



MP35N

1. Brief introduction:

MP35N(UNS R30035) belongs to high-strength multiphase cobalt based high-temperature alloys and is a material grade for fasteners developed by SPS Technologies, a manufacturer of space shuttle fasteners in the United States. MP35N is one of the few alloys used in extreme environments with high-strength grades, and it does not undergo stress corrosion cracking.

MP35N alloy is mainly used in the production of fasteners and springs, and is used in aerospace space equipment, cruise missile launch devices, heart pulsators, valves for nuclear devices, as well as parts working in chloride media in the petroleum industry and shipbuilding industry.

2. MP35N chemical composition under SAE AMS 5758J-2014 standard:

Grade	Fe	C	Si	Mn	P
MP35N	-	-	-	-	-
	1	0.025	0.15	0.15	0.015
S	Cr	Ni	Mo	Ti	Co
-	19	33	9	-	Remainder
0.01	21	37	10.5	1	

Remarks: If require adjustments for some chemical compositions, pls consult with us.

3. MP35N mechanical properties:



Material	Heat treatment status	tensile strength	Yield point	Elongation at break or elongation at break	Cross-sectional shrinkage rate	hardness
		σ_b	σ_s	δ	ψ	HBW
		Mpa	Mpa	%	%	
Bar	Solid solution	793~1000	241~448	≥ 50	≥ 60	≤ 241
	Solid solution+cold deformation+aging	≥ 1793	≥ 1586	≥ 8	≥ 35	$\geq 44\text{HRC}$
	Solid solution+cold deformation+aging					$\geq 38\text{HRC}$

4. Main product types:

wire, rod, bar, strip, plate/sheet, tube, capillary tube, ring, forging.

5. MP35N Source URL:

<https://www.hitealloy.com/product/mp35n.html>