

LAMPIRAN

PT. GUNUNG RAJA PAKSI
steel is our business
Plate Mill

MILL TEST CERTIFICATE

AISI 304 - 304L - 316 - 316L

Purchaser : _____

Material : Hot Rolled Steel Plates
Specification : ASTM A 36
General Requirement : ASTM A 36
Supply Condition : As Rolled
Killed

Head Office & Factory
Jl. Perjuangan No. 3, Kp. Tangsi RT. 004/006 Sukadana,
Cikarang Barat, Bekasi 17538, West Java, INDONESIA

CERTIFICATE NUMBER : GRP-QA-MTC/11379/VIII/2019
CERTIFICATE DATE : 9/12/2021
S/O ANAPTA No. : SPB-1987-0153

PLATE ID	DIMENSIONS			WEIGHT	QTY	CHEMICAL LAB ANALYSIS (%)														TENSILE TEST		BENDING		IMPACT VALUE (JULIE)	
	T	W	L			C	Si	Mn	P	S	Nb	Cu	Cr	Ni	Mo	V	Al	Ti	N	CE	TENSILE		180°	IMPACT	
	mm	mm	mm																		mm	mm		mm	mm
1903 R 190216 A2-2	1	1500	6000	1.102	1	0.14	0.225	0.08	0.008	0.010	0.004	0.05	0.02	0.02	0.001	0.040	0.001	0.0070	0.2%	292	416	71			
1903 R 190216 A2-3	2	1500	6000	1.102	1	0.14	0.225	0.08	0.008	0.010	0.004	0.05	0.02	0.02	0.001	0.040	0.001	0.0070	0.2%	292	416	71			
1903 R 190216 A2-4	3	1500	6000	1.102	1	0.14	0.225	0.08	0.008	0.010	0.004	0.05	0.02	0.02	0.001	0.040	0.001	0.0070	0.2%	292	416	71			
1903 R 190216 A2-5	4	1500	6000	1.102	1	0.14	0.225	0.08	0.008	0.010	0.004	0.05	0.02	0.02	0.001	0.040	0.001	0.0070	0.2%	292	416	71			
1903 R 190216 A3-1	5	1500	6000	1.102	1	0.14	0.225	0.08	0.008	0.010	0.004	0.05	0.02	0.02	0.001	0.040	0.001	0.0070	0.2%	292	416	71			
1903 R 190216 A3-2	6	1500	6000	1.102	1	0.14	0.225	0.08	0.008	0.010	0.004	0.05	0.02	0.02	0.001	0.040	0.001	0.0070	0.2%	292	416	71			
1903 R 190216 A3-3	7	1500	6000	1.102	1	0.14	0.225	0.08	0.008	0.010	0.004	0.05	0.02	0.02	0.001	0.040	0.001	0.0070	0.2%	292	416	71			
1903 R 190216 A3-4	8	1500	6000	1.102	1	0.14	0.225	0.08	0.008	0.010	0.004	0.05	0.02	0.02	0.001	0.040	0.001	0.0070	0.2%	292	416	71			
1903 R 190216 A3-5	9	1500	6000	1.102	1	0.14	0.225	0.08	0.008	0.010	0.004	0.05	0.02	0.02	0.001	0.040	0.001	0.0070	0.2%	292	416	71			
1903 R 190216 C2-1	10	1500	6000	1.102	1	0.14	0.225	0.08	0.008	0.010	0.004	0.05	0.02	0.02	0.001	0.040	0.001	0.0070	0.2%	292	416	71			
1903 R 190216 C2-2	11	1500	6000	1.102	1	0.14	0.225	0.08	0.008	0.010	0.004	0.05	0.02	0.02	0.001	0.040	0.001	0.0070	0.2%	292	416	71			
1903 R 190216 C2-3	12	1500	6000	1.102	1	0.14	0.225	0.08	0.008	0.010	0.004	0.05	0.02	0.02	0.001	0.040	0.001	0.0070	0.2%	292	416	71			
1903 R 190216 C2-4	13	1500	6000	1.102	1	0.14	0.225	0.08	0.008	0.010	0.004	0.05	0.02	0.02	0.001	0.040	0.001	0.0070	0.2%	292	416	71			
1903 R 190216 C2-5	14	1500	6000	1.102	1	0.14	0.225	0.08	0.008	0.010	0.004	0.05	0.02	0.02	0.001	0.040	0.001	0.0070	0.2%	292	416	71			
1903 R 190216 C3-1	15	1500	6000	1.102	1	0.14	0.225	0.08	0.008	0.010	0.004	0.05	0.02	0.02	0.001	0.040	0.001	0.0070	0.2%	292	416	71			
1903 R 190216 C3-2	16	1500	6000	1.102	1	0.14	0.225	0.08	0.008	0.010	0.004	0.05	0.02	0.02	0.001	0.040	0.001	0.0070	0.2%	292	416	71			
1903 R 190216 C3-3	17	1500	6000	1.102	1	0.14	0.225	0.08	0.008	0.010	0.004	0.05	0.02	0.02	0.001	0.040	0.001	0.0070	0.2%	292	416	71			
1903 R 190216 C3-4	18	1500	6000	1.102	1	0.14	0.225	0.08	0.008	0.010	0.004	0.05	0.02	0.02	0.001	0.040	0.001	0.0070	0.2%	292	416	71			
1903 R 190216 C3-5	19	1500	6000	1.102	1	0.14	0.225	0.08	0.008	0.010	0.004	0.05	0.02	0.02	0.001	0.040	0.001	0.0070	0.2%	292	416	71			
1903 R 190216 C3-6	20	1500	6000	1.102	1	0.14	0.225	0.08	0.008	0.010	0.004	0.05	0.02	0.02	0.001	0.040	0.001	0.0070	0.2%	292	416	71			

