

# 1.4301 / 1.4307 Stainless Steel Flange Specification

## Material Overview

1.4301 (AISI 304 / X5CrNi18-10) and 1.4307 (AISI 304L / X2CrNi18-9) are austenitic stainless steels widely used in corrosive and high-temperature environments. Flanges made from these grades offer excellent corrosion resistance, weldability, and durability for pipelines and pressure systems.

Stainless steel types 1.4301 and 1.4307 are also known as grades 304 and 304L respectively. Type 304 is the most versatile and widely used stainless steel. It is still sometimes referred to by its old name 18/8 which is derived from the nominal composition of type 304 being 18% chromium and 8% nickel.

Type 304 stainless steel is an austenitic grade that can be severely deep drawn. This property has resulted in 304 being the dominant grade used in applications like sinks and saucepans.

Type 304L is the low carbon version of 304. It is used in heavy gauge components for improved weldability. Some products such as plate and pipe may be available as “dual certified” material that meets the criteria for both 304 and 304L.

Standards: DIN / EN 1092-1, ISO

Material Grades: 1.4301 (304), 1.4307 (304L)

Nominal Sizes: DN10 - DN2000

Pressure Ratings: PN6, PN10, PN16, PN25, PN40

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## Types of Flanges

- Weld Neck Flange (DIN 2632 / 2633 / EN 1092-1 Type 11)
- Slip-On Flange (DIN 2573 / 2576)
- Blind Flange (DIN 2527)
- Threaded Flange (DIN 2565 / 2566)
- Lap Joint Flange (DIN 2642 / 2643)
- Socket Weld Flange (DIN 2627 / 2628 / 2629)

## Chemical Composition (Typical %)

Grade	C	Mn	Si	P	S	Cr	Ni
1.4301	≤0.07	≤2.0	≤1.0	≤0.045	≤0.015	17.5 - 19.5	8.0 - 10.5
1.4307	≤0.030	≤2.0	≤1.0	≤0.045	≤0.015	17.5 - 19.5	8.0 - 10.5

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## Facing & Dimensions

- **Facing Types:** Raised Face (RF), Flat Face (FF), Ring Type Joint (RTJ)
  - **Dimensions:** As per DIN / EN 1092-1 standards
  - Custom sizes available on request
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## Applications

- Chemical & Petrochemical Pipelines
  - Food & Beverage Processing Equipment
  - Pharmaceutical & Biotech Plants
  - Marine & Shipbuilding Piping
  - Water Treatment & Desalination Plants
  - Oil & Gas Pipelines
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## Why Choose Our Flanges

- Direct **manufacturer & exporter** of 1.4301 / 1.4307 DIN flanges
  - Large stock availability & custom sizes
  - Third-party inspection available (TÜV, SGS, BV, Lloyd' s)
  - Global delivery with competitive pricing
  - Optional coatings & surface finishes
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