

# CEWELD Powder NiBSi WC2

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| TYPE         | Nickel based Cr free metal powder with high tungsten carbide content                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| APPLICATIONS | <p>CEWELD® Powder NiBSi WC2 is a Cr free spray powder for overlay spray and fuse and Laser or PTA welding on wear parts that need to outlast new parts where high temperatures combined with corrosion and wear resistance is required.</p> <p>Main applications in the field:</p> <ul style="list-style-type: none"> <li>Stabilizers and hard band tools</li> <li>Decanter screws</li> <li>Debarking knives</li> <li>Agitator blades</li> <li>Bucket teeth and covers</li> <li>Universal fan blades and slag mills</li> <li>Agricultural scraper bars</li> </ul> |

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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| PROPERTIES | <p>CEWELD® Powder NiBSi is a self fluxing Tungsten alloy with excellent corrosion and wear resistance suitable for working temperatures Up to 650°C (1200°F). The coatings are dense and practically oxide free. The coatings produced in this way are hard, dense, and particularly resistant to abrasion and erosion under low loads. Machinable by grinding.</p> <p>Hardness:</p> <p>Matrix: 40-60 HRC</p> <p>Carbid: 2000-3000 HV01</p> <p>Layer thickness: 1-3 layers Max. 3 mm per layer possible</p> <p><b>Standard particle size: 150/53 µm</b></p> <p><i>also possible: 106/20 µm, 106/38 µm, 106/45 µm, 125/38 µm, 125/45 µm, 150/45 µm, 150/53 µm, 150/63 µm, 180/53 µm, 180/63 µm, 210/63 µm, 250/45 µm, 63/20 µm, 75/20 µm</i></p> |
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| CLASSIFICATION | AWS | A 5.1: E 6010 |
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| SUITABLE FOR | <p>For coating the following base materials:</p> <p>Structural steel, stainless steel, nickel alloys, heat-treatable steels, if preheated to 300 °C (570 °F) to prevent extensive cracking in the coating.</p> |
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## APPROVALS

## WELDING POSITIONS

|                                             |      |    |      |     |     |    |
|---------------------------------------------|------|----|------|-----|-----|----|
| TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%) | C    | Si | Ni   | B   | Fe  | W  |
|                                             | 0.04 | 3  | Rem. | 2.9 | 0.2 | 60 |

|                       |                |                         |                      |        |          |
|-----------------------|----------------|-------------------------|----------------------|--------|----------|
| MECHANICAL PROPERTIES | Heat Treatment | R <sub>p0,2</sub> (MPa) | R <sub>m</sub> (MPa) | A5 (%) | Hardness |
|                       | As Welded      |                         |                      |        | 50 HRc   |

|          |              |
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| REDRYING | Not required |
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## GAS ACC. EN ISO 14175