

SeAH CSS

SeAH Changwon Integrated Special Steel
147 Jeokhyeon-ro, Seongsan, Changwon, Gyeongnam, Korea

INSPECTION CERTIFICATE

Steel Grade : DuMAC 11

Heat No. : N36859

Size : THICKNESS 16 MM X WIDTH 203 MM

Commodity : FLATS

Specification(Ed/Add) : SEAHCS (20)

Melting Process : E.A.F. - L.F. & V.D. - INGOT CASTING

Delivery Condition : SPHEROIDIZING ANNEALING

BLACK SURFACE

Customer : PHUONG TRANG

Supplier : PHUONG TRANG

Purchase order No. : PT2604

Date : 2026-09-05

Cert. No. : 260904-2161

Made in Korea

Melted and poured in the Republic of Korea

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Inspection Items	Chemical Composition (wt. %)										Nonmetallic Inclusion (ASTM E-45) (Method A)							
	C	Si	Mn	P	S	Cu	Cr	Mo	V		A(T)	A(H)	B(T)	B(H)	C(T)	C(H)	D(T)	D(H)
Spec.	Min.	1.400	0.400	0.600	0.0300	0.0300	11.000	0.800	0.200									
	Max.	1.600	0.400	0.600	0.0300	0.0300	13.000	1.200	0.500									
Ladle		1.462	0.244	0.227	0.0267	0.0002	11.238	0.811	0.235		0.0	0.0	0.8	0.0	0.0	0.0	0.5	0.0

Inspection Items	Tensile Test				Hardness (HB)		Impact Test		Decarburized Layer		Grain Size	Micro Structure	Ultrasonic Test
	Spec.	Min.	Max.				Type		DM-T	DM-F			
3200-I												GOOD	GOOD

Lot No.	Bundle No.	Length(mm)	Number of Qt.	Total Length	Weight (kg)	Weight (lb)	Case No.
B670003200	B6700032001	3160 - 3430	5		437	963	
		TOTAL		5	437	963	

We hereby certify that the material described herein has been made in accordance with the rules of the contract.
Our quality system is certified in accordance with ISO 9001: 2015 by DNV.

Certified by

B. M. Karg

Manager of Quality Assurance Team