



**INSPECTION CERTIFICATE
(MILL TEST CERTIFICATE)
EN 10204 3.1**

CHARM MING VIETNAM CO., LTD
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 JOB NO. : AF1905035C
 CERTIFICATE NO. : Q200821035C-02
 DATE : AUG. 21, 2020

PURCHASER : ALLIED FITTING L.P.
 ORDER NO. : 5219GCV
 SPEC. FOR RAW MATERIAL : ASTM A106 Gr. B
 SPEC. FOR INSPECTION : ASTM A234 - 19 WPB
 ASME SA234 - 2019 WPB
 ASME B16.9-2018 / ASME B16.25-2017
 BS EN 10204 3.1-2004

Spe.	Chemical Composition %													Tension Test			Hardness Test	Magnetic Particle Exam.		
	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Pb	CE	Yield Strength	Tensile Strength	Elongation				
MIN	X100	X100	X1000	X1000	X1000	X100	X100	X100	X1000	X1000	X1000	X1000	X100	P.S.I	P.S.I	%	HBW			
MAX	25	10	106	50	58	40	40	40	15	80	20		42		95000	30	197			
6	12	27	127	11	1	1	2	12	0	0	0	*<3	36	46835	73660	47	133	N/A		
7	14	18	88	10	3	1	3	6	<1	10	3	*<3	30	35525	61770	43	137	N/A		
8	12	16	78	5	2	4	4	6	2	<1	2	*<3	27	37990	74675	43	138	N/A		
9	12	16	78	5	2	4	4	6	2	<1	2	*<3	27	44515	67715	39	132	N/A		
10	13	16	78	12	2	3	2	10	2	<1	2	*<3	29	44225	65250	42	133	N/A		
	Visual Examination					Dimensional Inspection					Heat Treatment					(*) Product Analysis by CHARM MING				
	Acceptable					Acceptable					N/A									

$$CE = C + Mn/6 + (Cr + Mo + V) / 5 + (Ni + Cu) / 15$$

MATERIAL (HARDNESS) CONFORMS TO THE REQUIREMENTS OF NACE MR0103-2015/ NACE MR0175-2015 and ISO 15156-2015

We hereby certify that the products described here in have been manufactured and tested in accordance with specifications and also the purchaser's requirements concerned.

The products have been made free of Mercury/Radiation and made from Seamless steel pipe.

NOTE:

- ABOVE - LISTED ELBOWS HAVE BEEN HOT - FORMED AT A TEMPERATURE ABOVE 1150°F (620°C) AND BELOW 1800°F (980°C) AND SUBSEQUENTLY COOLED IN STILL AIR.
- THE MANGANESE ABOVE THE SPECIFIED MAXIMUM WILL BE PERMITTED UP TO A MAXIMUM OF 1.65%. (FOOTNOTE D IN TABLE 1 OF ASTM A234 -19 WPB).
- THE QUALITY MANAGEMENT SYSTEM OF ISO 9001-2015 AND PED 2014/68/EU, ANNEX I PARAGRAPH 4.3 HAVE BEEN APPROVED BY LRQA
- CERTIFIED ACCORDING TO PRESSURE EQUIPMENT DIRECTIVE 2014/68/EU, ANNEX I SEC. 4.3 BY THE NOTIFIED BODY OF TÜV THÜRINGEN E. V. REG. NO. 0090

Stock 4709897 06/21/2021
 4709897
 MATCONOR MN90LR08 2IN LR 90
 BW A234 ELBOW

Quality Assurance Section/Manager