	19/11/2013	300	300	NA	NA
3	636375	06/11/2015	330	330	NA	NA
Qualification/Acceptance signatures						
Manufacturer:	Prepared by/Date:			Checked by/Date:		
	 Irene Castro May 2021			 Aitor González May 2021		
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): TSS NORWAY TUBACEX				Signature/Date: 28.05.2021 INGVE STANGELAND 		

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Ingve Stangeland

ACERALAVA TUBACEX <small>GROUP</small>	QTR Qualification Test Record NORSOK M-650 EDITION 4					QTR. No.: 2
						Rev. No.: 7
Manufacturer name/address/ Web page:	ACERIA DE ALAVA, S.A.U. (ACERALAVA) Tres Cruces, 8 01400 Llodio (Alava) Spain www.tubacex.com				PLANT: Poligono de Saracho s/n 01470 Amurrio (Alava) Spain	
Reference standard	NORSOK M-650 EDITION 4 ASTM A479, A276, A182					
Material designation and MDS No.:	BARS UNS S 32760 NORSOK M-630 edition 7 MDS D57 REV. 6					
Manufacturing summary doc. No.:	1. MS 32760 HR					Rev. No.: 6
Products and manufacturing process(es):	1. HOT ROLLED BARS					
Mandatory conditions and sub-contractors:	Heat treatment carried out in Guinea Furnace in Acerálava (ref. HRC-G-E-6X100). Heat treatment of UNS S32760 bar according to heat treatment procedure 04.02-C000.00TT-P.001.					
Other information:	<p>This new QTR no. 2 Rev 7., is made with the aim of suiting its content to the new Norsök, M630 Ed.7 requirements (following ISO 17781 Ed 2017). Only those items/processes where results are in accordance with the required in this new edition are considered for requalification.</p> <p>Qual. test report 563338 was carried out for fulfillment of MDS D57 rev4 and test report 636369 was carried out for fulfillment of MDS D57 rev5. Both reports comply with MDS D57 rev6. In report 636369 low presence of intermetallic phases/precipitation is shown which do not affect material performance as proved by impact and corrosion testing. Heat treatment witnessed by SFF (report VHTA-01) and Lloyd's Register (VHTA-02).</p> <p>TTI-ACERALAVA do have in house testing facilities to cover all the testing required by 22%Cr and 25%Cr reference standards. The laboratory is included in the ISO 9001 QA system and is ISO 17025:2017 accredited for tensile, impact, flattening and hardness testing.</p>					
Expiry date	28.05.2026					
Tested and Qualified Thickness and Weight						
Products and manufacturing process(es):	Test record No.	Test date	Tested Thickness (mm)	Qualified thickness (mm)	Test piece weight (kg)	Qualified weight (kg)
1	563338	08/11/2012	200	200	NA	NA
1	636369	06/11/2015	230	230	NA	NA
Qualification/Acceptance signatures						
Manufacturer:	Prepared by/Date:  Irene Castro May 2021			Checked by/Date:  Aitor González May 2021		
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): TSS NORWAY TUBACEX				Signature/Date: 28.05.2021 INGVE STANGELAND 		

