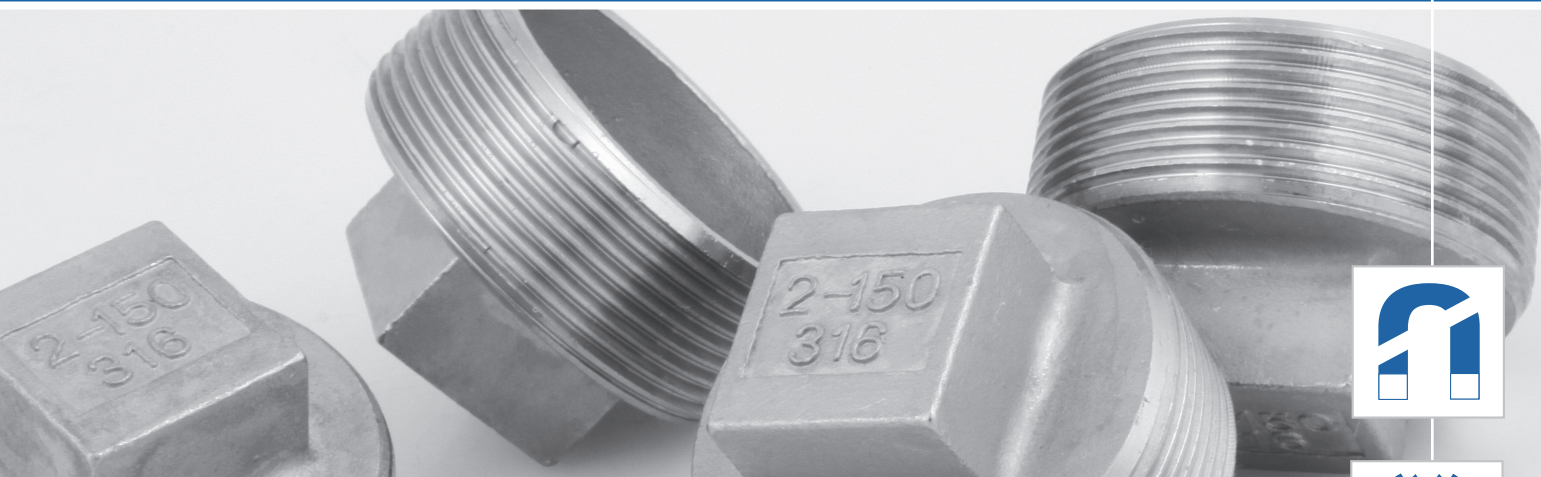


C ≤ 0,07 / Cr 16,5 – 18,5 / Ni 10,0 – 13,0 / Mo 2,0 – 2,5  
1.4401 / X5 CrNiMo 17-12-2 / DIN EN 10088 / DIN 17440  
AISI 316 L / BS 316 S 31 / SIS 2348\*



### Applications

Mechanical engineering; power stations; chemical and petrochemical industry; food industry; agricultural engineering; aviation; nautical gear; medicine and pharmaceuticals; military engineering; decoration and kitchen fittings; construction industry.

### Processing techniques

Machining; open-die and drop forging; cold forming and cold upsetting.



### Corrosion resistance ●●●●○

Compared to material 1.4301, material 1.4401 is characterised by its properties in numerous acids (sulphuric, phosphoric and organic acids) with a moderate chloride content, depending on the temperature and concentration.

### Mechanical properties ●●○○○

Optimal processing properties are achieved by means of heat treatment in the temperature range of between 1000 and 1080 °C followed by rapid cooling in air or water.

### Forging ●●●○○

Heating to 1150 °C without any special precautions. Hot forming in the range between 1150 and 950 °C. Cooling in air or water when distortion no longer appears feasible.

### Welding ●●●●○

Material 1.4401 can be welded without difficulty.

### Machining ●●○○○

Material 1.4401 shows a tendency towards work-hardening during processing. A sulphur content of 0.020 to 0.030 % has a beneficial effect.

### Note

1.4401 can be weakly magnetic. The magnetizability can increase as the cold forming increases. The material can be polished.