

Inspection Certificate (EN10204 3.1)

FEFL00161



Felix Metal Tech Co., Ltd.
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CUSTOMER : TACHEN INTERNATIONAL, INC
PO. NO. : L81199
MPS. NO. : N/A
PROJECT NAME : N/A

SPECIFICATION : ASTM A182 F304/F304L-17
 ASME SA182 F304/F304L-2017ED

CERTIFICATE NO. : FV190708-032
PAGE : 1 OF 1
DATE : 2019-07-08

Description	Lot No.	Tension Test *1										Hardness Test	Impact Test			
		Size of Specimen		Y.S.	T.S.	E.L.	R.A.	HBW	Temp. : °C	Notch : J	Min.		Avg			
		D mm	G.L. mm													
4 #150 BL RF 3" Q'ty (EA) F14LB030	C2HM24	12.5	50	205	515	30	50	237								
TOTAL	4															

Heat Treatment *4	Heat No.	Chemical Composition(%) *3															
		Dimension & Visual															
		C	Si	Mn	P	S	Ni	Cr	Mo	Cu	V	Nb	Al	N			
S : 1050°C x 2.0 hrs, WC	FF-6022	0.03	1.00	2.00	0.045	0.030	8.00	18.00									
Remark		0.025	0.45	1.73	0.039	0.009	13.00	20.00									0.10
- NACE MR0175/ISO15156-3 - 2015 : HRC22 Max(=HB237)							8.05	18.32									0.09
- NACE MR0103/ISO17945 -2015																	
- Country of Melting: INDIA/ E.I.F +A.O.D																	
- Country of forging: VIETNAM																	

Abbreviation
 *1. Tension Test : Y.S. = Yield Strength, T.S. = Tensile Strength, E.L. = Elongation, R.A. = Reduction of Area, G.L. = Gauge Length(mm), D. = Diameter(Ø)
 *2. Location : L = Longitudinal, Tr = Transverse, T = Tangential, R = Radial
 *3. Chemical Composition : H = Heat Analysis, P = Product Analysis
 *4. Heat Treatment : N = Normalized, A = Annealed, Q = Quenched, T = Tempered, S = Solution Treated, S.R. = Stress Relieved, A.C. = Air Cooled, W.C. = Water Cooled, F.C. = Furnace Cooled
 *5. CE : C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15

We hereby certify that the material herein has been tested, inspected and satisfied in accordance with the above specification.



Surveyor _____

Manager / Q.M. Team _____