

## AA 2101 Lean Duplex

**CATEGORY** FCAW Flux-Cored

**TYPE** Rutile fluxcored wire for welding lean duplex stainless steel

**APPLICATIONS** Very well suited for the chemical industries (e.g. bio fuel), the pulp and paper industry and also the food industry.

**PROPERTIES** AA 2101 has excellent welding properties and was developed especially for the steel grade 1.4162/UNS S 32101. Due to the higher Mn and N - content of the Lean duplex base material, the slag viscosity and therefore the flow behaviour is changing and the welding bead is liquid for a longer time. The result is a very smooth seam.

**CLASSIFICATION**

|            |                                |
|------------|--------------------------------|
| AWS        | A 5.22: E2307 T1-1/4           |
| EN ISO     | 17633-A: T 23 7 N L P C1/M21 2 |
|            | 17633: T Z 24 9 N L R M(C) 3   |
| DIN: W.Nr. | 1.4162                         |
| DIN        | 8556:~ 23 7 N L                |

**SUITABLE FOR** Lean duplex stainless steel EN 1.4162 / ASTM 32101 grade such as LDX2101® (Avesta)

**APPROVALS** CE approved

**WELDING POSITIONS:**



**WELD DEPOSIT WEIGHT % (M21)**

| C    | Mn   | Si   | Cr   | Ni  | N    | P     | S     | FNW |
|------|------|------|------|-----|------|-------|-------|-----|
| 0.03 | 1.26 | 0.45 | 24.6 | 7.9 | 0.13 | 0.020 | 0.003 | 45  |

**TYPICAL WELD METAL PROPERTIES (M21)**

| Heat Treatment | R <sub>p0,2</sub><br>(N/mm <sup>2</sup> ) | R <sub>m</sub><br>(N/mm <sup>2</sup> ) | A <sub>5</sub><br>(%) | Impact Energy (J) ISO-V |       |       | Hardness<br>HRc / HV |
|----------------|---|--|-----------------------|-------------------------|-------|-------|----------------------|
|                |   |  |                       | +20°C                   | -40°C | -60°C |                      |
| AW             | 571                                       | 750                                    | 29                    | 45                      |       |       |                      |

AW: as welded

**WELDING PARAMETERS / PACKING**

| Welding Parameters |             |                 | Packing    |            |             |
|--------------------|-------------|-----------------|------------|------------|-------------|
| D (mm)             | Voltage (V) | Current (A) DC+ | spool type | kg / spool | kg / pallet |
| 1.2                |             | 130-250         | S-300      | 15         | 750         |

**REDRYING TEMPERATURE** 150°C / 24hr

**PROTECTIVE GAS** Co2 / Argon-Co2