

## **CARBOLOY 520**

| International standards   | DIN 855   | 5  | I  | E 23-UN          | l-300-CK | NPTZ                  |                |     |   |  |  |
|---|---|--|--|------------------|----------|-----------------------|----------------|-----|---|--|--|
| Approvals   |   |  |  |                  |          |                       |                |     |   |  |  |
| Typical applications<br>and characteristics   | CARBOLOY 520 is a lime basic coated high CrCoMoTiAIW alloyed nickel<br>based electrode.<br>The deposit is a precipitation hardenable alloy with an exceptional combi-<br>nation of high temperature mechanical property capabilities, forgeability<br>and corrosion resistance.<br>The alloy can be used for a great number of critical high temperature<br>applications. |  |  |                  |          |                       |                |     |   |  |  |
| Operating temperature   |   |  |  |                  |          |                       |                |     |   |  |  |
| Welding instructions  | To achieve a crack-free overlay, the base material should be preheated to 300 – 400°C, depending on the alloy. Slow cooling after welding is advised.   |  |  |                  |          |                       |                |     |   |  |  |
|   |   | oning and                                |  | y is advi        | seu.     |                       |                |     |   |  |  |
| Hardness of<br>all-weld metal   |   |  | welded                                       |                  | HR       | c worl                | k-harden       | ned |   |  |  |
| Hardness of<br>all-weld metal<br>( typical values)  |   |  | welded                                       |                  |          | <b>c wor</b> l<br>ca. |                | ed  |   |  |  |
| all-weld metal  |   | IB as                                    | welded                                       | Mo               |          |                       |                | ned | ] |  |  |
| all-weld metal<br>( typical values)   | F   | IB as                                    | welded                                       |                  | HR       | ca.                   | 39             |     | ] |  |  |
| all-weld metal<br>( typical values)<br>Weld metal analysis                                | C   | IB as<br>ca. :<br>Cr                     | welded<br>300<br>Co                          | Mo               | HRo      | ca.                   | 39<br><b>W</b> | Ni  |   |  |  |
| all-weld metal<br>( typical values)<br>Weld metal analysis<br>(typical, wt. %)            | <b>C</b><br>0,04  | <b>IB as</b><br>ca. 3<br><b>Cr</b><br>19 | <b>welded</b><br>300<br><b>Co</b><br>12      | Mo               | HRo      | ca.                   | 39<br><b>W</b> | Ni  |   |  |  |
| all-weld metal<br>( typical values)<br>Weld metal analysis<br>(typical, wt. %)<br>Current | <b>C</b><br>0,04<br>= +<br>PA, PB,  | <b>IB as</b><br>ca. 3<br><b>Cr</b><br>19 | welded<br>300<br><u>Co</u><br>12<br>, PE, PF | <b>Mo</b><br>5,5 | HRo      | ca.                   | 39<br><b>W</b> | Ni  |   |  |  |

| Dia./Length | Amperage (A) | Pcs./ packet | Pcs./ carton | kg / 1000 | kg / packet | kg / carton |
|-------------|--------------|--------------|--------------|-----------|-------------|-------------|
| 3,2 x 350   | 80 - 120     | 155          | 619          | 32,3      | 5,0         | 20,0        |
| 4,0 x 350   | 110 - 150    | 102          | 409          | 48,9      | 5,0         | 20,0        |
| 5,0 x 450   | 150 - 190    | 61           | 244          | 98,2      | 6,0         | 24,0        |

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Statements on composition and application are just for the applier's information. Statements on mechanical properties always refer to the all-weld-metal according to valid standards. Carbo-Weld may change the characteristics of its products without notice. We recommend the applier to check our products for their special application autonomously.