

1.4006 / 410

- For medium-stressed components, crankshafts, supplied in rods, exceptionally in sheets
- hardenable, supplied in annealed or heat treated state QT65, difficult to weld
- Martensitic, magnetic, polishable
- Corrosion resistant in water and vapour environment and slightly aggressive chlorine-free environment.
- Strength after heat treatment up to max. 1350 N/mm², use up to 600°C

1.4016 / 430

- For use in interior, decoration, cutlery, delivered in sheets
- delivered in annealed or bright annealed state, weldable
- Ferritic, magnetic, polishable
- Corrosion resistant in water and vapor environment and slightly aggressive chlorine-free environment.
- Strength min. 440 N/mm², use up to 800°C

1.4021 / 420

- For highly-stressed components, crankshafts, screws, pull rods, delivered in rods, exceptionally in sheets
- Well hardenable, delivered in annealed or heat treated state QT650 or QT700, difficult to weld.
- Martensitic, magnetic, polishable
- Corrosion resistant in water and vapor environment and slightly aggressive chlorine-free environment.
- Strength after heat treatment up to max. 1550 N/mm², use up to 550°C

1.4028

- For highly-stressed components, crankshafts , delivered in rods
- Well hardenable, delivered in annealed or heat treated state QT850, difficult to weld.
- Martensitic, magnetic, polishable
- Corrosion resistant in water and vapor environment and slightly aggressive chlorine-free environment.
- Strength after heat treatment up to max. 1750 N/mm², use up to 550°C

1.4034

- In hardened condition for tools, knives, surgical instruments, scale blades, crankshafts, delivered in rods and sheets
- Well hardenable, delivered in annealed state, unweldable.
- Martensitic, magnetic, polishable
- Corrosion resistant in water and vapor environment and slightly aggressive chlorine-free environment.
- Hardness after treatment up to 55 HRC, use up to 550°C

1.4057 /431

- For highly-stressed components, crankshafts, screws, pull rods with higher corrosion resistance than other martensits
- delivered in rods
- Well hardenable, delivered in annealed or heat treated state QT800, difficult to weld.
- Martensitic, magnetic, polishable
- Corrosion resistant in water
- Corrosion resistant in water and vapour environment and slightly aggressive environment with low content of chloride ions (seaside atmosphere)
- Strength after heat treatment up to max. 1300 N/mm², use up to do 600°C

1.4104 / 430 F

- Suitable for machining on automatic machines
- Martensitic with sulphur content, magnetic, polishable
- Corrosion resistant in water and vapour environment

1.4112 /440 B

- In hardened condition for tools, knives, surgical instruments, scale blades, crankshafts, delivered in rods and sheets
- Well hardenable, delivered in annealed state, unweldable.
- Martensitic, magnetic, polishable
- Corrosion resistant in water and vapour environment and slightly aggressive chlorine-free environment.
- Hardness after treatment up to 60 HRC, use up to 500°C

1.4122

- For highly-stressed components, crankshafts , delivered in rods
- Well hardenable, delivered in heat treated state QT750, unweldable.
- Martensitic, magnetic, polishable
- Corrosion resistant in water and vapor environment and slightly aggressive chlorine-free environment.
- Strength after heat treatment up to max. 1700 N/mm², use up to 550°C

1.4125

- In hardened condition for tools, knives, surgical instruments, ball bearings, engine valves, delivered mostly in rods
- Well hardenable, delivered in heat treated state, unweldable.
- Martensitic, magnetic, polishable
- Corrosion resistant in water and vapor environment and slightly aggressive chlorine-free environment.
- capable of achieving the highest strength, hardness and wear resistance of all stainless alloys after heat treatment.

