
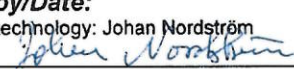

	Qualification Test Record (QTR) NORSOK M-650				QTR. No.: 2205 - 2014
					Rev. No.:3
Manufacturer name/address/ Web page:	Outokumpu Stainless AB, Avesta Works, P.O. Box 74, SE 77422 Avesta, Sweden www.outokumpu.com				
Reference standard	NORSOK M-650, Edition 4				
Material designation and MDS No.:	ASTM A240: UNS 32205, UNS S31803; EN 10088-2 & 10028-7: 1.4462 MDS D45, rev 5 or Outokumpu MDS D45, rev 2 (see Other information)				
Manufacturing Summary doc. No.:	MS NORSOK 18 - 2205				Rev. No.: 1
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 min750 MPa, A50 and A min 25% 3. Temperature of quenching medium in AP-line is 50-55 C.				
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 2018-09-01 		Checked by/Date: Mgr product technology: Johan Nordström 2018-09-01 		
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>					
Qualified/Accepted by (company name /address):  Aker Engineering & Technology AS Reg.nr. 879 817 552			Signature/Date: 27/9/2018 