

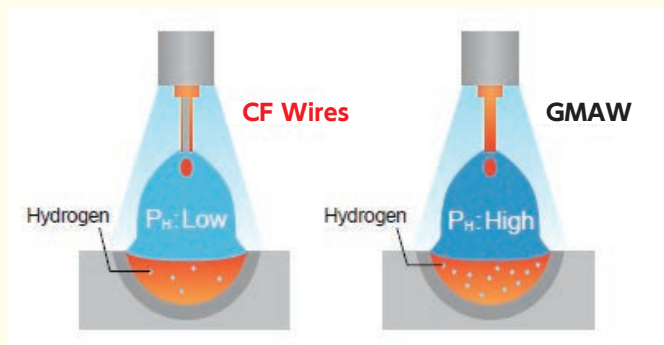
WELDREAM™

Premium Ultra-Low Hydrogen Seamless Flux-Cored and Metal-Cored Arc Welding Wires for Reduced Preheat Requirements

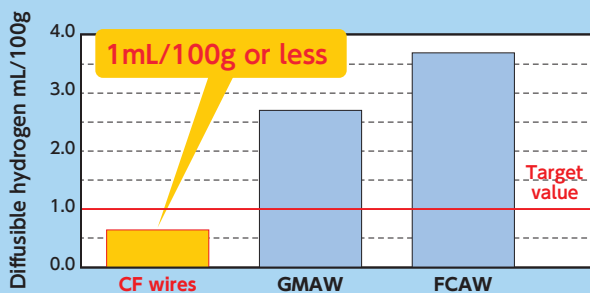
CF Wires

- The name "CF Wires" is derived from "Curb Fracture."
- Ultra-low diffusible hydrogen content in weld metal (Design: 1 mL/100 g)
- Exceptional resistance to cold cracking, outperforming conventional welding wires
- Proprietary seamless manufacturing technology and optimized flux formulation
- Reduced preheating requirements during welding process
- Lower energy consumption, reduced welding costs, and improved productivity

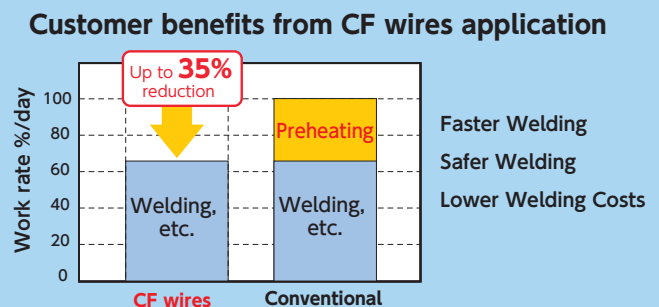
Conceptual Image of Hydrogen Partial Pressure During Welding



Ultra-Low Diffusible Hydrogen Content of CF Wires



Improved Productivity Through Reduced Preheating Time



Not prone to cold cracking, even at low temperatures and without preheating.



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BT-HT is a product name of NIPPON STEEL CORPORATION's steel plate.

CF Wires Product Lineup

All-Weld Metal Grade		Brand Name	Size mm	Shielding Gas	Welding Position	Example Applications
TS MPa	Temp. °C					
490	0	SF-1CF	1.2, 1.4	CO ₂	All Positions	Welding and repair welding of Abrasion Resistant Steels and 490 N/mm ² steels thicker than 100 mm
590	-20	SX-60CF	1.2, 1.4	CO ₂	Flat, Horizontal	Welding and repair welding of cranes, buckets, other construction equipment, and steel structures such as buildings and bridges
780	0	SF-80CF	1.2	CO ₂	All Positions	
	-20	SX-80CF	1.2	CO ₂	Flat, Horizontal	
	-40	SX-80A.CF	1.2	Ar+CO ₂	Flat, Horizontal	Welding and repair welding of cranes, buckets, and other construction equipment
980	-40	SX-100A.CF	1.2	Ar+CO ₂	Flat, Horizontal	

Typical Mechanical properties of all-weld metal

All-Weld Metal TS Grade MPa	Brand Name	Tensile test			Impact test		Diffusible Hydrogen (mL/100g) Design ≤ 1.0	Specification
		YS MPa	TS MPa	El %	Temp. °C	vE (J)		
490	SF-1CF	513	566	25	0	110	0.6	JIS Z3313 T49J0T1-1CA-UH5 AWS A5.29 E71T1-GC-H2
590	SX-60CF	645	707	23	-20	75	0.4	JIS Z 3313 T59J1T15-0CA-G-UH5 AWS A5.28 E80C-G H2
780	SF-80CF	741	824	20	0	89	0.6	JIS Z3313 T780T1-1CA-N4M2-UH5 AWS A5.29 E111T1-GC-H2
	SX-80CF	771	823	21	-20	80	0.4	JIS Z3313 T782T15-0CA-N4C1M2-UH5 AWS A5.28 E110C-G H2
	SX-80A.CF	797	889	20	-40	82	0.3	JIS Z3313 T784T15-0MAG-UH5 AWS A5.28 E110C-G H2
980	SX-100A.CF	981	1082	16	-40	40	0.5	—



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Fumes and gas may be hazardous to your health. Please take appropriate preventive measures such as the implementation of ventilation as well as wearing a protector for breathing. Arc light is harmful to the eyes and skin. Please use appropriate shielding measures. Please do not touch anything where electricity is activated. It may cause death.

Request to Customers

- 1 Various data of distinctive features such as welding consumables, all-weld metal, weld metal, etc. shown in this catalog are provided for general information only and represent typical values. They do not constitute any representation or guarantee of performance, quality, or suitability for any specific application unless expressly agreed as specifications.
- 2 The properties and performance of welded structures, which cannot be determined by welding consumables alone, may vary depending on various factors such as structural design, chemical composition of base materials, fabrication method, welding conditions, environment, and operator skill. Users are solely responsible for evaluating and determining the suitability of the products for their intended applications, and appropriate verification and testing are recommended prior to use.
- 3 All information provided herein is based on available data at the time of publication and is subject to change without notice. We shall not be liable for any direct or indirect damages arising from the use of or any reliance upon the technical information contained in this catalog.

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