

TEST CERTIFICATE

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CUSTOMER	VECK		PROCESS ROUTE		TRUCK NO		TC NO		18051211																		
	CUSTOMER SPECIFICATION		BF-EOF-LRF-VD-CCM-RMS		INVOICE NO		SE18Y-02790		31.05.2018																		
			GRADE		NO OF BUNDLES		QUANTITY (Mt)		LENGTH (IN Mtr)																		
			HEAT NO		3		6.390		4 to 6																		
SUPPLY CONDITION		5742		20MnCr5		70 DIA		Half Red Half White with Blue Dot		COLOR CODE																	
AS ROLLED		10.4:1																									
CHEMICAL COMPOSITION																											
%	C	Si	Mn	P	S	Cr	Mo	Ni	Al	Sol Al	V	Ti	Cu	B	Nb	Ca	As	Sb	Sn	Pb	W	Bi	Co	Zr			
Min	0.17	0.15	1.10	-	-	1.00	-	-	0.020	-	0.005	-	0.15	-	-	-	-	-	-	-	-	-	-	-	-		
Max	0.22	0.40	1.40	0.035	0.035	1.30	0.04	0.15	0.040	-	0.005	0.0018	0.017	0.0004	0.0013	0.0007	0.0016	0.0012	0.0014	0.002	0.0024	0.0003	0.0051	0.0001			
Actual	0.17	0.24	1.17	0.019	0.029	1.05	0.007	0.019	0.026	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-			
H2(ppm)		N2(ppm)		O2(ppm)		CE		DI		Bsol																	
Min	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Max	2	90	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Actual	1.12	82.7	17.3	0.58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
PHYSICAL PROPERTIES																											
Test Condition		YS		UTS		Impact Strength (J)		Hardness		Rolled		Quench		Jominy Values (In HRC)		1/4"16"											
Tensile								BHN		BHN		BHN		34		39											
Min										207				39		38											
Max										170-175																	
Actual																											
Inclusion Rating (As per ASTM E-45)												SURFACE DEFECTS															
A												100% UT & MPI & SPARK DONE															
B												FREE FROM RADIOACTIVE ELEMENTS															
C												FREE FROM DEFECTS															
D												OK															
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