

DESCRIPTION

Executive 686CPT is a nickel-chromium-molybdenum alloy designed for welding alloys 625, C-276 along with duplex, super duplex and super austenitic stainless steels using TIG, MIG and SAW welding processes. This alloy is also used for weld overlay on parts subject to acid and acid chloride environments. The high alloy content of Executive 686CPT produces high strength weld material with excellent corrosion resistance, particularly pitting and crevice type corrosion.

Executive 686CPT filler metal is produced using high quality raw materials and tightly controlled chemistry to provide top quality, exceptionally clean wires that deliver the results fabricators demand.

APPLICATIONS & FEATURES

Executive 686CPT Filler Metal is used for welding duplex, super-duplex and super-austenitic stainless steels as well as alloys 22,59, 625, C-276 and 686.

Executive 686CPT can be used for weld overlay where general corrosion resistance is required including service environments containing hydrochloric or sulfuric acid along with oxidizing chloride and saline solutions.

TYPICAL WIRE CHEMISTRY & MECHANICAL PROPERTIES

| C | Mn | Fe | P | S | Si | Cu | Ni | Mo | Ti | Cr |
|------|------|------|------|------|------|------|-----|------|------|------|
| 0.01 | 1.00 | 5.00 | 0.02 | 0.02 | 0.08 | 0.50 | Bal | 15.0 | 0.25 | 19.0 |

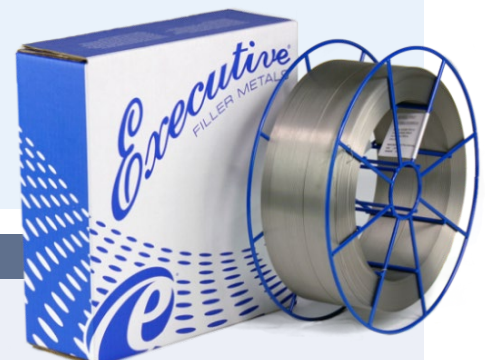
Tensile Strength: 110,000 PSI Min **Yield Strength:** **Elongation:** 35%

TYPICAL WELDING PARAMETERS

| Process | Diameter | Voltage | Amperage | Gas Flow | Shielding Gas / Flux |
|---------------------|----------|-----------------------------|----------|--------------|----------------------|
| GMAW - Short | .035" | 17-20 | 70-90 | 30 to 50 CFH | 100% Ar |
| | .045" | 19-22 | 75-160 | | 75% Ar / 25% He |
| | - Spray | .045" | 30-32 | | 190-250 |
| - Pulse | .045" | 18-20 | 120-150 | | |
| GTAW | .093" | Direct Current; Electrode - | | 30 to 40 CFH | 100% Ar |
| SAW | .062" | 28-32 | 250-280 | | NiCr-W Flux |
| | .093" | 28-33 | 275-350 | | |
| | .125" | 29-34 | 350-450 | | |

STANDARD PACKAGING

| | | |
|-------------------|--------------------|-------------|
| GMAW (MIG) | 33-lb wire baskets | 500-lb Drum |
| GTAW (TIG) | 10-lb plastic tube | 40-lb box |
| SAW | 60-lb wire coil | |
| | 60-lb Acro Pak | |



CLASSIFICATION

AWS/SFA 5.14, Class **ERNiCrMo-14**