

Certified Material Test Report According to EN 10204, type 3.1		Hikari Plant NIPPON STEEL WELDING & ENGINEERING CO.,LTD.	
Test Report No. : 2203667V	Purchaser's Spec. No. : NSTV-4 Rev. 5		
Date of issue : April 1, 2022	Material Classification		
Purchaser : Norsk Sveiseteknikk AS	EN ISO 17632-A-T 42 2 ZMn P M21 1 H5		
Trade Designation : SF-1A	AWS A5.20 E71T-1M-H4		

1. Materials

Trade Designation	Size	Manuf. No.	Flux lot No.	Remark
SF-1A	1.2 mm	1P102FP996	1P152V	
SF-1A	1.2 mm	1P106FP996	1P152V	
Test type		Test Unit		
EN ISO		14344 Lot class : T1 (each manufacturing month), Testing Schedule : 4 (exclude soundness test)		

2. Welding Condition (Test type : ISO)

Base Metal (mm)	SM490A 20tx250wx300L	Welding Position	Flat	Kind of Gas	80% Ar + 20% CO ₂	CTWD (mm)	25
	Current DC(+) (A)	Voltage (V)	Travel Speed (cm/min)	Flow Rate of Gas (l/min)	Preheat Temp. (°C)	Inter-pass Temp. (°C)	
	270	27	25	25	24	139 ~ 155	
Spec.	270 ± 10	27 ± 2	28 ± 3	20 ~ 25	15 Min.	135 ~ 163	

3. Test results of All-Weld-Metal (Test type : ISO)

Tension Test	Conditions	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation (%)
	AW	533	612	23
Spec.		420 Min.	500~640	20 Min. A5

Impact Test	Conditions	Temp. (°C)	Ind. Value (J)	Ave. (J)
	AW	-20	72, 71, 69	71
Spec.			32 Min	47 Min

Chemical composition (%)

	C	Si	Mn	P	S	Cu					
	0.06	0.56	1.37	0.015	0.005	0.29					
Spec.	0.03/ 0.07	0.30/ 0.70	1.10/ 1.60	0.030 Max.	0.025 Max.	0.35 Max.					

S, P and N of the strip : Below specified maximum

4. Hydrogen Content of Deposited Metal (Acc. to ISO 3690)

HDM (ml/100g)	Ave.	Spec.
2.5, 2.5, 2.4	2.5	5 Max.

Statement :

We hereby certify that the contents of this report are correct and accurate, and all operations performed by us or our subcontractors are in compliance with the requirements of the DATA SHEET No. : NSTV-4 Rev.5

No. 220135HGK (MIT 11832)

Net Weight

1P102FP996 : 10,000.0 kg
1P106FP996 : 1,040.0 kg



Certified by

YASUNOBU SHIGEMORI
Group Manager, Quality Control Dept.

This is electronically made and is not signed.