AWS A5.14 ERNiCrMo-13 Welding Rod Argon Arc Wedling Wire

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: CE,ROHS,ISO 9001
- Model Number: ERNiCrMo-13
- Minimum Order Quantity: 5 Kg
- Price: 15 - 499 kilograms US$35.00
- Packaging Details: Plastic film or waterproof woven bag inside, wire packed in spool put into carton,coil wire or strip wire put into wooden case
- Delivery Time: 7 to 20 Days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 300 tons per month

Product Specification

- Material: Nickel Based Welding Wire
- Diameter: 1.0-2.4mm
- Customized Support: OEM, ODM, OBM
- Model Number: ERNiCrMo-13
- Application: Electric Power, Pressure Vessel
- Use Type: Mig Torch/tig Torch
- Yield Strength: ≥420Mpa
- Elongation: ≥27%
- Tensile Strength: ≥760Mpa
- Melting Point: 1290-1350℃
- Density: 8.4g/cm3
- Standard: AWS A5.14 ASME DIN
- Highlight: AWS A5.14 Welding Rod

More Images

Our Product I

Product Description

Product Description:

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Nickel Welding Wire

ERNiCrMo-13 welding wire is a high-alloy nickel-based welding wire with excellent corrosion resistance and high temperature stability. Its chemical composition includes nickel (Ni), chromium (Cr), molybdenum (Mo) and iron (Fe), as well as small amounts of elements such as titanium (Ti) and niobium (Nb). ERNiCrMo-13 welding wire is widely used in the fields of chemical industry, petroleum, energy and aviation, and is especially suitable for welding in corrosive media such as acid, alkaline and chloride.
ERNiCrMo-13 welding wire has excellent corrosion resistance and can resist the erosion of various corrosive media, including strong acids such as sulfuric acid, hydrochloric acid, and hydrofluoric acid, as well as corrosive media such as seawater and chloride. It also exhibits excellent high-temperature stability and can withstand corrosion such as oxidation and sulfurization in high-temperature environments, maintaining the stability and reliability of welded joints.
In addition, ERNiCrMo-13 welding wire has good weldability and process adaptability, and can be applied to a variety of welding methods and process requirements. It can be welded by TIG (tungsten arc welding), MIG (metal inert gas welding), SAW (submerged arc welding) and other welding methods, and is suitable for different welding positions and working conditions.
ERNiCrMo-13 wire welding joints have excellent mechanical properties, such as high strength and good toughness, ensuring that the welding joints have a long service life under complex working conditions.

Excellent mechanical properties:

ERNiCrMo-13 welding wire has excellent mechanical properties, mainly in the following aspects:
Strength: ERNiCrMo-13 welding wire has high strength and can withstand large mechanical stress. This gives the welded joint good stability and reliability under stress.
Toughness: ERNiCrMo-13 welding wire has good toughness, that is, under the action of external forces such as impact or vibration, the welded joint can maintain its shape and integrity and is not prone to breakage or damage.
Plasticity: ERNiCrMo-13 welding wire has good plasticity, that is, it can undergo large deformation without breaking under stress. This enables the welded joints to adapt to complex working conditions and have good plasticity.
Hardness: The hardness of ERNiCrMo-13 welding wire is generally higher, which helps to improve the wear and tear resistance of the welded joint, allowing it to maintain better performance under friction, abrasion or scratching.
It should be noted that the specific mechanical properties of ERNiCrMo-13 welding wire may be affected by factors such as welding process parameters, heat treatment of welding materials and subsequent heat treatment. Therefore, in specific applications, it is recommended to conduct welding tests and evaluations according to actual needs to ensure that the mechanical properties of the welded joints meet the requirements.

Technical Parameters:

MIG	(15kg/spool),	Size
		0.8 1.2 2.4 3.2mm
TIG	(5kg/box),Strip	

ERNiCrMo-13

C	Mn	Fe	P	S	Si	Cu	Ni	Co	Al	Ti	Cr	Nb+ Ta	Mo	V	W	Rest
0.01	0.5	1.5	0.015	0.005	0.1	N/A	Rest	0.3	0.1-0.4	N/A	22-24	1.8-2.5	15-16	N/A	N/A	≤0.50

Influencing factors:

The mechanical properties of ERNiCrMo-13 welding wire are usually affected by the welding process parameters. Welding process parameters refer to parameters adjusted during the welding process, including welding current, welding voltage, welding speed, preheating temperature, post-heat treatment, etc.
The following are the effects of some common welding process parameters on the mechanical properties of ERNiCrMo-13 welding wire:
Welding current and voltage: Welding current and voltage directly affect the melting speed and energy input of the welding wire, thereby affecting the solidification structure and mechanical properties of the weld. Too high or too low current and voltage may cause the strength and toughness of the weld to decrease.
Welding speed: Welding speed affects the cooling rate and grain size of the weld. Higher welding speeds may cause rapid cooling of the weld, increasing hardness but reducing toughness, while lower welding speeds may result in excessively large grains, affecting the strength and toughness of the weld.
Preheating temperature: Preheating temperature can improve the toughness and cold cracking tendency of the heat affected zone (HAZ) of the welded joint. Appropriate preheating temperature can reduce the occurrence of residual stress and cracks and improve the mechanical properties of welded joints.
Post-heat treatment: Post-heat treatment includes heat treatment processes such as annealing, normalizing and quenching, which can adjust the structure and improve the performance of welded joints. Different post-heat treatment methods will affect the mechanical properties such as hardness, strength and toughness of welded joints.
Therefore, when welding with ERNiCrMo-13 welding wire, it is very important to select appropriate welding process parameters to ensure that the welded joint has the required mechanical properties.

