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| NS SUGAR | NS SUGAR IS A HIGH CHROME CARBIDE ELECTRODE WITH MODIFIED WELDING CHARACTERISTICS FOR REPAIR WORK ON SUGAR CANE PROCESSING COMPONENTS | | | | DATA SHEET NO. 125 | | | | | |
| SPECIFICATION | - | | | | | | | | | |
| CLASSIFICATION | | | | | | | | | | |
| PRODUCT DESCRIPTION | <p>The design emphasis of the flux is designed to ensure a slag solidification range that allows the chrome carbide particles to be evenly distributed within the austenitic alloy matrix, so ensuring complete uniformity of hardness.</p> <p>The balanced lime rutile flux contains the appropriate alloying elements and is bound with a blend of silicates that ensures both coating strength and resistance to moisture absorption.</p> | | | | | | | | | |
| WELDING FEATURES OF THE ELECTRODE | <p>The electrode welds with a smooth stable arc and easily strikes and re-strikes. Weld appearance is bright, almost of polished appearance, smoothly contoured and slag detachability is excellent.</p> <p>The ease of re-strike and slag characteristics allow the electrode to be used for special pattern welding, eg: lattice or button type procedures.</p> | | | | | | | | | |
| APPLICATIONS AND MATERIALS TO BE WELDED | For surfacing of sugar mill feed roll, shredding knives and hammer bit. NS Sugar can be applied to repair the worn rolls during either running or stationary condition. | | | | | | | | | |
| WELD METAL ANALYSIS COMPOSITION % BY Wt. | | C | Mn | Si | S | P | Cr | Mo | Nb | Fe |
| | MIN | 3.8 | 0.5 | 0.7 | - | - | 33 | 0.5 | 0.5 | |
| | MAX | 4.5 | 1.5 | 1.5 | 0.03 | 0.03 | 38 | 1.0 | 1.0 | |
| | TYPICAL | 4.0 | 1.2 | 1.3 | 0.02 | 0.02 | 35 | 0.8 | 0.8 | Bal. |
| WELD METAL HARDNESS (ALL WELD METAL) | AS WELDED 150 °C PRE-HEAT | | HRC | | HV | | OTHERS | | | |
| | 1 st Layer | | 48 – 54 | | 475 – 575 | | | | | |
| | 2 nd Layer | | 56 – 62 | | 675 – 700 | | | | | |
| | 3 rd Layer | | 60 – 66 | | 700 – 850 | | | | | |
| Actual hardness will be affected on base material composition, number of layers, heat input and welding conditions | | | | | | | | | | |
| WELDING AMPERAGE AC or DC+ | Ø (mm) | 3.2 | | 4.0 | | 5.0 | |  | | |
| | MIN | 110 | | 150 | | 190 | | | | |
| | MAX | 160 | | 220 | | 270 | | | | |
| OTHER DATA | Electrodes that have become damp should be re-dried at 150°C for 1 hour. | | | | | | | | | |
| RELATED PRODUCTS | Please contact our Technical Department for detail. | | | | | | | | | |