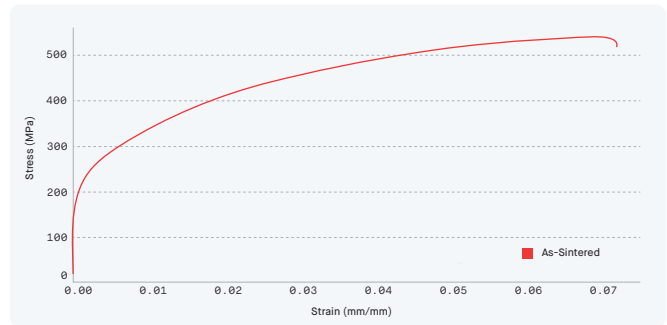


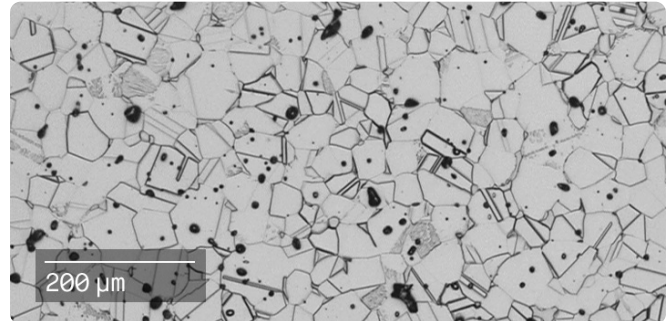
[Material Data Sheet]

304L Stainless Steel



COMPOSITION %

Fe	Balance
Cr	17.5 - 19.5
Ni	8 - 12
Mn	2 (max)
Si	1 (max)
P	0.045 (max)
S	0.03 (max)
N	0.1 (max)
C	0.045 (max)



MECHANICAL PROPERTIES ¹

	Standard	Shop System™ As-Sintered
Ultimate tensile strength - xy (MPa)	ASTM E8M	560 ± 30
Yield strength - xy (MPa)	ASTM E8M	182 ± 4
Elongation - xy (%)	ASTM E8M	63 ± 12
Young's modulus - xy (GPa)	ASTM E111	188 ± 15
Unnotched Charpy impact energy - xy (J)	MPIF 59	215 ± 22
Hardness (HRB)	ASTM E18	68 ± 2
Density (g/cc)	ASTM B311	7.7 ± 0.06

PERFORMANCE ²

Boil test (corrosion)	ASTM F1089	Pass
Copper sulfate test (corrosion)	ASTM F1089	Pass

ATTRIBUTES & APPLICATIONS

Structural components (e.g. housings & frames)
 Jewelry & decorative items
 Fluid transfer components (e.g. manifolds)
 Food processing equipment
 Welded components & assemblies

OTHER STANDARD DESIGNATIONS ³

UNS S30403
 EN 1.4307
 X2CrNi18-9

1. Mechanical properties noted represent mean values +/- 1 standard deviation across Xy & Yx orientations for as-printed samples.
 2. Prior to corrosion resistance testing, all test samples were hand ground to remove surface oxidation and passivated in accordance with ASTM A967.
 3. Listed designations are for reference purposes only. Composition and mechanical properties may vary.
 End-use material performance is impacted (+/-) by certain factors including but not limited to part geometry and design, application and evaluation conditions, etc.