outokumpu ()	QTR Qualification Test Record NORSOK M-650				R. <i>No.:</i> R_S32205/S31803
high performance stainless steel					Rev. No.: 5
Manufacturer name/address/ Web page:	Outokumpu Stainless AB, Quarto Plate Europe, SE-693 81 Degerfors www.outokumpu.com				
Reference standard	NORSOK M-650 rev.4 in compliance with ISO 17782				
Material designation and MDS No.:	ASTM A240 UNS S31803, ASTM A240 UNS S32205 MDS D45 rev. 6				
Manufacturing summary doc. No.:	MS_2205				v. No.:
Products and manufacturing process(es):	Quarto stainless plate Europe, solution annealed and pickled: Production Routes: A2: Slab Avesta + Rolling in Degerfors + Heat treatment in Rolling Hearth Furnace Degerfors B2: Slab SMACC+ Rolling in Degerfors + Heat treatment in Rolling Hearth Furnace Degerfors D1: Slab Avesta + Rolling in Degerfors + Heat treatment in Batch furnaces (BF 1 or BF2) Degerfors D2: Slab SMACC+ Rolling in Degerfors + Heat treatment in Batch furnaces (BF 1 or BF2) Degerfors E1: Slab Avesta + Rolling in Avesta (SHRP) + Heat treatment in Batch furnaces (BF 1 or BF2) Degerfors E2: Slab Avesta + Rolling in Avesta (SHRP) + Heat treatment in Rolling Hearth Furnace Degerfors E3: Slab Tornio+ Rolling in Degerfors + Heat treatment in Rolling Hearth Furnace Degerfors E4: Slab Tornio+ Rolling in Degerfors + Heat treatment in Batch furnaces (BF 1 or BF2) Degerfors				
Mandatory onditions and sub-contractors:	Sub-contractors: Slab SMACC, Slab Avesta, Slab Tornio				
Other information:	Verification of Heat treatment Furnaces carried out. References: - Report 4.0 Verification of heat treatment procedure in Roller Hearth furnace, 1100 C° - Verification report BF1 (880-109) - Verification report BF2 (880-110) QTR Rev.5 updated to include MDS D45 Rev. 6 for production testing.				
Qualification expires	11-11-2025				
Products and	Test record No.	nd Qualified Thi Tested	ckness and Weig		Qualified weight
manufacturing process(es):	rest record No.	thickness (mm)	(mm)	Test piece weight (kg)	Qualified weight (kg)
Hot rolled stainless plate, solution annealed and pickled:					
A2	TR_8625-11-01	30	30	2811	-
B2	TR_8702-48-01	30	30	2811	-
D1	TR_3375-31-02	70	70	3280	-
D2	TR_3270-11-03	80	80	3748	•
E1	TR_8428-02-13	25	31	2687	-
E2	TR_8428-02-09	25	31	2682	<u> </u>
E3 E4	TR_8369-14-01 TR_8368-12-01	25 80	31 80	5770 6450	<del>-</del>
L-1			1		
Manufacturer:			tance signati		
Outokumpu Stainless AB	Prepared by/Date: Technical development Veronica Sundberg/2021-04-13		Checked by/Date: General Manager T&Q dept. Christopher Myhrman/2021-04-13		
The manufacturer and this This acceptance does not	exempt any purchaser fi	above listed products	liance with the requirent and materials. to ensure that this qual	nents of NORSOK M	-650 for supply of the
I	AkerSolution Fornebu, Norway 929 877 950 VAT	S	Signature/Date:	21/04 n- Mih	1/2021 kelden