



| AUSTENITIC STAINLESS STEEL<br>ACX 286 |                  |
|---------------------------------------|------------------|
| EN DESIGNATION                        | AISI DESIGNATION |
| 1.4567                                | 304Cu            |
| X3CrNiCu18-9-4                        |                  |



**DESCRIPTION** | Steel grade ACX 286 is Roldan's version of steel grade 304 with copper added, improving both its cold-working formability and its corrosion resistance.

This combination of good machinability, cold-working formability and corrosion resistance makes this steel grade a great option for specific applications.

**CHEMICAL COMPOSITION**

| C     | Si    | Mn    | P      | S      | N(ppm) | Cr          | Cu        | Mo | Ni        | Ti |
|-------|-------|-------|--------|--------|--------|-------------|-----------|----|-----------|----|
| ≤0.02 | ≤0.75 | ≤1.00 | ≤0.045 | ≤0.015 | ≤700   | 17.00-19.00 | 3.00-3.50 | -  | 8.50-9.00 | -  |

**APPLICATIONS**

Steel grade ACX 286 main applications are cold-working processes.

- Screws
- Bolts
- Other screw elements produced through a stamping process.
- Dentistry and other elements that require anti-bacterial properties.
- Automotive industry

**MECHANICAL PROPERTIES EN 10088-3**

|          | Rp <sub>0.2</sub> (MPa) | Rm (MPa) | Elongation (%) | Hardness (HB) |
|----------|-------------------------|----------|----------------|---------------|
| Wire rod | ≥175                    | 450-650  | ≥45            | 215 máx.      |

**PHYSICAL PROPERTIES EN 10088-1**

| Elastic modulus | Thermal expansion average coefficient (20°C-100°C) | Thermal conductivity | Electrical resistivity | Density                |
|-----------------|--|----------------------|------------------------|------------------------|
| 200 Gpa         | 16,7 µm/m°C  | -                    | -                      | 7.9 kg/dm <sup>3</sup> |

**WELDING**

This stainless steel grade has good properties for welding processes.

MMA welding with AWS electrodes:

- Pre-heating not necessary
- Post weld: slow cooling

**FORMABILITY**

This steel grade's chemical composition distinguishes it from other 304 steel grades, like our ACX 126 or ACX 229, due to its great cold-working formability. The addition of copper fulfils the goal of reaching a balance that provides optimal formability properties.

**CORROSION RESISTANCE**

ACX 286 corrosion resistance is superior to the more common austenitic steel grades, like ACX 125, matching the properties of "low carbon" stainless steels like ACX 216 or ACX 229.

It resists intergranular corrosion upon delivery; ACX 286 chemical composition is "low carbon".



ACX 286 | AUSTENITIC STAINLESS STEEL



SPECIFICATIONS | It can be supplied in accordance with requirements of standards EN 10088-3.

CERTIFICATIONS



Sistema de Gestión  
 ISO 9001:2015  
 ISO 14001:2015  
 ISO 50001:2018



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