

CERTIFICATE NO. : KN-QA200201-04
 DATE OF ISSUE : 02. 01. 2020
 INVOICE NO : 2001-007
 CUSTOMER :

INSPECTION CERTIFICATE

(EN10204:2004 3.1/ISO 10474:1991 3.1B)



◀ KYEONG NAM BEND CO., LTD

#250-90, DongBuk-Ro 473 Beon-Gil,

SangDong-Myeon, Kim Hae-Si, Kyeong Nam, Korea

TEL : 82-55-331-9353

FAX : 82-55-331-9124

WEBSITE : http://knbend.com

Spec for Inspection	ASME B 16.9-2013	Spec for Material	ASTM A/SA234 WPB-2019	Material	CARBON STEEL FITTINGS	Visual&Dimension	SATISFACTORY											
No	PO NO	Description	Qty (EA)	Material	HEAT NO.	Chemical Composition (%)										Heat Treatment		
						Spec.	C	Si	Mn	P	S	Ni	Cr	Mo	Cu		V	CE
							x 100			x 1000		x 100						
						Min.	-	10	29	-	-	-	-	-	-		-	-
Max.	30	-	106	50	58	40	40	15	40	8	-							
1	232729-TX-T	CAPx3xXXH	25	WPB	KR1906365	L	21	26	51	16	16	2	9	9	2	2	Normalized 800°C, 20 min	
2	232729-TX-T	CAPx8xS160	20	WPB	KR1906585	L	22	24	51	17	16	2	9	9	2	2	Normalized 800°C, 20 min	
3	232729-TX-T	CAPx12xS40	10	WPB	KR1905157	L	20	22	50	10	16	2	9	9	2	2	Normalized 800°C, 20 min	
4	241248-TX-T	90E/Lx1xXH	100	WPB	KR1248	L	19	24	38	15	7	1	1	1	1	1	Hot formed 620°C-980°C	
5	241248-TX-T	90E/Lx1-1/4xSTD	1500	WPB	KR6174	L	19	23	32	12	10	1	1	1	1	1	Hot formed 620°C-980°C	
6	241248-TX-T	90E/Lx2xSTD	1500	WPB	KR1833	L	18	20	41	19	6	1	1	1	1	1	Hot formed 620°C-980°C	
7	241248-TX-T	90E/Lx2xXH	3000	WPB	KR6145	L	16	24	66	12	12	1	1	1	1	1	Hot formed 620°C-980°C	

No	Heat No.	Tensile Test					Hardness Test HB	Flattening Test	Impact Test(ft-lb)		Hydrostatic Test		N.D.E	Uniformity Test of GALV/Zn
		Spec.	Y.S	T.S	EL	R.A			Temp(°C)	Size(2mm-v)	MPa	Pressure/Result		
		Min.	240	415	30	-			Min()	Max()				
		Max.	-	-	-	197			Act	Ave.				
1	KR1906365	P	280	470	31									
2	KR1906585	P	270	475	31									
3	KR1905157	P	275	465	31									
4	KR1248	P	295	498	30									
5	KR6174	P	286	485	30									
6	KR1833	P	303	483	30									
7	KR6145	P	385	488	30									

Reviewed By :
 Witnessed By:
 Approved By:

H. H. Choi

MANAGER OF QUALITY

Note: *For each reduction of 0.01% below the specified carbon maximum, an increase of 0.06% manganese above the specified maximum will be permitted, up to a maximum of 1.65%.
 *100% X-ray detected for welded fittings
 *NACE MR0175

We hereby certify that the material herein has been made and tested in accordance with all requirements of the specification and the results of all examination are acceptable.

◀ KYEONG NAM BEND CO., LTD.