



exocor™

NICKEL BARE WIRE DATA SHEET

executive 825

DESCRIPTION

Executive 825 is used for Tig, Mig, SAW welding of nickel-iron-chromium-molybdenum-copper alloys. Executive 825 can also be used to overlay cladding where similar chemical composition is required.

CHEMISTRY RANGE

| C | Cr | Ni | Mo | Mn | Si | P | S | Cu | Fe |
|------|------|------|-----|------|------|-------|-------|-----|------|
| 0.03 | 21.5 | 42.0 | 3.3 | 0.45 | 0.35 | 0.005 | 0.002 | 2.2 | 29.8 |

*single values shown are maximum percentages

WELDING PARAMETERS

| PROCESS | SIZE | VOLTS | AMPS | SPEED OF WELDING / GAS FLOW | SHIELDING GAS / FLUX |
|---------|------|-----------------------------|-----------|--------------------------------|----------------------|
| SAW | .093 | 29 - 32 | 300 - 350 | 20 - 30 IPM (500 to 750mm)/min | Please call |
| | .125 | 29 - 32 | 400 - 550 | 20 - 30 IPM (500 to 750mm)/min | Please call |
| | .156 | 29 - 32 | 500 - 650 | 20 - 30 IPM (500 to 750mm)/min | Please call |
| GMAW | .035 | 29 - 33 | 160 - 180 | 30 to 50 CFH | 75% Ar + 25% He |
| | .045 | 29 - 33 | 180 - 220 | 30 to 50 CFH | or |
| | .062 | 29 - 33 | 210 - 250 | 30 to 50 CFH | 50% Ar + 50% He |
| GTAW | .093 | Direct Current; Electrode – | | 30 to 40 CFH | 100% Ar |

MECHANICAL PROPERTIES

Tensile Strength: 88,500 PSI minimum 610 MPA
Yield Strength: 61,000 PSI 570 MPA
Elongation: 34%

CLASSIFICATION

Wire chemistry has been optimized for best performance and conforms to AWS/SFA 5.14, Class **ERNiFeCr-1**.