Xuper NucleoTec 2222

Manual Metal Arc Electrode For Joining Thick Sections Of Hardenable Steels

DESCRIPTION: xuper NucleoTec 2222 is a low heat input electrode with a proprietary basic flux-coating formulation and a high purity, fully alloyed core wire. It is designed specifically for joining thick sections of hard enable steels with lower preheat procedures and Maximum Safety Margin. The electrode provides a fully authenticate solid-solution nickel-chromium-manganese-iron alloy deposit, which offers reliable, radiographic quality deposits with outstanding mechanical, metallurgical, physical, and chemical properties.

Product Details

- Manual Metal Arc Electrode for joining thick sections of hardenable steels

APPLICATIONS

Cement kiln rings, rollers, and shells Ball mill crusher trunnions and casings Forging, extrusion, and metal working machines Liquid gas vessels or equipment. Chemical and petroleum installations. Heat exchangers and steam power transition joints

PROCEDURE FOR USE:

Preparation: Ensure that areas to be joined are free from contaminants, oxides, defects etc, especially with high nickel alloys, where final decreasing operations may pe necessant Adopt standard joint design depending upon type, size, service requirements or dissimilar combination of alloys.

Preheating : For the joining or overlaying of high nickel alloys preheating is not normally required. Preheating will be required however for air hardening, higher carbon and low alloy steels Particular care should be taken when joining ferrite steels to nickel alloys when preneung & required, that the nickel side is not allowed to overheat. For carbon and alloy steels the preheat temperature will depend upon type, size and carbon equivalent of the base material. **Welding Technique:** Select lowest amperage as possible and employ an electrode angle between 70-80 to the direction of travel for down hand joints, and near vertical to the line of joint for vertical up positions, 45° to the line of joint for fillet welds. Maintain an are length as short as possible and deposit as stringer beads and avoid weaving wherever possible especially on dissimilar combination Joints). Remove all slag to avoid inclusions between passes followed by a thorough wire brushing using a stainless steel brush.

Joining thick sections of difficult-to-weld steels Alloy steels of unknown specification. Nickel bearing steels for sub-zero service and elevated temperatures. Dissimilar joints between stainless and ferrite steels. Nickel alloys of NiCrFe, NiCrMnFe type. Joining deoxidized copper to nickel alloys or steel.

TECHNICAL DATA

Tensile strength : 690 N/mm2 (100,000 psi)

Yield strength :420 N/mm2 (61,000 psi)

Elongation: 45%

Current polarity: AC/DC (+)

DIAMETER	AMPERAGE
2.5mm	50-90
3.2mm	70-110
4.0mm	90-140
5.0mm	110-170

Note: For optimum result use the lowest amperage practical