Customization:

Victory Nickel Welding Wire - ERNiCrMo-3

Looking for high quality and reliable nickel weld wire? Look no further than Victory's ERNiCrMo-3 welding wire. Made with high quality nickel material, this wire is perfect for all your welding needs.
Customization Service

At Victory, we understand that each project is unique and requires specific welding solutions. That's why we offer customization services for our nickel welding wire. We can tailor the wire according to your specific needs and requirements, ensuring the best possible results for your project.

contact us
email:victory@dlx-alloy.com
Oem service:
Welcome customized size
We are experience factory for OEM&ODM service

Important relevant parameters:

The following are detailed technical data and performance reports on some of the mechanical properties that ERNiCrMo-13 welding wire may involve:
Tensile Strength: Tensile strength refers to the maximum tensile stress of a welded joint under tensile loading. This value is usually reported in megapascals (MPa).
Yield Strength: Yield strength refers to the stress value at which considerable plastic deformation and residual stress begin to occur in a welded joint under tensile loading. Usually reported in units of megapascals (MPa).
Elongation: Elongation refers to the plastic deformation ability of a welded joint before tensile fracture, usually expressed as a percentage. Higher elongation indicates better toughness of the welded joint.
Impact Toughness: Impact toughness refers to the ability of a welded joint to resist crack expansion and fracture under impact loading. Usually reported as the amount of impact energy absorbed, such as joules (J) or foot-pounds (ft-lb).
Hardness: Hardness refers to the ability of the welded joint surface or fracture to resist scratches and deformation. Usually reported as Rockwell hardness (HRC) or Brinell hardness (HB), etc.
Fatigue Performance: Fatigue performance refers to the ability of a welded joint to resist fatigue crack growth and failure under alternating loading. This is usually reported via fatigue life curves and S-N curves etc.

Suggestions for use:

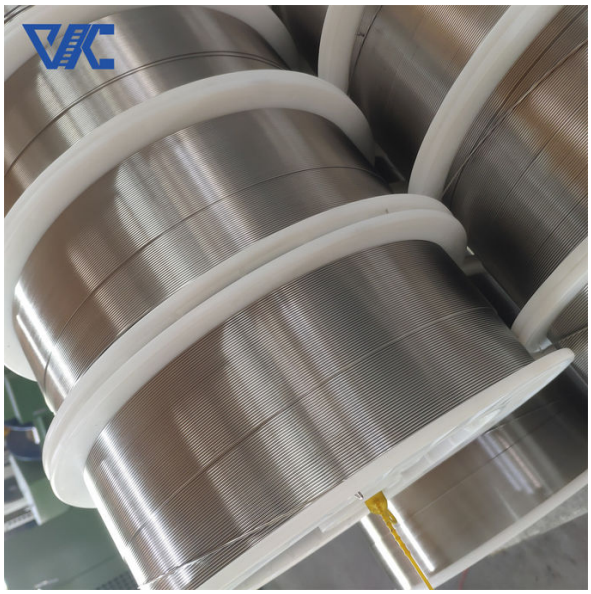
Here are some suggestions to help customers achieve the best results when using ErNiCrMo-3 welding wire:
Before use, be sure to clean the welding surface to remove any grease, dirt or oxides.
Use appropriate welding equipment and parameters to ensure the stability and quality of the welding process.
Follow welding specifications and recommended welding procedures to ensure the strength and reliability of welded joints.
For complex welding applications, welding specimen testing is recommended prior to use to verify the suitability of the selected welding parameters and process.

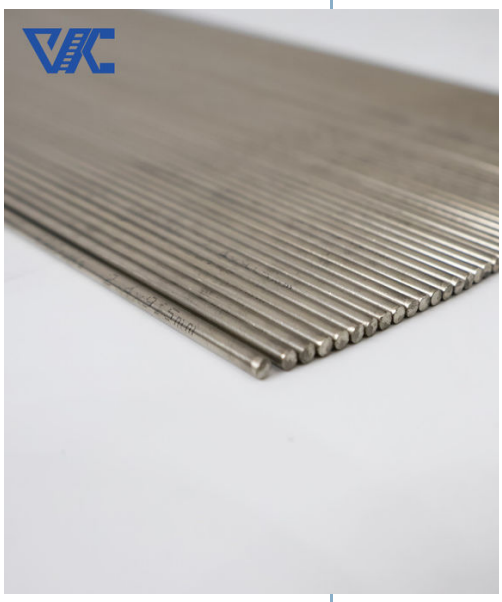
FAQ:

Q: What is the chemical composition of ERNiCrMo-13 welding wire?
Answer: The chemical composition of ERNiCrMo-13 welding wire mainly includes nickel (Ni), chromium (Cr), molybdenum (Mo), iron (Fe) and other elements.

Q: What are the diameter specifications of ERNiCrMo-13 welding wire?
Answer: The common diameter specifications of ERNiCrMo-13 welding wire are 0.8mm, 1.0mm, 1.2mm, etc.

Q: What are the characteristics of ERNiCrMo-13 welding wire?
Answer: ERNiCrMo-13 welding wire has excellent corrosion resistance, high temperature strength and thermal fatigue resistance, and is suitable for high temperature and corrosive environments.





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