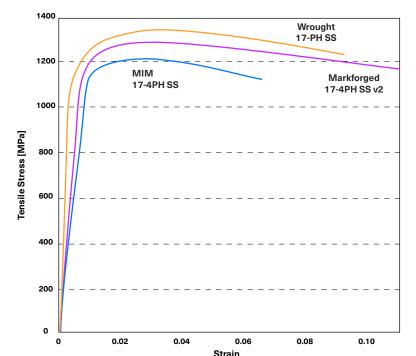


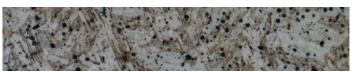
17-4PH_{v2}

STAINLESS STEEL V2

17-4PH Stainless Steel is a multipurpose steel used for industrial applications. Heat-treatable to 36 HRC and possessing 95% wrought strength, Markforged 17-4PH enables you to print high-strength, robust metal parts for a wide variety of applications.







Markforged H900 Heat Treated

17-4PH Stainless Steel v2 printed on the Metal X system heat treated to H900 specification.



MIM H900 Heat Treated

17-4PH MIM standard stainless steel heat treated to H900 specification.



ASTM A564 H900 Heat Treated

ASTM A564 17-4PH stainless steel heat treated to H900 specification.

Physical Properties	Test	Markforged H900	MIM H900	ASTM A564 H900
Ultimate tensile strength [MPa]	ASTM E8	1230	1190	1310
0.2% Yield strength [MPa]	ASTM E8	1050	1090	1170
Elongation at Break [%]	ASTM E8	13	6	10
Tensile Modulus [GPa]	ASTM E8	170	190	190
Hardness [HRC]	ASTM E18	38	33	40
Corrosion	ASTM F1089	Pass	Pass	Pass
Relative density [%]	ASTM B923	96.4	95.5	100

Composition	Weight%		
Iron	Balance		
Carbon	0.07 max		
Chromium	15 - 17.5		
Manganese	1.0 max		
Niobium	0.15 - 0.45		
Silicon	1.0 max		
Phosphorus	0.04		
Sulfur	Balance		
Nickel	3-5		
Copper	3-5		

Material performance and composition is impacted by certain factors including but not limited to part geometry. All data and graphs on front page reflect values of H900 heat treated 17-4 PH SS. Markforged represent typical tested values of solid fill parts, while MIM H900 and Wrought H900 represent typical reference values from MPIF Standard 35. Density and Hardness tests performed by Markforged —all other tests were conducted by 3rd party. All microstructure images etched and photographed at Markforged