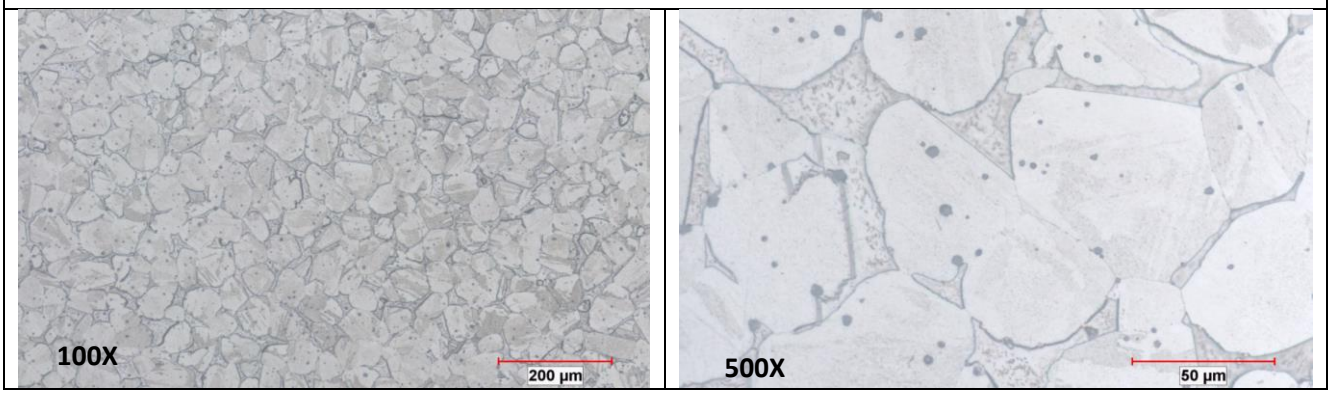
INDO-MIM BJT 17-4 PH SPECIFICATION SHEET

17-4PH Stainless Steel (SS) is a martensite precipitation hardening material used in applications that require a combination of high strength and mechanical properties with good corrosion and wear resistance. Properties can be tailored through heat treatment, making this versatile material valuable for a wide use of applications in the medical, aerospace, marine, food processing, and automotive industries.

Chemical Composition (Wt%)												
Element	Fe	C	Ni	Cr	Cu	Nb+Ta	Mn	Si	P	S	Mo	Others
Min	Bal	-	3	15.5	3	0.15	-	-	-	-	-	-
Max		0.07	5	17.5	5	0.45	1	1	0.04	0.03	0.3	1.0

Properties[1)2)3)]		Test Method	HP Metal Jet	Benchmark MPIF 35	HP Metal Jet	Benchmark MPIF 35
			As Sintered	As Sintered	H900	H900
Hardness (HRC)	XYZ	ASTM E18	μ=24, σ = 1.0	27 (Typical)	μ=39, σ = 1.5	35 (Typical)
Ultimate Tensile Strength (MPa)	XYZ	ASTM E8	μ=875, σ = 16	≥ 790	μ=1281, σ = 27	≥ 1070
Yield Strength (Mpa)	XYZ		μ=796, σ = 32	≥ 650	μ=1179, σ = 39	≥ 970
Elongation (%)	XYZ		μ=8.6, σ = 1.5	≥ 4	μ=8.6, σ = 1.4	≥ 4
Surface Roughness (Ra)	XYZ		μ=5.4, σ = 0.36	-	μ=5.4, σ = 0.36	-
Density	g/cc	ASTM B311	μ=7.6, σ=0.01	7.5 (Typical)	μ=7.6, σ=0.01	7.5 (Typical)
	%		≥ 98%		≥ 98%	

MICROSTRUCTURE (As sintered): Martensite with delta ferrite



Notes:

1. All reported values are typical properties at nominal composition and density.
2. Reported value is as sintered & H900 condition.
3. Disclaimer: All reported values are based on a finite sample size and for reference purposes only. Information contained herein is subject to change without notice and based on specific application designs. No warranty or guarantee is made against these values.