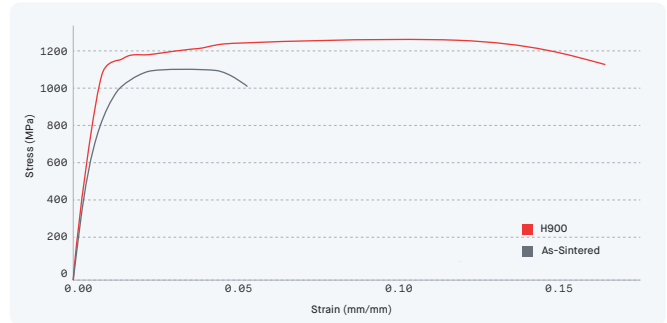


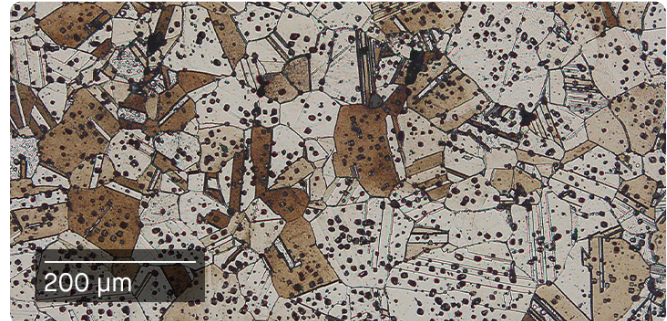
[Material Data Sheet]

17-4 PH Stainless Steel



COMPOSITION %

C	0.07 (max)
Cr	15.5-17.5
Ni	3-5
Cu	3-5
Mn	1.0 (max)
Nb+Ta	0.15-0.45
Fe	bal



MECHANICAL PROPERTIES

	Standard	Studio System™ + As-Sintered	MIM - MPIF 35 min ² As-Sintered	Studio System™ + H900 Heat Treat	MIM - MPIF 35 min ² H900 Heat Treat
Yield strength (MPa)	ASTM E8M	616	650	1020	970
Ultimate tensile strength (MPa)	ASTM E8M	1092	790	1253	1070
Elongation at break (%)	ASTM E8M	6.3	4	16.4	4
Hardness (HRC)	ASTM E18	30	27 (typ)	42	33 (typ)
Density (g/cc)	ASTM B311	7.6	7.5	7.6	7.5

OTHER STANDARD DESIGNATIONS¹

UNS S17400
EN 1.4542
ISO 4542-174-00-1

1. Listed designations are for reference purposes only. Composition and mechanical properties may vary.
 2. Per MPIF Standard 35, Materials Standards for Metal Injection Molded Parts (MPIF 35-MIM, 2018). End-use material performance is impacted (+/-) by certain factors including but not limited to part geometry and design, application and evaluation conditions, etc.
 Tensile properties, hardness, and density data reported are mean values minus 1 sigma.