REMARKS:

We hereby certify that the material described herein has been made
to satisfy the test in accordance with above specification.

Prepared by: _____
Date: 9/12/2021

Edwin Yudi-Nom
QUALITY ASSURANCE

GRP/PMQA/12

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Mill sertifikat baja ASTM A36



SeAH Besteel Corp.
1-6, SORYONG-DONG, KUNSAN,
CHEONGBUK, KOREA(573-711)

MILL CERTIFICATE

TEL : +82-(0)63-460-8572, 8318(QA)
+82-(0)63-460-8114(Repres.)
FAX : +82-(0)63-460-8423 Page(0/0)
Size (mm) : 1 - 100
Length (mm) : 6000
Weight (kg) :
Quantity(pcs) : 1

Date : 2020-12-25
Cert. No. : 202008-383190
Customer :
Heat No. : 338575

Steel Grade : AISI 1020
Shape of Product : PLATE SHEET
Delivery Condition : Plate Bar

Inspection Items		Chemical Composition (wt. %)				
		C	SI	MN	P	S
		x 100	x 100	x 100	x 1000	x 1000
Spec.	Min.	15	20	0.85		
	Max.	20	24	1.067	0.016	0.021
	Result	20	24	1.067	0.025	0.024
Inspection Items		Product Hardness (HB)				
		SURFACE	110-121 HB	20-25 HRC		

Mechanical Properties AISI 1020

Mechanical Properties	Symbol	Amount
Density (kg/m ³)	ρ	7870
Tensile Strength (MPa)		420
Yield Strength (MPa)		350
Elongation at Break (%)		15
Reduction of Area (%)		40
Modulus of Elasticity (GPa)		186
Bulk Modulus (GPa)		148
Poissons Ratio		0.29
Machinability		65.0

<<Remarks>>

B/DS : 4

End of report

We hereby certify that the material described herein has been
made in accordance with the rules of the contract.

Certified by

O. Y. Cho

Manager of Quality Assurance Dept

Mill sertifikat baja AISI 1020