

Certificate No. : 230424-FH01KS-0111A1-0008
Date of Issue : May., 02, 2023

Mill Test Certificate



Order No. : 01S6033795
Supplier : POSCO INTERNATIONAL CORPORATION

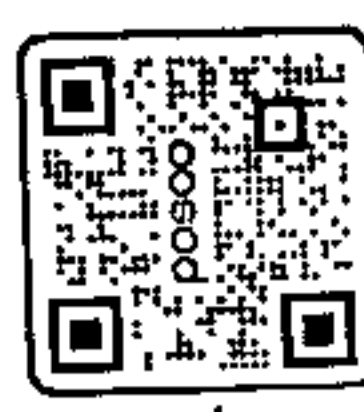
PO No. : 2304-25.770 (25.770)
Commodity : HR COIL
Spec & Type : ASTM A1011-CS-B

Size	Product No.	Quantity	Weight (kg) (lb)	Heat No.	Country of Melt & Pour	Position	Tensile Test			Division	Chemical Composition														
							YP (MPa)	TS (MPa)	EL (%)		C (%)	Si (%)	Mn (%)	P (%)	S (%)	Cr (%)	Ni (%)	B (ppm)	Cu (%)	Mo (%)	N (ppm)	Nb (%)	Ti (%)	V (%)	Sol-Al (%)
1.60x1219xC	HTQ122980	1	19,130 (42,174)	SB60540	KOR	B	219	345	39	L	0.0391	0.007	0.191	0.0070	0.0100	0.032	0.034	0	0.037	0.006	42	0.001	0.0007	0.000	0.016
1.60x1219xC	HTQ122910	1	20,220 (44,577)	SB60545	KOR	B	220	340	41	L	0.0342	0.005	0.189	0.0060	0.0076	0.020	0.008	0	0.009	0.002	43	0.001	0.0005	0.000	0.024
1.60x1219xC	HTQ136410	1	18,430 (40,631)	SB64121	KOR	B	214	339	40	L	0.0397	0.003	0.213	0.0074	0.0034	0.011	0.006	0	0.009	0.002	24	0.000	0.0008	0.000	0.026
*** Sub Total (010) ***		3	57,780 (127,382)																						
1.60x1524xC	HRQ127350	1	18,620 (41,049)	SQ23370	KOR	B	253	354	34	L	0.0329	0.007	0.173	0.0143	0.0182	0.021	0.008	0	0.011	0.001	33	0.000	0.0004	0.000	0.029
1.60x1524xC	HRQ127360	1	19,330 (42,615)	SQ23370	KOR	B	253	354	34	L	0.0329	0.007	0.173	0.0143	0.0182	0.021	0.008	0	0.011	0.001	33	0.000	0.0004	0.000	0.029
*** Sub Total (020) ***		2	37,950 (83,664)																						
1.86x1219xC	HTQ124340	1	18,830 (41,512)	SB60221	KOR	B	210	340	40	L	0.0354	0.004	0.204	0.0079	0.0065	0.020	0.023	0	0.011	0.003	22	0.000	0.0005	0.000	0.037
1.86x1219xC	HTQ119910	1	19,180 (42,284)	SB60540	KOR	B	207	344	39	L	0.0391	0.007	0.191	0.0070	0.0100	0.032	0.034	0	0.037	0.006	42	0.001	0.0007	0.000	0.016
1.86x1219xC	HTQ120010	1	18,970 (41,821)	SB60540	KOR	B	207	344	39	L	0.0391	0.007	0.191	0.0070	0.0100	0.032	0.034	0	0.037	0.006	42	0.001	0.0007	0.000	0.016
1.86x1219xC	HTQ122940	1	19,300 (42,549)	SB60540	KOR	B	212	340	39	L	0.0391	0.007	0.191	0.0070	0.0100	0.032	0.034	0	0.037	0.006	42	0.001	0.0007	0.000	0.016
1.86x1219xC	HTQ121320	1	19,200 (42,328)	SB60542	KOR	B	205	338	38	L	0.0401	0.006	0.200	0.0059	0.0080	0.023	0.020	0	0.028	0.006	35	0.001	0.0006	0.000	0.025
1.86x1219xC	HTQ122950	1	19,280 (42,504)	SB60545	KOR	B	194	337	37	L	0.0342	0.005	0.189	0.0060	0.0076	0.020	0.008	0	0.009	0.002	43	0.001	0.0005	0.000	0.024

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.

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

P.O. # P0242539-08
14 ga 48 x 96
HEAT # SB 60221



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

Park, Junyoung

Surveyor To :

Chief of material testing section

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POSCO