1.4301 / 304

- The most commonly used stainless steel, used in the food industry, construction, furniture production, drinking water distribution, WWTP, is characterized by good ductility and cold processing
- austenitic, chromium-nickel, non-magnetic, weldable, polishable, non-hardenable
- Can be susceptible to pitting and intercrystalline corrosion in welding areas, resists oxidation up to 350°C

1.4305 / 303

- Steel suitable for chip machining on automatic machines
- austenitic, chromium-nickel with added sulphur, non-magnetic, unweldable, polishable, non-hardenable
- Corrosion resistance and strength slightly lower than 1.4301
- Supplied in round, hexagonal and square rods

1.4307 / 304L

- Variant of steel 1.4301 with reduced carbon content, often both steel qualities are given at certificate as well
- The same use, due to lower carbon content, is less susceptible to intergranular corrosion

1.4306 / 304 L

- Variant of 1.4306 steel with increased Nickel content, often demanded by French customers

1.4541 / 321

- Steel is suitable for the construction of chemical and energy equipment including pressure vessels in an oxidizing environment. For strong inorganic acids only at very low concentrations and normal temperatures.
- austenitic, chromium-nickel-titanic, non-magnetic, weldable, non-polishable, non-hardenable
- resists intergranular corrosion, airborne oxidation up to 850°C, weak inorganic acid solutions and strong inorganic acids

1.4401 / 316

- Option of steel grade 1.4404 with higher carbon content, higher strength
- may be susceptible to intergranular corrosion in the welding area

1.4404 / 316L

- For the construction of pressure vessels and apparatuses in the chemical, pharmaceutical, textile and food industries, where increased resistance to non-oxidising acids is required, or increased product purity, in particular for welded parts
- austenitic, chromium-nickel-molybdenum, non-magnetic, weldable, polishable, non-hardenable
- Increased resistance to pitting (chloride) corrosion, resists weak salt solutions and water with higher chlorine content (pools), use up to 450°C

1.4571 / 316 Ti

- Especially in the building and chemical industries. In many cases, this steel is used to manufacture of pressure vessels. It is suitable for welded components in the chemical, paper and energy industries.
- austenitic, chromium-nickel-molybdenum-titanic, non-magnetic, weldable, non-polishable, non-hardenable
- Resistant to intergranular corrosion throughout the critical temperature range. Its strength is resistance to surface corrosion, especially sulphuric acid and phosphoric acid. It also resists spot corrosion. Resistance to oxidation up to 400°C.

1.4435 / 316 L

- Compared to grade 1.4404, it has a higher Ni and Mo content, which guarantees higher corrosion resistance, especially spot corrosion.

1.4539 / (904 L)

- sometimes referred to as superaustenit
- NiCrMoCu steel, which is characterized by excellent resistance (pitting corrosion or flake corrosion) in aggressive environments (solutions of phosphoric acid, sulphuric acid up to 20 °C of all concentrations, sea water up to 70 °C). Weldable.
- Suitable for reactors and other apparatuses in the chemical and paper industry with higher concentrations of aggressive substances in combination with elevated temperature.

1.4462

- Due to its excellent corrosion properties it is suitable for environment of chlorides and hydrogen sulphide. Use for pipes for the petrochemical industry, drilling platforms, in processes with chlorine-containing solutions and seaside applications. Suitable for heat exchangers, suitable for use in dilute sulphuric acid and in organic acids, especially acetic acid. High strength allows the use of lightweight constructions in the construction industry.
- Duplex ferrite-austenitic structure, magnetic, weldable, worse machinable.

1.4452

- Steel has excellent corrosion resistance comparable to austenitic steels. In some cases, even austenitic stainless steels of this type are exceeded due to the presence of Cu. The steel structure after adequate heat treatment is resistant to intergranular corrosion. It also resists corrosion fatigue during cyclic stress in corrosion environment and to corrosion cracking. Due to the high strength after hardening, the steel also resists erosion in the corrosion environment.
- delivered mostly in rods
- Supplied in annealed AT or hardened state P1300, difficult to weld.
- Precipitation hardenable

- Strength after heat treatment min. 1270N/mm², use up to 600°C

1.4828 / 309

- Heat resistant
- It is resistant to oxidation by air up to the temperature 1000°C. In other environments with higher oxidation ability, the rate of oxidation may rise sharply and the highest application temperature drops to 800°C.
- austenitic, non-magnetic, polishable