

# **SF-430Nb**

METAL CORED ARC WELDING CONSUMABLE  
FOR WELDING OF 409 AND 430 TYPE STAINLESS STEEL

2023.01

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**HYUNDAI WELDING CO., LTD.**



## ❖ Specification

*JIS Z 3323*

TS430Nb – MA0

## ❖ Applications

Metal cored wire designed for the horizontal fillet welding of 409 and 430 type stainless steels in ferrite stainless steels automotive mufflers.

## ❖ Characteristics on Usage

This wire gives excellent bead appearance and provides the operator with a soft stable arc and very low spatter levels thus giving enhanced cosmetic appearance.

## ❖ Note on Usage

Use with Ar or Ar + 2~5%O<sub>2</sub> gas.

## ❖ Packing

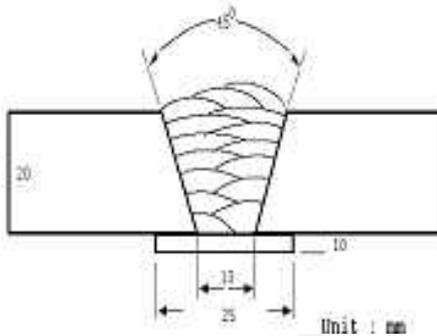
<b>Dia.</b>	1.2mm(0.045in)	
<b>Spool *including ball pac</b>	12.5kg(27.6lbs)	15kg(33lbs)



## Mechanical Properties & Chemical Composition of All Weld Metal

### ❖ Welding Conditions

Method by AWS Spec.



[ Joint Preparation & Layer Details ]

<b>Diameter(mm)</b>	: 1.2mm(0.045in)
<b>Shielding Gas</b>	: 100%Ar
<b>Flow Rate(ℓ /min.)</b>	: 20~22
<b>Amp./ Volt.</b>	: 220/26
<b>Stick-Out</b>	: 20mm (0.79in)
<b>Pre-Heat(°C)</b>	: 150°C(302°F)
<b>Interpass Temp.(°C)</b>	: 150 ~ 260°C(302~500°F)
<b>Polarity</b>	: DC(+)

### ❖ Mechanical Properties of All weld metal

Consumable	Tensile Test		Heat Treatment
SF-430Nb	TS MPa (lbs/in <sup>2</sup> )	EL(%)	770°C(1418°F) x 2Hr FC to 600°C(1112°F) AC to RT
	520(75,000)	24	

### ❖ Chemical Analysis of All weld metal(wt%)

Consumable	C	Si	Mn	P	S	Cr	Nb	Ti
SF-430Nb	0.03	0.40	0.17	0.010	0.010	16.5	0.50	0.40

This information is provided solely for the purpose of confirming product conformance with applicable standards. The serviceability of a product or structure utilizing this type of information is and must be the sole responsibility of the builder/user. Many variables beyond the control of HYUNDAI WELDING CO., LTD. affect the results obtained in applying this type of information. These variables include, but are not limited to, welding procedure, shielding gas, plate chemistry and temperature, weldment design, fabrication methods and service requirements.



# Proper Welding Condition

## ❖ Proper Current Range

Consumable	Shielding Gas	Welding Position	Wire Dia.
			1.2mm (0.045in)
SF-430Nb	100%Ar or Ar + 2~5%O <sub>2</sub> gas	F & HF	150~250Amp

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