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Ingve Stangeland

ACERALAVA TUBACEX <small>GROUP</small>	QTR Qualification Test Record NORSOK M-650 EDITION 4				QTR. No.: 3	
					Rev. No.: 3	
Manufacturer name/address/ Web page:	ACERIA DE ALAVA, S.A.U. (ACERALAVA) Tres Cruces, 8 01400 Llodio (Alava) Spain www.tubacex.com				PLANT: Polígono de Saracho s/n 01470 Amurrio (Alava) Spain	
Reference standard	NORSOK M-650 EDITION 4 ASTM A479, A276, A182					
Material designation and MDS No.:	BARS UNS S 32750 NORSOK M-630 edition 7 MDS D57 REV. 6					
Manufacturing summary doc. No.:	1. MS 32750 HR				Rev. No.: 3	
Products and manufacturing process(es):	1. HOT ROLLED BARS					
Mandatory conditions and sub-contractors:	Heat treatment carried out in Guinea Furnace in Acerálava (ref. HRC-G-E-6X100). Heat treatment of UNS S32750 bar according to heat treatment procedure 04.02-C000.00TT-P.001.					
Other information:	This new QTR no. 3 Rev 3., is made with the aim of suiting its content to the new Norsök, M630 Ed.7 requirements (following ISO 17781 Ed 2017). Only those items/processes where results are in accordance with the required in this new edition are considered for requalification. Qualification testing 555151 has been carried out to MDS D57 rev 4. however material meets requirement of MDS D57 rev. 5 and MDS D57 rev. 6. Statistical data for corrosion test at surface and ferrite content in locations from surface to centre is added to comply with rev.6. Heat treatment witnessed by SFF (report VHTA-01) and Lloyd's Register (VHTA-02). ACERALAVA-TTI do have in house testing facilities to cover all the testing required by 22% and 25% Cr reference standards. The Laboratory is included in the ISO 9001 QA system and is ISO 17025:2017 accredited for tensile, impact and hardness testing.					
Expiry date	28.05.2026					
Tested and Qualified Thickness and Weight						
Products and manufacturing process(es):	Test record No.	Test date	Tested Thickness (mm)	Qualified thickness (mm)	Test piece weight (kg)	Qualified weight (kg)
1	555151	23/07/2012	282	282	NA	NA
Qualification/Acceptance signatures						
Manufacturer:	Prepared by/Date:  Irene Castro May 2021			Checked by/Date:  Aitor González May 2021		
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): TSS NORWAY TUBACEX <small>GROUP</small> Gamle Forusvei 11 4031 Stavanger, Norway Ingve Stangeland				Signature/Date: 28.05.2021 INGVE STANGELAND 		

ACERALAVA TUBACEX <small>GROUP</small>	QTR Qualification Test Record NORSOK M-650 ED. 4		QTR. No.: 4			
			Rev. No.: 2			
Manufacturer name/address/ Web page:	Acería de Alava, S.A.U. (ACERALAVA) Tres Cruces, 8 01400 Llodio (Alava) Spain www.tubacex.com		Plant Polígono Industrial de Saracho s/n 01470 Amurrio (Alava) Spain			
Reference standard	NORSOK M-650 EDITION 4 ASTM A479, A182, A276, B649					
Material designation and MDS No.:	BARS UNS S31254 NORSOK M630 ed7 MDS R17 REV. 6					
Manufacturing summary doc. No.:	1. MS 31254 HF				Rev. No.: 4	
Products and manufacturing process (es):	1. HOT FORGED BARS					
Mandatory conditions and sub-contractors:	Heat treatment carried out in Guinea Furnace (ref. HRC-G-E-6X100) in Acerálava. Heat treatment of UNS S31254 bar according to heat treatment procedure 04.02-C000.00TT- P.001.					
Other information:	<p>This new QTR no. 4 Rev 2., is made with the aim of suiting its content to the new Norsök, M630 Ed.7 requirements. Only those items/processes where results are in accordance with the required in this new edition are considered for requalification.</p> <p>Test report 630480 carried out under M-630 ed6, MDS R17 rev5 complies with M-630 ed 7 MDS R17 rev6. Statistical data for corrosion test G48 at surface is included for compliance. Corrosion testing performed at mid thickness position (T/2) in test report 630480 gives corrosion rate higher than 4 g/m2. This result is for information only attending note in paragraph 10.3.3 from M-650. If Purchaser intends to use the finished bar for products including the centre of the bar, corrosion testing of the center of the bar shall be evaluated.</p> <p>Heat treatment witnessed by Lloyd's Register of Shipping (report VHTA-02). TTI-ACERALAVA do have in house testing facilities to cover all the testing required by 6Mo reference standards. The Laboratory is included in the ISO 9001 QA system and is ISO 17025:2017 accredited for tensile, impact and hardness testing.</p>					
Expiry date:	28.05.2026					
Tested and Qualified Thickness and Weight						
Products and manufacturing process(es):	Test record No.	Test date	Tested thickness (mm)	Qualified thickness (mm)	Test piece weight (kg)	Qualified weight (kg)
1	630480	6/11/2015	250 as forged 230 as machined	250 as forged 230 as machined	NA	NA
Qualification/Acceptance signatures						
Manufacturer:	Prepared by/Date:		Checked by/Date:			
	 Irene Castro May 2021		 Aitor González May 2021			
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): TSS NORWAY TUBACEX <small>GROUP</small>			Signature/Date: 28.05.2021 INGVE STANGELAND 			

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