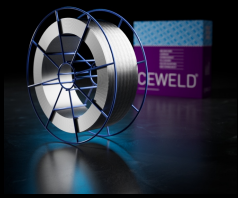


# CEWELD 253 MA

|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |                      |                    |                         |    |    |     |       |          |      |      |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------|--------------------|-------------------------|----|----|-----|-------|----------|------|------|
| TYPE                                              | CEWELD 253 MA is designed for welding austenitic chromium-nickel steels such as 253MA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                         |                      |                    |                         |    |    |     |       |          |      |      |
| APPLICATIONS                                      | For use in high temperature furnaces, combustion chambers, burners etc Not suitable for applications exposed to wet corrosion. Prior to welding, it is recommended to carefully brush or ground black plates and previous weld beads.                                                                                                                                                                                                                                                                                                                                                                    |                         |                      |                    |                         |    |    |     |       |          |      |      |
| PROPERTIES                                        | Cerium combined with silicon improves the oxidation resistance and erosion-corrosion resistance in oxidizing and neutral environments, whereas the nitrogen allows superior strength at high temperatures. Therefore, this filler wire shows excellent resistance to high temperatures (most suitable temperature range is 850 - 1100 °C), high creep strength, very good resistance to isothermal and, particularly, cyclic oxidation.                                                                                                                                                                  |                         |                      |                    |                         |    |    |     |       |          |      |      |
| CLASSIFICATION                                    | EN ISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                         | 14343-A: G 21 10 N   |                    |                         |    |    |     |       |          |      |      |
|                                                   | W.Nr.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                         | 1.4835               |                    |                         |    |    |     |       |          |      |      |
| SUITABLE FOR                                      | Outokumpu 253 MA (1.4835)<br>Outokumpu 153 MA (1.4818)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                         |                      |                    |                         |    |    |     |       |          |      |      |
| APPROVALS                                         | CE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                         |                      |                    |                         |    |    |     |       |          |      |      |
| WELDING POSITIONS                                 | <div>      </div> |                         |                      |                    |                         |    |    |     |       |          |      |      |
| TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%) | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Si                      | Mn                   | P                  | S                       | Cr | Ni | Mo  | Nb    | N        | Cu   | Ce   |
|                                                   | 0.07                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1.5                     | 0.6                  | 0.02               | 0.001                   | 21 | 10 | 0.1 | 0.007 | 0.16     | 0.13 | 0.04 |
| MECHANICAL PROPERTIES                             | Heat Treatment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | R <sub>P0,2</sub> (MPa) | R <sub>m</sub> (MPa) | A <sub>5</sub> (%) | Impact Energy (J) ISO-V |    |    |     |       | Hardness |      |      |
|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |                      |                    | RT                      |    |    |     |       |          |      |      |
|                                                   | As Welded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 440                     | 680                  | 38                 | 130                     |    |    |     |       | HRc      |      |      |
| REDRYING                                          | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                         |                      |                    |                         |    |    |     |       |          |      |      |
| GAS ACC. EN ISO 14175                             | I1, I3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                         |                      |                    |                         |    |    |     |       |          |      |      |



# CEWELD 253 MA

253 MA 1,0MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| BS-300    | 15      | 8720682050200 |