


MRC Global

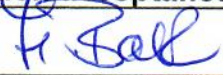

	Qualification Test Record NORSOK M-650 Edition 4	QTR. No.: WS-QTR-003
		Rev. No.: 03
Manufacturer name/address/ Web page:	Wilhelm Schulz GmbH, Kuhleshütte 111, 47809 Krefeld, Germany www.wschulz.com	
Reference standard	Norsok M-650 Edition 4	
Material designation and MDS No.:	ASTM A815/ UNS S31803 acc. to MDS D43 Rev. 5	
Manufacturing summary doc. No.:	MSWPS31803-W/WX, MSWPS31803-S P, MSWPS31803-S	Rev. No.: 10
Products and manufacturing process(es):	Cold formed seamless and welded fittings, WPS31803-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	

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 MSWPS31803-S Rev. 8	B2	168,3 x 4,5	60,0		
	B4	457,2 x 54,99			
Tee WP-S MSWPS31803-S Rev. 8	T2	168,3 x 4,5	60,0		
	T4	457,2 x 54,99			
Conc. Red WP-S MSWPS31803-S Rev. 8	R2	168,3 x 141,3 x 5,0	60,0		
	R4	457,2 x 406,4 x 54,99			
Cap WP-S MSWPS31803-S P Rev. 8	K2	457,2 x 50,0	60,0		
Elbow 90 DEG LR WP-WX MSWPS31803-W/WX Rev. 8	BG4	323,9 x 5,0	60,0		
	BG6	457,2 x 50,0			
Tee WP-WX MSWPS31803-W/WX Rev. 8	TG4	323,9 x 5,0	60,0		
	TG6	457,2 x 50,0			
Conc. Red. WP-WX MSWPS31803-W/WX Rev. 8	RG4	323,9 x 273 x 5,0	60,0		
	RG7	457,2 x 406,4 x 50,0			

For additional test reports see annexure 1

Qualification/acceptance signatures

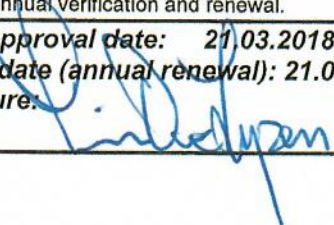
Manufacturer:	Prepared by/Date: Heike Ballik, 21.02.2020 	Checked by/Date: Dr.-Ing. E.-U. Waldherr, 21.02.2020 
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Remarks/Special remarks:

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
Langarinden 16
NO-5132 NYBORG

Initial approval date: 21.03.2018
Expiry date (annual renewal): 21.03.2021
Signature: 

Annex1-WS-QTR-003 Rev. 03

Tested and Qualified Thickness and Weight					
<i>Products and manufacturing process(es):</i>	<i>Test record No.</i>	<i>Tested thickness (mm)</i>	<i>Qualified thickness (mm)</i>	<i>Test piece weight (kg)</i>	<i>Qualified weight (kg)</i>
Elbow 90 DEG LR WP-S	B2	168,3 x 4,5	31,75		
	B3	219,1 x 4,5			
Tee WP-S	T2	168,3 x 4,5	31,75		
	T3	219,1 x 25,4			
Conc. Red. WP-S	R2	168,3 x 141,3 x 5,0	31,75		
	R3	219,1 x 168,3 x 25,4			
Cap WP-S	K1	406,4 x 30	37,5		
Elbow 90 DEG LR WP-WX	BG4	323,9 x 5,0	37,5		
	BG5	406,4 x 30			
Tee WP-WX	TG4	323,9 x 5,0	37,5		
	TG5	406,4 x 355,6 x 30			
Conc. Red. WP-WX	RG4	323,9 x 273 x 5,0	37,5		
	RG6	355,6x 323,9 x 30,0			