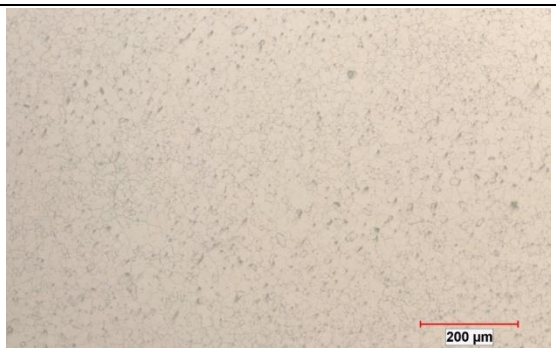
INDO-MIM BJT INCONEL 718 SPECIFICATION SHEET

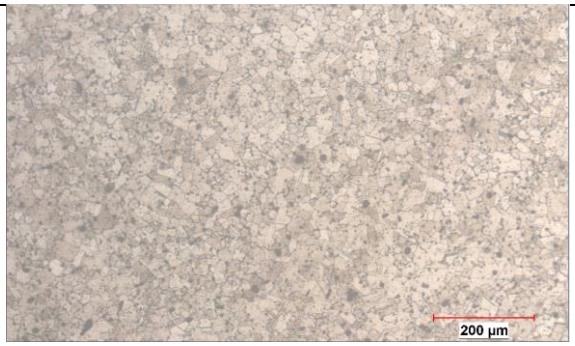
INCONEL Alloy 718 is a precipitation-hardenable nickel-chromium superalloy designed for exceptional mechanical strength and corrosion resistance across a wide temperature range. The alloy exhibits **high yield, tensile, and creep-rupture strength,** with excellent stability and weldability compared to similar nickel-based alloys.

Properties[1)2)3)]	Orientation	Test Method	HP Metal Jet	Benchmark: Indo-MIM - 718	HP Metal Jet	Benchmark: Indo-MIM 718
			As Sintered	As Sintered	Heat Treated	Heat Treated
Hardness (HR15N)	XYZ	ASTM E18	μ=77, σ = 1.0	70 min	μ=80, σ = 0.75	78 Min.
Ultimate Tensile Strength (MPa)	XYZ	ASTM E8	μ=1242, σ = 16	990 Min	μ=1369, σ = 8.6	1180 Min.
Yield Strength (MPa)	XYZ		μ=930, σ = 11	585 Min	μ=1145, σ = 15	900 Min.
Elongation (%)	XYZ		μ=26, σ = 2.0	11 min	μ=20, σ = 1.0	5 Min.
Surface Roughness (μm, Ra)	XYZ		μ=5, σ = 0.35	-	-	-
Density (g/cc)	XYZ	ASTM B311	μ=8.09, σ=0.06	7.98 Min	-	-
	XYZ		98.4% Typ	97% min.	-	-

MICROSTRUCTURE (Heat Treated): Equiaxed grains with austenite Phase



100X



100X

Notes:

1. All reported values are typical properties at nominal composition and density.
2. Reported value are in as-sintered & Heat-Treated condition.
3. Heat Treated Condition:
   SA: 1050°C 2hrs, Primary Aging 720°C for 8 hrs soaking
   Secondary Aging 620°C for 8 hrs soaking

GENERAL / EXTERNAL

4. 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.