

This page is mainly introduced the **B 883 MIM-17-4-PH Datasheet**, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of **B 883 MIM-17-4-PH**, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Specialsteel B 883 MIM-17-4-PH

B 883 MIM-17-4-PH Standard Number:

ITEM	Standard Number	Descriptions
1	B 883 (2010)	Standard Specification for Metal Injection Molding (MIM) Ferrous Materials

B 883 MIM-17-4-PH Chemical composition (mass fraction) (wt.%)

Chemical		Min.(%)					Max.(%)			
C							0.07			
Si							1.00			
Mn							1.00			
Cr		15.00					17.50			
Ni		3.00					5.00			
Cu		3.00					5.00			
Nb		0.15					1.45			
C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta	
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other	

SAE AMS 5342E (2006) Steel, Corrosion-Resistant, Investment Castings
16Cr - 4.1Ni - 0.28Cb (Nb) - 3.2Cu Homogenization, Solution, and
Precipitation Heat Treated (H1100) 130 ksi (896 MPa) Tensile Strength
(17-4)

Used typically for parts requiring good corrosion resistance and strength up to 315°C.

B 883 MIM-17-4-PH Physical Properties

Tensile strength	115-234	σ_b /MPa
Yield Strength	23	$\sigma_{0.2} \geq$ /MPa
Elongation	65	$\delta 5 \geq$ (%)
ψ	-	$\psi \geq$ (%)
Akv	-	$Akv \geq$ /J
HBS	123-321	-
HRC	30	-

B 883 MIM-17-4-PH Mechanical Properties

Tensile strength	231-231	σ_b /MPa
Yield Strength	154	$\sigma_{0.2} \geq$ /MPa
Elongation	56	$\delta 5 \geq$ (%)
ψ	-	$\psi \geq$ (%)
Akv	-	$Akv \geq$ /J
HBS	235-268	-
HRC	30	-

B 883 MIM-17-4-PH Heat Treatment Regime

Annealing	Quenching	Tempering	Normalizing	Q & T
√	√	√	√	√

B 883 MIM-17-4-PH Range of products

Product type	Products	Dimension	Processes	Deliver Status
Plates / Sheets	Plates / Sheets	0.08-200mm(T)*W*L	Forging, hot rolling and cold rolling	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting
Steel Bar	Round Bar, Flat Bar, Square Bar	Φ8-1200mm*L	Forging, hot rolling and cold rolling, Cast	Black, Rough Turning, Shot Blasting,
Coil / Strip	Steel Coil /Steel Strip	0.03-16.0x1200mm	Cold-Rolled & Hot-Rolled	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting
Pipes / Tubes	Seamless Pipes/Tubes, Welded Pipes/Tubes	OD:6-219mm x WT:0.5-20.0mm	Hot extrusion, Cold Drawn, Welded	Annealed, Solution and Aging, Q+T, ACID-WASHED

