

Trade name	Chemical composition												
	C %	Mn %	P ≤%	S ≤%	Si %	Ni %	Cr %	Mo %	Cu %	Fe %	Co %	W %	Other %
Alloy C(CW-6M)	0.07	1.0	0.04	0.03	1.0	Bal.	17.0-20.0	17.0-20.0		3.00			
Alloy X	0.20	1.0	0.04	0.03	1.0	Bal.	20.50-23.00	8.0-10.0		17.0-20.0	0.5-2.5	0.20-1.0	
In 600	0.15	1.0	0.03	0.015	0.50	72 Min	14.0-17.0		0.50	6.0-10.0			
In 625	0.10	0.50	0.015	0.015	0.50	Bal.	20.0-23.0	8.0-10.0	0.30	5.0	1.0		0.4Ti, 0.4Al, 3.15-4.15 Cb +Ta
Monel 410	0.35	1.5			2.0	62.0-68.0			260-33.0	2.5	*		0.50Al
S Monel	0.25	1.5			3.5-4.5	60.0			27.0-31.0	2.5	*		0.50Al
RH Monel	0.40-0.70	1.5			2.3-3.0	Bal.			29.0-34.0	0.5	1.0		0.50Al
E Monel	0.30	1.5			1.0-2.0	60.0 Min			26.0-33.0	3.5	*		0.50Al, 1.0-3.0 Cb+Ta
M- 35 Monel	0.35	1.5	0.03	0.03	1.25	Bal.			26.0-33.0	3.5			0.5Max Cb

Cobalt included in % nickel , maximum unless range is shown

Alloy	Properties of separately cast test bars of nickel base alloys						
	Heat treatment Condition	Tensile strength		0.2% yield strength		%Elongation range	Hardness range or max
		English(psia)	Metric(Mpa)	English(psia)	Metric(Mpa)		
Alloy	As cast	80-95000	552-95000	45-55000	310-379	8-12	90-100Rb
C	Annealed	75-95000	517-655	45-55000	310-379	8-12	90Rb-25Rc
Alloy	A.C.24°C	63-70000	434-483	41-45000	283-310	10-15	85-96Rb
X	A.C.816°C	35-45000	241-310	-	-	12-20	-
In 600	As Cast	65-75000	448-517	35-40000	241-276	10-20	80-90Rb
In 625	Annealed	80-100000	552-758	40-55000	276-379	15-30	10-20Rc
Monel 410	As Cast	65-75000	448-517	32-38000	221-262	25-35	65-75Rb
S	annealed	100-110000	690-758	55-65000	379-448	5-10	20-28Rc
Monel	hardened	120-140000	827-965	85-100000	586-690	0	32-38Rc
RH Monel	As cast	100-110000	690-758	60-80000	414-552	10-20	20-30Rc
Monel E	As cast	65-80000	448-552	33-40000	227-276	25-35	67-78Rb
M-35 Monel	As cast	65-80000	448-552	25-35000	172-241	25-40	65-85Rb