


	Qualification Test Record (QTR) NORSOK M-650			QTR. No.: 2205 - 2014	
				Rev. No.: 4	
Manufacturer name/address/ Web page:	Outokumpu Stainless AB, Avesta Works, P.O. Box 74, SE 77422 Avesta, Sweden www.outokumpu.com				
Reference standard	NORSOK M-650, Edition 4				
Material designation and MDS No.:	ASTM A240: UNS S32205, UNS S31803; EN 10088-2 & 10028-7: 1.4462 MDS D45, rev 5 or Outokumpu MDS D45 rev2 (see Other information)				
Manufacturing Summary doc. No.:	MS NORSOK 18 - 2205			Rev. No.: 2	
Products and manufacturing process(es):	Hot and cold rolled stainless steel plate, sheet and strip Hot rolled: Melting – Casting – Hot Rolling – Annealing and pickling – Finishing and testing Cold rolled: Melting – Casting – Hot Rolling – Annealing and pickling – Cold Rolling - Annealing and pickling – Finishing and testing				
Mandatory conditions and sub-contractors:					
Other information:	1 Verification of heat treatment procedure has been carried out. Ref report no 2012-009-v3. 2 The material may also be delivered according to Outokumpu MDS D45 rev 2, with enhanced tensile properties at room temperature: Rp02 min 550 MPa, Rm min 750 MPa, A50 and A min 25% 3. Temperature of quenching medium in AP-line is 50-55 C. 4. Slab supplier may also be Outokumpu Tornio Works.				
Qualification expires:	September 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
Hot Rolled plate and strip	2205 HR Qualification test report	8	Max 10	N/A	N/A
Cold Rolled plate, sheet and strip	2205 CR Qualification test report	6	Max 7,5	N/A	N/A
Qualification/acceptance signatures					
Manufacturer: Outokumpu Stainless AB, Avesta Works	Prepared by/Date: Product dev. Kristina Wretstam 2020-01-10: 	Checked by/Date: Mgr product technology: Johan Nordström 2020-01-10: 			
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):  AkerSolutions Fornebu, Norway NO 929 877 950 VAT			Signature/Date: 13/01/2020 