



Mill Test Certificate

Certificate No. : 230422-FH01KS-0021A1-0004
Date of Issue : May., 02, 2023

Order No. : 01S6033795

PO No. : 2304-25.770
(25.770)

Supplier : POSCO INTERNATIONAL CORPORATION

Commodity : HR COIL

11 gat 48x96

CL

Spec & Type : ASTM A1011-CS-B

Size	Product No.	Quantity	Weight (kg) (lb)	Heat No.	Country of Melt & Pour	Position	Tensile Test			Division	Chemical Composition														
							YP (MPa)	TS (%)	EL (%)		C (%)	Si (%)	Mn (%)	P (%)	S (%)	Cr (%)	Ni (%)	B (ppm)	Cu (%)	Mo (%)	N (ppm)	Nb (%)	Ti (%)	V (%)	Se-Al (%)
2.98x1219xC	HQQ092480	1	19,480 42,901	SB64117	KOR	B	217	341	41	L	0.0391	0.006	0.191	0.0127	0.0047	0.021	0.009	0	0.009	0.002	28	0.000	0.0008	0.000	0.026
2.98x1219xC	HQQ092500	1	19,520 43,034	SB84117	KOR	B	217	341	41	L	0.0391	0.006	0.191	0.0127	0.0047	0.021	0.009	0	0.009	0.002	28	0.000	0.0006	0.000	0.026
2.98x1219xC	HQQ156010	1	20,870 46,010	SQ24071	KOR	B	222	350	39	L	0.0369	0.014	0.195	0.0102	0.0021	0.014	0.007	0	0.012	0.002	42	0.000	0.0005	0.000	0.019
2.98x1219xC	HQQ152580	1	19,890 43,849	SQ24093	KOR	B	212	349	41	L	0.0382	0.006	0.199	0.0089	0.0041	0.013	0.006	1	0.010	0.002	38	0.000	0.0005	0.000	0.028
2.98x1219xC	HQQ152620	1	20,390 44,952	SQ24093	KOR	B	212	349	41	L	0.0382	0.006	0.199	0.0089	0.0041	0.013	0.006	1	0.010	0.002	38	0.000	0.0005	0.000	0.028
2.98x1219xC	HQQ152640	1	20,350 44,863	SQ24093	KOR	B	212	340	41	L	0.0382	0.006	0.199	0.0089	0.0041	0.013	0.006	1	0.010	0.002	38	0.000	0.0005	0.000	0.028
2.98x1219xC	HQQ152590	1	20,480 45,150	SQ24093	KOR	B	225	350	40	L	0.0382	0.006	0.199	0.0089	0.0041	0.013	0.006	1	0.010	0.002	38	0.000	0.0005	0.000	0.028
2.98x1219xC	HQQ152600	1	20,400 44,974	SQ24093	KOR	B	225	350	40	L	0.0382	0.006	0.199	0.0089	0.0041	0.013	0.006	1	0.010	0.002	38	0.000	0.0005	0.000	0.028
2.98x1219xC	HQQ152610	1	20,880 45,591	SQ24093	KOR	B	225	350	40	L	0.0382	0.006	0.199	0.0089	0.0041	0.013	0.006	1	0.010	0.002	38	0.000	0.0005	0.000	0.028
2.98x1219xC	HQQ152830	1	20,700 45,635	SQ24093	KOR	B	225	350	40	L	0.0382	0.006	0.199	0.0089	0.0041	0.013	0.006	1	0.010	0.002	38	0.000	0.0005	0.000	0.028
*** Sub Total (080) ***		10	202,740 (kg)	448,959 (lb)																					
2.98x1524xC	HQR042630	1	20,250 44,643	SQ23391	KOR	B	206	341	41	L	0.0370	0.007	0.203	0.0084	0.0037	0.013	0.005	0	0.011	0.002	28	0.001	0.0004	0.000	0.037
2.98x1524xC	HQQ116350	1	20,690 45,613	SQ23391	KOR	B	212	342	41	L	0.0370	0.007	0.203	0.0084	0.0037	0.013	0.005	0	0.011	0.002	28	0.001	0.0004	0.000	0.037

* Position - T : Top, M : Middle, B : Bottom
* Tensile Test, Direction : Longitudinal, Gauge Length : 50 mm (Rectangular),
YP Method : Upper Point
* Division - L : Ladle Analysis

We hereby certify that the material herein has been made in accordance with the order and is fully in compliance.
This material has been fully killed and made by basic oxygen process.
Test Certificate is issued according to ISO 10474/EN 10204 3.1.

Legal sanction can be imposed on forging. Improper use of product can cause safety issues.

Surveyor To :

Park, Junyoung

