

4820 AC

CATEGORY SMAW Stick Electrodes

TYPE High Chromium electrode for high temperature applications.

APPLICATIONS Cap layers for joining refractory Cr-Al-Si steels. Cladding corrosion resistant overlays. Cladding heat resistant overlays up to 1150°C. Cladding components in a sulphurous environment..

PROPERTIES Ceweld 4820 AC is an AC-weldable fully core-wire alloyed electrode for fabrication and repair welding on equal or similar, corrosion and heat-resistant steels and steel-castings. The weld-deposit is on equal base-material scale-resistant and, by reason of its low nickel-content, resistant against attack of sulphurous gases at higher temperatures up to 1150°C. When welding Ceweld 4820 AC low heat-input is required as alloys of such chemistry are sensitive to embrittlement at 600-800°C. The interpas temperature should not exceed 300°C.

CLASSIFICATION

| | |
|------------|----------------------|
| AWS | A 5.4: ~E 2504-17 |
| EN ISO | 3581-A: E 25 5 R 32 |
| DIN: W.Nr. | 1.4820 |
| DIN | 8556: E 25 4 MP R 23 |

SUITABLE FOR

| W.Nr: | EN ASTM/ACI | W.Nr: | EN ASTM/ACI |
|--------|-------------------|--------|--------------------------|
| 1.4710 | G-X30CrSi6 | 1.4724 | X10CrAl13 TP405-CA15 |
| 1.4745 | G-X40CrSi23 TP433 | 1.4820 | G-X12 CrSi 26 5 |
| 1.4712 | X10CrSi6 502 | 1.4729 | G-X40CrSi13 |
| 1.4762 | X10CrAl24 TP443 | 1.4821 | X20 CrNiSi 25 4 TP329 |
| 1.4713 | X10CrAl7 502 | 1.4740 | G-X40CrSi17 |
| 1.4773 | X8Cr30 | 1.4822 | G-X40CrNi 25 4 TP329 |
| 1.4722 | X10CrSi13 | 1.4742 | X10CrAl18 430B-TP430 |
| 1.4776 | G-X40CrSi29 | 1.4823 | G-X40CrNiSi 27 4 TP329HC |

APPROVALS CE approved

WELDING POSITIONS:



WELD DEPOSIT WEIGHT %

| C | Mn | Si | Cr | Ni | Mo |
|------|-----|-----|----|-----|----|
| 0.06 | 0.7 | 1.0 | 25 | 4.7 | - |

TYPICAL MECHANICAL PROPERTIES

| Heat Treatment | Rp0,2 (N/mm ²) | Rm (N/mm ²) | A5 (%) | Impact Energy (J) ISO-V | | | Hardness HB |
|----------------|----------------------------|-------------------------|--------|-------------------------|-------|-------|-------------|
| | | | | -20°C | -40°C | -60°C | |
| AW | 500 | 700 | 20 | | | | 180 |

WELDING PARAMETERS / PACKING

| Welding Parameters | | | Packing | |
|--------------------|-------------|--------------------|----------|------------|
| D (mm) | Length (mm) | Current (A) DC+/AC | kg / can | kg / 6pack |
| 2.5 | 300 | 60-80 | 2.5 | 15 |
| 3.2 | 350 | 80-120 | 2.5 | 15 |
| 4.0 | 350 | 120-150 | 2.8 | 16.8 |

REDRYING TEMPERATURE 1 hr/ 350° C +/- 10°C (if necessary)