



CEWELD 320 LR

| TYPE | Solid stainless steel wire for high corrosive environments. (Type 320, Alloy20,Valbruna AV20) | | | | | | | | | | | | | | | | | | | |
|---|--|----------------------|--------|----------|-----|----------------|-------------------------|----------------------|--------|----------|-----------|-----|-----|------|-----|-----|----|----|-----|-----|
| APPLICATIONS | CEWELD® 320 LR (equivalent to Alloy 20 or Valbruna AV20) is used in many industries, including chemical processing, petrochemicals and refineries, shipbuilding, pharmaceuticals, and food processing. End uses include equipment for industries that produce or use sulfuric acid, storage tanks, mixing tanks, agitators, pump and valve parts, food processing equipment (resistance to fruit acids and fatty acids), fasteners and fittings, and the production of synthetic plastics. | | | | | | | | | | | | | | | | | | | |
| PROPERTIES | CEWELD® 320 LR has been specially developed for high resistance to sulfuric acid. The high nickel, chromium, molybdenum, and copper content ensures excellent general corrosion resistance. Due to the limited carbon content and niobium stabilization, welded structures can generally be used in corrosive environments without heat treatment after welding. With a nickel content of 33 percent, CEWELD® 320 LR is virtually immune to chloride-induced stress corrosion cracking. This alloy is often chosen to solve SCC problems that can occur with 316L stainless steel. | | | | | | | | | | | | | | | | | | | |
| CLASSIFICATION | AWS | A 5.9: ER320 | | | | | | | | | | | | | | | | | | |
| | EN ISO | 14343-B: G 320 | | | | | | | | | | | | | | | | | | |
| | W.Nr. | 2.4660 | | | | | | | | | | | | | | | | | | |
| | F-nr | 6 | | | | | | | | | | | | | | | | | | |
| | FM | 5 | | | | | | | | | | | | | | | | | | |
| SUITABLE FOR | 2.4660, AISI 320, A351, A744 Gr. CN-7M UNS N08020 Alloy 20, Carpenter 20, 320, Nicrofer 3620 nb, Carpenter 20, Incoloy 20, NiCr20CuMo | | | | | | | | | | | | | | | | | | | |
| APPROVALS | CE | | | | | | | | | | | | | | | | | | | |
| WELDING POSITIONS |  | | | | | | | | | | | | | | | | | | | |
| TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%) | <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>C</th> <th>Si</th> <th>Mn</th> <th>Cr</th> <th>Ni</th> <th>Mo</th> <th>Cu</th> </tr> </thead> <tbody> <tr> <td>0.06</td> <td>0.5</td> <td>1.6</td> <td>20</td> <td>34</td> <td>2.5</td> <td>3.5</td> </tr> </tbody> </table> | | | | | | C | Si | Mn | Cr | Ni | Mo | Cu | 0.06 | 0.5 | 1.6 | 20 | 34 | 2.5 | 3.5 |
| C | Si | Mn | Cr | Ni | Mo | Cu | | | | | | | | | | | | | | |
| 0.06 | 0.5 | 1.6 | 20 | 34 | 2.5 | 3.5 | | | | | | | | | | | | | | |
| MECHANICAL PROPERTIES | <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Heat Treatment</th> <th>R_{P0,2} (MPa)</th> <th>R_m (MPa)</th> <th>A5 (%)</th> <th>Hardness</th> </tr> </thead> <tbody> <tr> <td>As Welded</td> <td>400</td> <td>590</td> <td>35</td> <td>HRc</td> </tr> </tbody> </table> | | | | | Heat Treatment | R _{P0,2} (MPa) | R _m (MPa) | A5 (%) | Hardness | As Welded | 400 | 590 | 35 | HRc | | | | | |
| Heat Treatment | R _{P0,2} (MPa) | R _m (MPa) | A5 (%) | Hardness | | | | | | | | | | | | | | | | |
| As Welded | 400 | 590 | 35 | HRc | | | | | | | | | | | | | | | | |
| REDRYING | Not required | | | | | | | | | | | | | | | | | | | |
| GAS ACC. EN ISO 14175 | M13 | | | | | | | | | | | | | | | | | | | |



CEWELD 320 LR

320 LR 1.2MM

| Packaging | KG/unit | EanCode |
|-----------|---------|---------------|
| BS-300 | 15 | 8720663415455 |

320 LR 1.6MM

| Packaging | KG/unit | EanCode |
|-----------|---------|---------------|
| BS-300 | 15 | 8720663415462 |