



TENALLOY 125

LOW ALLOY STEEL (High Strength)



Low alloy steel Welding Electrode for joining Cr-Mo-V type cast steel.

CLASSIFICATION : EN ISO 3580-A

EN ISO 3580-A

E 1CrMoV B 22 H5

E 1Cr Mo V B 22 H5

KEY FEATURES :

- Basic coated electrode
- Cr-Mo-V type low alloy weld deposit
- Suitable for welding similar composition cast steels
- The deposit is heat treatable
- All position capability
- Radiographic quality weld

WELDING POSITION :



DCEP

TYPICAL APPLICATIONS :

- Welding similar composition low alloy cast steels e.g. (GS-17CrMoV5-10)
- Suitable for material 1.7706
- Suitable for steel casting with comparable hardening characteristics

REDRYING CONDITION : 250-300°C for minimum 1 hr. (Also available in vacuum packed condition)

CHEMICAL COMPOSITION OF UNDILUTED WELD METAL, Wt % :

| | C | Mn | Si | Cr | Mo |
|---------------|-----------|-----------|-----------|-----------|-----------|
| Typical | 0.14 | 0.6 | 0.4 | 1.3 | 1.2 |
| Specification | 0.12-0.15 | 1.0 max | 0.40-0.50 | 1.20-1.50 | 1.0-1.30 |
| | V | Ni | S | P | |
| Typical | 0.2 | 0.2 | 0.01 | 0.01 | |
| Specification | 0.20-0.30 | 0.40 max | 0.02 max | 0.02 max | |

MECHANICAL PROPERTIES OF ALL WELD METAL :

| | Condition | UTS, MPa | YS at 0.2% offset, MPa | EL% | CVN Impact at 20°C, J |
|---------------|------------------|-----------------|-------------------------------|------------|------------------------------|
| Typical | PWHT | 715 | 620 | 20 | 82 |
| Specification | | 630 min | 500 min | 16 min | 27 min |

PWHT : SR at 690°C for 2 hrs followed by water quenching after soaking at 940°C for 1 hr and tempering at 720°C.

PARAMETERS - PACKING DATA :

| Ø x L, mm | Amperage, A | Wt./Carton, Kg | Carton/Box | Net wt./Box, Kg |
|------------------|--------------------|-----------------------|-------------------|------------------------|
| 2.5 x 350 | 60-90 | 5 | 4 | 20 |
| 3.15 x 450 | 90-130 | 5 | 4 | 20 |
| 4.0 x 450 | 140-180 | 5 | 4 | 20 |
| 5.0 x 450 | 190-230 | 5 | 4 | 20 |