

SUBMERGED ARC WELDING DMEB-9

Classification: EB-9

AWS A5.23 / ASME SFA 5.23

Description, Characteristics & Applications:

This type wire is classified by the chemical composition of deposited weld metal in combination with a specific welding flux using the submerged welding process. The weld metal properties are obtained by the use of a properly selected flux and EB9 wire and knowing if the weldment is to be heat treated or as welded condition. Weld parameter dependent upon the wire diameter and welding flux being used. Both agglomerated and fused fluxes can be used for submerged arc welding. The chemical composition of the flux mainly affects the chemistry of the weld metal and consequently its corrosion resistance and mechanical properties.

Typical Chemical Composition (%)

| C | Mo | Mn | Cu | Si | V | S | Nb | P | N | Cr | Al | Ni |
|-------------|-------------|------|----------|----------|-------------|-----------|-------------|-----------|-------------|--------------|----------|----------|
| 0.07 - 0.13 | 0.85 - 1.15 | 1.25 | 0.10 max | 0.50 max | 0.15 - 0.25 | 0.010 max | 0.02 - 0.10 | 0.010 max | 0.03 - 0.07 | 8.50 - 10.50 | 0.04 max | 1.00 max |

Deposited Chemical Composition (%) (Typical)

| C | Mo | Mn | Cu | Si | V | S | Nb | P | N | Cr | Al | Ni |
|------|------|------|------|------|------|-------|------|-------|------|------|------|------|
| 0.09 | 0.90 | 1.00 | 0.11 | 0.20 | 0.19 | 0.009 | 0.03 | 0.009 | 0.04 | 8.75 | 0.01 | 0.75 |

Deposited All Weld Metal Properties % (AW)

| Tensile Strength | Yield Strength | Elongation (%) | Hardness | Ferrite WRC (FN) | CVN Impacts (J) |
|------------------|----------------|----------------|----------|------------------|-----------------|
| | | | | | @ °C |
| 100,000psi | 85,000psi | 22% | ----- | ----- | ----- |

Note: Using Neutral flux

If additional information is needed visit us on the web at www.duramaxwelding.com