
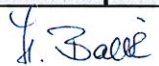

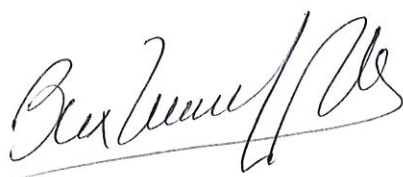


MRC Global

	Qualification Test Record NORSOK M-650 Edition 4		QTR. No.: WS-QTR-004		
			Rev. No.: 07		
Manufacturer name/address/ Web page:	Wilhelm Schulz GmbH, Kuhleshütte 111, 47809 Krefeld, Germany www.wschulz.com				
Reference standard	Norsok M-650 Edition 4				
Material designation and MDS No.:	ASTM A 403/ UNS S31254/ MDS R13 Rev. 6				
Manufacturing summary doc. No.:	MSWPS31254-S, MSWPS31254-S P, MSWPS31254-W/-WX			Rev. No.: 7	
Products and manufacturing process(es):	Cold formed seamless and welded fittings, WPS31254-S/ -W/ -WX, manufactured from pipes and plates, by Hydro Forming and Dye Forming				
Mandatory conditions and sub-contractors:	Heat treatment by Furnace No. 600 and Furnace No. 570 in house Heat treatment procedure verifications satisfactory carried out under witness of qualifying company				
Other information:	Mechanical and Metallurgical Testing by DEKRA Incos GmbH, D-47228 Duisburg TÜV Rheinland Werkstoffprüfung GmbH, D-13158 Berlin and D-44649 Herne Element Materials Technology Hamburg GmbH, D-21079 Hamburg TPW Prüfzentrum GmbH, D-41460 Neuss MT Laboratories GmbH, D-40667 Meerbusch and D-47229 Duisburg Technotest – TÜV Austria, D-51371 Leverkusen				
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)
Elbow 90 DEG LR WP-S MSWPS31254-S Rev. 3	B2 B3	114,3 x 3,05 168,3 x 21,95	27,44		
Tee WP-S MSWPS31254-S Rev. 3	T2 T3	114,3 x 3,05 168,3 x 21,95	27,44		
Conc. Red. WP-S MSWPS31254-S Rev. 3	R2 R3	114,3 x 88,9 x 3,05 168,3 x 141,3 x 21,3	26,63		
Cap WP-S MSWPS31254-S P Rev. 3	K1	355,6 x 21,95	27,44		
Elbow 90 DEG LR WP WX MSWPS31254-W/-WX Rev.3	BG4 BG5	219,1 x 5,0 406,4 x 28	37,5		
Tee WP-WX MSWPS31254-W/-WX Rev. 3	TG4 TG5	219,1 x 5,0 406,4 x 355,6 x 28	37,5		
Conc. Red.WP-WX MSWPS31254-W/-WX Rev.3	RG4 RG5	219,1 x 168,3 x 5,0 406,4 x 355,6 x 28,0	37,5		
Tee Red. WP-WX	TG6	273,05 x 12,70/ 219,07 x 8,18	15,88		
Qualification/acceptance signatures					
Manufacturer:	Prepared by/Date: Heike Ballik, 13.03.2024 		Checked by/Date: Haydn Hilling, 13.03.2024 		



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Remarks/Special remarks:

Note: WSchulz and MRC agreed to performed new qualification tests within M630 Ed.7 in the range thickness that can be available in the most representative piece, a tee.

The rest of the QTR.s thickness range will be updated in the future and be presented to Equinor to update the test refence and thickness if necessary.

Starting material supplier for TG6 is no longer on TR2000 list. However, this qualification will be complemented by the end of 2024 by thicker material delivered from vendors which are on TR2000 list.

1. 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.
2. 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.
3. This qualification is executed and accepted by MRC Global as "Qualifying Company" solely for the supply of the above listed products to MRC Global as "Purchaser", and MRC Global assumes no liability for the use of or reliance on this qualification/ acceptance by other purchasers.
4. In accordance with MRC Global internal routines and procedures, the validity of the qualification/acceptance is 1 year from the initial signing of the QTR front sheet, after which the qualification/acceptance is subject to annual verification and renewal.

Qualified/Accepted by (company name/address):

MRC Global Norway AS
Gamle Forusveien 53
4033 STAVANGER

Initial approval date: 21.03.2023

Expiry date (annual renewal): 21.03.2025

Signature: 