## MATERIAL

100% recycled stainless steel in a short circuit specially developed for this type of product.

## ENVIRONMENTAL IMPACT

0.63 kg CO2-eq or 10 times less than conventional steel 6.8 kg CO2-eq.

## APPLICATIONS

Mainly used for the manufacture of parts that can be in prolonged contact with the skin (anti-allergenic), for medical applications (bio-compatibility) and especially for its aesthetic aspect which guarantees a perfect polishing (hyper regulated molecular mesh).

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| BATCH CERTIFICATE | Guarantee of traceability of raw materials used. |
| AVAILABLE FORMATS | - In bars: diameter 16mm, 45mm, 60mm, length 3 meters.<br>- In flats: 65mm x 10mm x 1000mm or 62mm x 6mm x 1000mm<br>- On order: by 1'000kg according to your custom dimensions. |
| PROCESS SPECIFICATIONS | Hot rolled bar, descaled, Hyper hardened, ground h9 for the round or nut, sandblasted for the flat. |
| DESIGNATION | AISI 316L, DIN 1.4441 ; X2CrNiMo18-15-3. |
| CHEMICAL COMPOSITION (AVERAGE DATA) | C: 0.0170 Si: 0.3060 Mn: 1.8220 Ni: 14.7620 Cr: 17.5940 Mo : 2.7630 Cu: 0.3640 S: 0.0002 P: 0.0193 N: 0.0830. |
| GENERAL PROPERTIES | Very good machinability in conventional or automatic machines, very good formability for stamping, excellent polishability. |
| MECHANICAL PROPERTIES | At 20 degrees the elastic limit is between 200 and 400 MPa, the tensile strength between 500 and 950 MPa and the elongation between 25 and 40 %. |
| MICROSTRUCTURE | The average grain size sampling (inclusionary cleanliness) according to DIN 50/602 method M is between 39 and 44 microns. |
| SURFACE TREATMENTS | Electrolytic / chemical / laser / galvanic: very good. |
| JOINING TECHNIQUES | Resistance welding, all types of arc welding (MIG, TIG, submerged arc), laser or electron beam welding. |
| STAMPABILITY | Very good, with stress relieving annealing between 1'060 and 1'100 degrees (indicative values). |
| CORROSION RESISTANCE | This stainless steel remains one of the best of the austenitic family due to its high Molybdenum content, it complies with tests according to ISO 3851-21998 method A and ASTM A262-2015 method E.<br>Due to its medical bio-compatibility, it can be used as a prosthesis inside the body or as surgical tools. |