

17-4 Stainless Steel Data Sheet

*Chemical Composition (Nominal Values Weight %)

C	Cr	Ni	Cu
0.02	16.75	4.75	3.5

*Composition shown is nominal. Actual chemical composition may vary.

Characteristics

17-4 Stainless Steel is a precipitation hardening stainless steel. 17-4 Stainless Steel is used in plastics processing and extrusion where a combination of high corrosion resistance and wear is necessary.

17-4 Stainless Steel consistently demonstrates the following characteristics:

- High resistance to corrosive environments
- Similar to class 304 Stainless. Superior to all 400 class stainless steels
- Moderate wear resistance
- Superior dimensional stability in heat treatment
- Ability to be EDM machined easily

Applications

17-4 Stainless Steel applications include: plastic extrusion tooling, injection mold inserts, injection mold components, high corrosion resistant stainless applications.

Heat Treatment of 17-4 Stainless Steel

Solution Treating

Heat through to 1900°F, hold 30 minutes per inch of thickness. Air quench to room temperature.

Age hardening

Age one hour per inch of thickness, 4 hours minimum.
 925 F: Approximately 42 HRC
 1025 F: Approximately 38 HRC
 1150 F: Approximately 34 HRC

17-4 Stainless steel is typically supplied in the solution annealed condition at approximately 32-35 HRC.