

# ISO 3506-6:2020-04 (E)

## Fasteners - Mechanical properties of corrosion-resistant stainless steel fasteners - Part 6: General rules for the selection of stainless steels and nickel alloys for fasteners

---

<b>Contents</b>	<b>Page</b>
<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Groups and grades of stainless steels</b> .....	<b>2</b>
4.1 General.....	2
4.2 Stainless steel group A (austenitic structure).....	2
4.2.1 General.....	2
4.2.2 Grade A1.....	3
4.2.3 Grade A2.....	3
4.2.4 Grade A3.....	3
4.2.5 Grade A4.....	3
4.2.6 Grade A5.....	3
4.2.7 Grade A8.....	3
4.3 Stainless steel group C (martensitic structure).....	4
4.3.1 General.....	4
4.3.2 Grade C1.....	4
4.3.3 Grade C3.....	4
4.3.4 Grade C4.....	4
4.4 Stainless steel group F (ferritic structure) — Grade F1.....	4
4.5 Stainless steel group D (austenitic-ferritic structure).....	4
4.5.1 General.....	4
4.5.2 Grades D2 and D4.....	5
4.5.3 Grades D6 and D8.....	5
4.6 Stainless steels and nickel alloys for elevated and high temperatures.....	5
<b>5 Chemical composition specifications for stainless steels and nickel alloys</b> .....	<b>5</b>
<b>6 Resistance to stress corrosion cracking</b> .....	<b>8</b>
<b>7 Resistance to pitting and crevice corrosion</b> .....	<b>9</b>
<b>8 Resistance to intergranular corrosion</b> .....	<b>9</b>
<b>9 Susceptibility to formation of intermetallic compounds</b> .....	<b>11</b>
<b>10 Magnetic permeability properties of stainless steels</b> .....	<b>12</b>
<b>Annex A (informative) Common designations of stainless steels and nickel alloys used for fasteners</b> .....	<b>13</b>
<b>Bibliography</b> .....	<b>20</b>