C ≤ 0,07 / Cr 17,0 – 19,5 / Ni 8,0 – 10,5 1.4301 / X5 CrNi 18-10 / DIN EN 10088 / DIN 17440 AISI 304 / BS 304 S 15 / SiS 2332\*



## **Applications**

Construction industry; mechanical engeneering; chemical industry; Food industry/agricultural engeneering; petrochemical industry; transportation/automotive engeneering; decoration and kitchen fittings.

# **Processing techniques**

Machining; Open-die and drop forging; Cold forming /cold upsetting.





#### Corrosion resistance •••00

High resistance to environmental exposure: Water, rural and urban atmosphere in the absence of relatively high chloride or acid concentrations. With certain restrictions in food and agricultural feed processing (e.g. white wines, mustard, etc).

#### 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 •••00

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 1.4301 can be welded without difficulty.

### Machining ●●○○○

Material 1.4301 shows a tendency towards work-hardening during processing. A sulphur content of 0.020 to 0.030 % has a beneficial effect.

### Note

1.4301 can be weakly magnetic. The magnetizability can increase as the cold forming increases. The material can be polished.

