

MP35N - AMS5844 / AMS5845 / AMS5758

## Chemical Properties

Element	Chemical Composition %
Nickel (Ni)	35
Cobalt (Co)	35
Chromium (Cr)	20
Molybdenum (Mo)	10

## Heat Treatment (Aging)

For AMS 5844 (full strength/ heavily cold worked) material: aged at 1000 °F - 1200 °F for 4 hours

## Mechanical Properties - Bar

Bar Dia (in)	Age	UTS	YS (0.2%)	Elong. (%)	RA	HRC
		(ksi)	(ksi)	(%, 4D)	(%)	
Annealed						
NA		115 - 145	35 - 65	50	65	99 B max
Cold Drawn -	Full Strength					
\< 1.80	NA 1050 °F /4	260	230	8	35	44 min
Cold Drawn -	Reduced Strength					
\< 2.00	1050 °F /4	220	210	10	45	
	1050 °F /4	200	190	10	45	
	1300 °F /4	220	210	10	40	51 max
	1350 °F /4	210	200	10	40	51 max
	1425 °F /4	190	180	10	40	51 max
Pilgered -	Reduced Strength					
2.25 to	1050 °F /4	195	185	10	40	
2.625	1300 °F /4	185	175	12	40	51 max
	1350 °F /4	175	165	12	40	51 max
	1425 °F /6	170	160	12	40	51 max

## Mechanical Properties - Tubing

Age	UTS (ksi)	YS (0.2%) (ksi)	Elong (% , 4D)	RA (%)	Hardness (HRC)
1050 °F		220			
1300 °F /4	YS + 100	200			51 max
1350 °F /4		190			51 max
1425 °F /6	190	180	10	40	51 max

## Shear Strength - Bar

AMS 5844 and 5845 material in bar sizes up to 1.00" dia minimum sheer strength value of 150 ksi

For larger sizes please contact your local service centre

## Disclaimer

This data is indicative only and as such is not to be relied upon in place of the full specification. In particular, mechanical property requirements vary widely with temper, product

and product dimensions. All information is based on our present knowledge and is given in good faith. No liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon.

The information provided in this datasheet has been drawn from various recognised sources, including EN Standards, recognised industry references (printed & online) and manufacturers' data. No guarantee is given that the information is from the latest issue of those sources or about the accuracy of those sources.

Material supplied by the Company may vary significantly from this data, but will conform to all relevant and applicable standards.

As the products detailed may be used for a wide variety of purposes and as the Company has no control over their use; the Company specifically excludes all conditions or warranties expressed or implied by statute or otherwise as to dimensions, properties and/or fitness for any particular purpose, whether expressed or implied.

Advice given by the Company to any third party is given for that party's assistance only and without liability on the part of the Company. All transactions are subject to the Company's current Conditions of Sale. The extent of the Company's liabilities to any customer is clearly set out in those Conditions; a copy of which is available on request.