



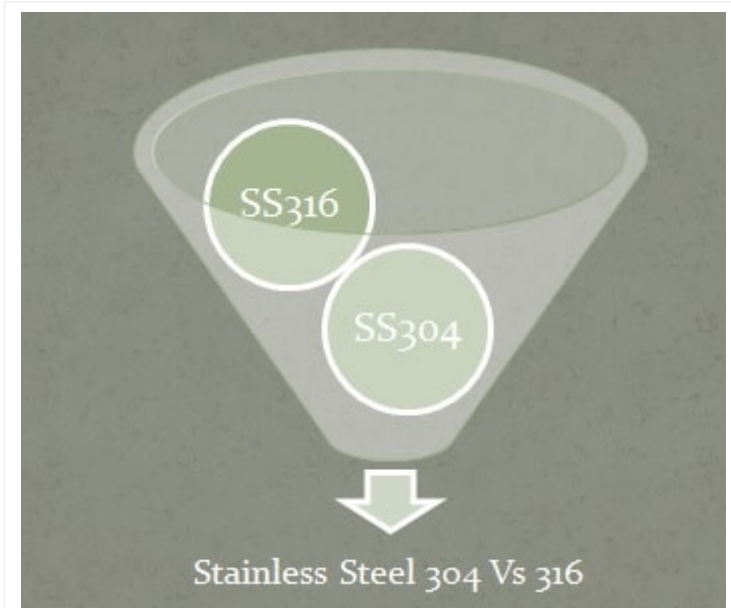
SS304 and SS316 are one of the important stainless steel austenite material grades which are defined in American standards. When you compare Stainless Steel 304 Vs 316, experts conclude 316 stainless steel has almost the same chemical composition as that of 304 stainless steels. SS316 has only difference in molybdenum content which enables it corrosion protective in saline environments.

The metallic samples of both SS304 and SS316 (both are 50 mm thick) are being tested in chemical lab and mechanical labs on different testing equipment. The chemical test is done to identify the chemical composition of steel whereas the mechanical tests are done to identify the strength of 304 vs 316 samples.

The summary of results for chemical tests is shared below:

Grades >>	SS304	SS316
Carbon	0.06	0.05
Manganese	1.9	1.8
Phosphorous	0.04	0.04
Sulphur	0.03	0.03
Molybdenum	0	2.1
Nickel	7	8
Chromium	17.2	18

Rest percentage is iron which is present on both grades.



Comparison of two grades of stainless steel

Also read the comparison on SS304 vs SUS304 steel

The summary of mechanical test is shared below:

Mechanical Properties & Strength

Grades >>	SS304	SS316
Tensile Strength (MPa)	535	545
Yield Strength (MPa)	215	275
Hardness (HB)	200	220
Elongation %	40%	50%

Note: The values are test results conducted by lab of confidential steel manufacturing industry and it is just for informational and indication purpose. The information shared above should not be used for reference, business or legal purpose.