



---

---

## Pressure Rating Tables for Stainless Steel Pipe

---

### ***Notes to the tables of allowable working pressures.***

1. This data is intended to provide a general guide. It must not to be relied upon in the absence of competent professional advice.
2. These allowable pressures were calculated by the formula given in AS 4041-2006 "Pressure Piping", clause 3.14.3. Other design codes may give different allowable pressures. The original specifications must be consulted for full details.
3. These calculations assume Piping Class 1 so only apply if this level of piping construction quality has been achieved.
4. Calculations are for seamless pipe to specification ASTM A312/A312M. An additional weld joint efficiency factor of 85% must be allowed for standard welded pipe, and allowance made for corrosion or wear loss if appropriate.
5. Grade 304 and 316 design pressures are only valid at temperatures above 538°C if carbon content is 0.04% or higher.
6. Allowable working pressures are given in megapascals (MPa). Conversions to other units are:

to convert	to	multiply by
megapascals (MPa)	pounds/sq. inch (psi)	145.0
megapascals (MPa)	ksi	0.145
megapascals (MPa)	kilograms/mm <sup>2</sup> (kgf/mm <sup>2</sup> )	0.10197
megapascals (MPa)	bar	10.00
megapascals (MPa)	kilopascals (kPa)	1000

### **LIMITATION OF LIABILITY**

*The information contained in this Atlas Steels series of tables is not an exhaustive statement of all relevant information. It is a general guide for customers to the products and services available from Atlas Steels and no representation is made or warranty given in relation to this information or the products or processes it describes.*

Revised: PJM, 2/09/2010







STAINLESS STEEL GRADE TP316 PIPES - ASTM A 312, Seamless

ALLOWABLE WORKING PRESSURE AT TEMPERATURE

Table with columns for Temperature (°C), Design Strength (MPa), Size (DN, NPS, mm), Sch No, WT (mm), and Allowable Working Pressure (MPa) for various pipe sizes and wall thicknesses.

Important - refer to the associated Notes to this table.

