

# SelectAlloy Ni55-C

Nickel Alloy / Gas Shielded / Metal Cored

PRODUCT DATA SHEET

## FEATURES

- SelectAlloy Ni55-C is a premium metal cored, gas shielded electrode designed for welding various grades of cast iron in the flat position.
- This electrode is intended to be used for single or multi-pass welding in build-up and repair welding applications.
- Ni55-C may also be used for buttering or joining certain transition joints between cast iron and cast steels or mild/low alloy steels.
- Typical uses of this electrode include engine blocks, drive shafts, pump housings, valves and machine bases.
- There is no AWS Classification but the deposit chemistry is similar to ENiFe-CI per AWS A5.15

## DIAMETERS (in [mm])

0.045 (1.2), 1/16 (1.6)

## POSITIONS



## SHIELDING GAS

Ar + 0.5-3% O<sub>2</sub>

Flow Rate: 40 - 50 CFH

## POLARITY

Direct Current Electrode Positive (DCEP)

## TYPICAL WELD DEPOSIT CHEMISTRY (WT%)

| Shielding Gas | C    | Fe  | Mn   | Ni   | Si   |
|---------------|------|-----|------|------|------|
| Argon         | 0.11 | Bal | 3.39 | 58.1 | 0.07 |

## RECOMMENDED WELDING PARAMETERS \*\*

| Diameter in (mm) | Shielding Gas            | Position          | WFS* in/min (m/min) | Amps | Volts | CTWD* in (mm)       |
|------------------|--------------------------|-------------------|---------------------|------|-------|---------------------|
| 0.045 (1.2 mm)   | 98% Ar/2% O <sub>2</sub> | Flat & Horizontal | 325 (8.3)           | 220  | 22    | 1/2 - 5/8 (13 - 16) |
|                  |                          | Flat & Horizontal | 375 (9.5)           | 235  | 23    | 1/2 - 5/8 (13 - 16) |
|                  |                          | Flat & Horizontal | 420 (10.7)          | 250  | 24    | 5/8 - 3/4 (16 - 19) |
|                  |                          | Flat & Horizontal | 500 (12.7)          | 270  | 26    | 5/8 - 3/4 (16 - 19) |
| 1/16 (1.6 mm)    | 98% Ar/2% O <sub>2</sub> | Flat & Horizontal | 225 (5.7)           | 265  | 21    | 5/8 - 3/4 (16 - 19) |
|                  |                          | Flat & Horizontal | 300 (7.6)           | 305  | 23    | 5/8 - 3/4 (16 - 19) |
|                  |                          | Flat & Horizontal | 330 (8.4)           | 335  | 24    | 3/4 - 1 (19 - 25)   |
|                  |                          | Flat & Horizontal | 375 (9.5)           | 350  | 26    | 3/4 - 1 (19 - 25)   |

\* WFS = Wire Feed Speed, CTWD = Contact Tip To Work Distance

\*\*The parameters listed are recommended starting points of operation and the ranges for amperage, wfs, and voltage could be extended based on fitness for application. For products with "all-position" capability, as determined and listed in classification, the position recommendation can be determined based on operator skill and material thickness and isn't limited to the listing.



Notice: Be sure to follow all your employers safety practices, policies and procedures when using this product. Refer to CSA W117.2 and ANSI Z49.1 Safety in Welding, Cutting and Allied Processes for further information and the manufactures SDS sheet. The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. Thus the results are not guarantees for use in the field. The manufacturer disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.

## **PACKAGING (lbs (kgs))**

33 (15) Spools, 60 (27.2) Coils, 500 (226.8) Round Drum, 800 (362.9) Hex Drum, 900 (408.2) Hex Drum

*\*Some packaging options may not be available depending on diameter and product. Special package options may be available upon request.*

## **STORAGE AND HANDLING**

All products should be stored in original packaging, in dry conditions and handled with care. For more information refer to our website.



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