

	Qualification Test Record (QTR) NORSOK M-650				QTR. No.: 01																									
					Rev. No.: 10																									
Manufacturer name/address/ Web page:	<i>H. Butting GmbH & Co. KG, Gifhorner Str. 59, 29379 Wittingen-Knesebeck, Germany</i> <i>www.butting.de</i>																													
Reference standard	NORSOK M-650, Edition 4																													
Material designation and MDS No.:	ASTM A928 Type 22Cr Duplex UNS S31803 / UNS S32205 Cl.1/3/5 NORSOK M-630:2020 MDS D42 Rev. 6																													
Manufacturing Summary doc. No.:	D-01				Rev. No.:06																									
Products and manufacturing process(es):	Cold formed Stainless Steel Pipes, longitudinally welded by <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">EB/GTAW/SAW</td> <td style="width: 33%;">Double sided</td> <td style="width: 33%;">Furnace HT</td> <td style="width: 33%;">Prod. route No. 1</td> </tr> <tr> <td>EB/GTAW</td> <td>Double sided</td> <td>Furnace HT</td> <td>Prod. route No. 2</td> </tr> <tr> <td>PAW/GTAW</td> <td>Double/single sided</td> <td>Furnace HT</td> <td>Prod. route No. 3</td> </tr> <tr> <td>PAW/GTAW</td> <td>Double/single sided</td> <td>Induction HT (in line)</td> <td>Prod. route No. 4</td> </tr> <tr> <td>EB/GTAW</td> <td>Double sided</td> <td>Induction HT (391)</td> <td>Prod. route No. 5</td> </tr> <tr> <td>PAW/GTAW</td> <td>Double sided</td> <td>Induction HT (391)</td> <td>Prod. route No. 6</td> </tr> </table>						EB/GTAW/SAW	Double sided	Furnace HT	Prod. route No. 1	EB/GTAW	Double sided	Furnace HT	Prod. route No. 2	PAW/GTAW	Double/single sided	Furnace HT	Prod. route No. 3	PAW/GTAW	Double/single sided	Induction HT (in line)	Prod. route No. 4	EB/GTAW	Double sided	Induction HT (391)	Prod. route No. 5	PAW/GTAW	Double sided	Induction HT (391)	Prod. route No. 6
EB/GTAW/SAW	Double sided	Furnace HT	Prod. route No. 1																											
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PAW/GTAW	Double sided	Induction HT (391)	Prod. route No. 6																											
Mandatory conditions and sub-contractors:	<ul style="list-style-type: none"> • Cold forming, Heat treatment, Pickling • Raw Material Suppliers <i>Plate: Acroni, Allegheny, ATI, Böhler, Industeel, Outokumpu</i> <i>Coil: Acerinox, Allegheny, Aperam, ATI, Outokumpu, TISCO</i> 																													
Other information:	<ul style="list-style-type: none"> • Test Laboratory accredited to ISO 17025 • Verification reports included in Section 3 • Qualification testing acc. to MDS D42 Rev.4 or 5, however all testing also meets requirements of MDS D42 Rev.5 • Rev. 08 - Re-Qualification and Qualification of Prod. route No. 5 + 6 • Rev. 09 - Qualification of raw material from TISCO (coil, PR no. 4) • Rev. 10 - Re-Qualification, Qualification of raw material from Acerinox (coil, PR no. 4), Qualification testing to extend qualified wall thickness of PR no. 5 																													
Qualification expires:	14.03.2029																													
Tested and qualified thickness and weight																														
Products and manufacturing process(es):	Reference no.	Qualification order no.	Tested thickness mm	Qualified thickness mm	Test piece weight kg	Qualified weight kg																								
Welded pipes / PR 1	QTR-01/R1	54/13682/01	45,24	56,55	N/A	N/A																								
Welded pipes / PR 1	QTR-01/R1	85/42040/09	60,00	60,00	N/A	N/A																								
Welded pipes / PR 1	QTR-01/R1	1000484	36,00	45,00	N/A	N/A																								
Welded pipes / PR 2	QTR-01/R2	1077773	44,45	55,56	N/A	N/A																								
Welded pipes / PR 3	QTR-01/R3	1077764	22,00	27,50	N/A	N/A																								
Welded pipes / PR 4	QTR-01/R4	1075454	9,53	11,91	N/A	N/A																								
Welded pipes / PR 4	QTR-01/R4	1182373	3,76	4,70	N/A	N/A																								
Welded pipes / PR 4	QTR-01/R4	1254767	4,78	5,98	N/A	N/A																								
Welded pipes / PR 5	QTR-01/R5	1172534	15,09	18,86	N/A	N/A																								
Welded pipes / PR 5	QTR-01/R5	1255040	19,05	23,81	N/A	N/A																								
Welded pipes / PR 6	QTR-01/R6	1172520	15,09	18,86	N/A	N/A																								

Qualification/acceptance signatures

Manufacturer:
**BUTTING GmbH &
Co. KG**

Prepared by/Date:
Sigrun Claus / 06.03.2024

Checked by/Date:
Sabine Nagel / 06.03.2024

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):

SFF | Scandinavian
Fittings & Flanges

Signature/Date: 06.03.2024
Vette R. Østerhus