

AISI Material Standards

| Material | Description |
|------------|---|
| Aluminized | Steel coated with aluminum/silicon on both sides. Provides strength and heat protection |

200-Series

| Material | Description |
|----------|--|
| 201 | General purpose stainless steel, very economical |
| 202 | General purpose stainless steel, very economical. Has more Chromium (Cr), Manganese (Mn), and Nickel (Ni) than 201 |

300-Series

| Material | Description |
|----------|--|
| 301 | Highly ductile stainless steel that has excellent weldability, strength and corrosion resistance |
| 302 | Higher strength (due to increased carbon content) than 304, but with the same corrosion resistance |
| 303 | Strength and corrosion resistance characteristics similar to 304, but with sulfur and phosphorus for free machining |
| 304 | Most common grade of stainless steel, with 18/8 (18% chromium, 8% nickel). Excellent strength and corrosion resistance |
| 309 | Strength and corrosion resistance similar to 304, but with better heat resistance |
| 316 | Marine-grade stainless steel that contains molybdenum to prevent specific forms of corrosion (especially chloride) |

400-Series

| Material | Description |
|----------|---|
| 409 | Very economical stainless steel, used principally in automotive exhaust systems |
| 410 | High strength stainless steel with excellent wear-resistance |
| 420 | High strength, cutlery grade stainless steel, with excellent polishability |
| 430 | Good formability, but temperature and corrosion resistance is reduced. Widely used for automotive trim applications |
| 431 | Excellent impact strength at high hardness levels. Used in a variety of aircraft and general industrial applications. |
| 439 | Higher chromium content than 409 for increased temperature, corrosion, and oxidation resistance |
| 441 | Higher grade version of 409, stabilized with titanium and columbium for increased oxidation, creep resistance, and improved formability |

DIN Material Standards

| Material | Description |
|----------|---|
| W1 | All Parts Entirely Made From Galvanized Steel |
| W2 | Band & Housing: Stainless Steel AISI 430 Screw: Galvanized Steel |
| W3 | All Parts Entirely Made From Stainless Steel AISI 430 |
| W4 | All Parts Entirely Made From Stainless Steel AISI 304 |
| W5 | All Parts Entirely Made From Stainless Steel AISI 316 |

Swedish Material Standards

| Material | Description |
|----------|--|
| S10 | Material and surface treatment chosen by the manufacturer. Min 72 hours to red rust.* Comparable to W1 |
| S20 | Material and surface treatment chosen by the manufacturer. Min. 200 hours to red rust* |
| S30 | All parts in chrome steel 1.4016/AISI 430/SS2320. Min. time to red rust is 500 hours.* Comparable to W3 |
| S40 | All parts in stainless steel 1.4301/AISI 304/SS2333 Min. time to red rust is 500 hours.* Comparable to W4 |
| S50 | All parts in acid resistant steel 1.4436/AISI 316/ SS2343 Min. time to red rust is 2,000 hours.* Comparable to W5 |
| S60 | All parts in acid resistant steel. Min. time to red rust— well over 2,000 hours.* Screw & housing in 1.4436/AISI 316/SS2343 and band in higher grade 1.4547/SS-EN 10 088-1 |

*Using industry standard neutral salt-spray test

International Material Standard Designations

| Material | DIN | AISI/AS | BS | AFNOR NF | SS | SUS |
|----------|--------|---------|---|----------------|------------------------------|-----|
| S10, W1 | | | Completely Galvanized Steel | | | |
| S20 | | | Manufacturer's Choice: Minimum 200 Hours To Red Rust* | | | |
| W2 | | 1.4016 | In Housing And Band. | | Screw: 72 Hours To Red Rust* | |
| S30, W3 | 1.4016 | 430 | 430 S 17 | Z8 C17 | 2320 | 430 |
| S40, W4 | 1.4301 | 304 | 304 S 15 | Z6 CN 18-09 | 2332 | 304 |
| S50, W5 | 1.4401 | 316 | 316 S 31 | Z3 CND 17-11-1 | 2343 | 316 |
| S60 | 1.4436 | 316 | — | — | 2347 | — |

SS = Swedish Standard DIN = Deutsches Institut für Normung AISI/AS = American Iron and Steel Institute / American Standard BS = British Standard
AFNOR NF = Association Francaise de Normalisation SUS = Stainless Use Steel *Using industry standard neutral salt-spray test