

A RO AUTICAL MAT RIAL SPECIFICATIONS

AMS 2262B

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TOLERANCES

Nickel, Nickel-Base, and Cobalt-Base Alloy Sheet, Strip, and Plate

1. PURPOSE: To publish established manufacturing tolerances.
 2. APPLICATION: Tolerances shown herein apply, unless otherwise agreed upon by purchaser and vendor. These tolerances apply to all conditions, unless otherwise noted. The term "excl" is used to apply only to the higher figure of the specified range.
 3. THICKNESS: Thickness is measured at any place on widths less than 1 in.; at any place 0.375 in. and over from an edge on widths 1 in. and over.
- 3.1 Cold Rolled and Hot Rolled Sheet:

TABLE I

Nominal Thickness Inch	Thickness Tolerance, Inch, Plus and Minus			
	Cold Rolled		Hot Rolled	
	Width Ranges, Inches		Width Ranges, Inches	
	48 and under	Over 48 to 60 incl	48 and under	Over 48 to 60 incl
0.018 to 0.025, incl	0.002	0.003	0.003	0.004
Over 0.025 to 0.034, incl	0.003	0.004	0.004	0.005
Over 0.034 to 0.056, incl	0.004	0.005	0.005	0.006
Over 0.056 to 0.070, incl	0.005	0.006	0.006	0.007
Over 0.070 to 0.078, incl	0.006	0.007	0.007	0.008
Over 0.078 to 0.093, incl	0.007	0.008	0.008	0.009
Over 0.093 to 0.109, incl	0.007	0.009	0.009	0.010
Over 0.109 to 0.125, incl	0.008	0.010	0.010	0.012
Over 0.125 to 0.140, incl	0.008	0.010	0.012	0.014
Over 0.140 to 0.171, incl	0.009	0.012	0.014	0.016
Over 0.171 to 0.187, incl	0.010	0.013	0.015	0.017
Over 0.187 to 0.218, incl	0.011	0.015	0.017	0.019
Over 0.218 to 0.234, incl	0.012	0.016	0.018	0.020
Over 0.234 to 0.250, incl	0.013	0.018	0.020	0.022

Note 1. Hot Rolled tolerances for Ni-Mo and Co-base alloys for widths 48 in. and under are as listed in Table I except for thicknesses over 0.125 in. which are as follows:

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Nominal Thickness Inch	Thickness Tolerance, Inch	
	Plus	Minus
Over 0.125 to 0.140, incl	0.013	0.010
Over 0.140 to 0.171, incl	0.016	0.010
Over 0.171 to 0.187, incl	0.018	0.010
Over 0.187	Hot rolled plate tolerances (Table III) apply	

Note 2. Hot rolled tolerances for width range "Over 48 to 60 incl" do not apply to Ni-Mo and Co-base alloys.

Note 3. Cold rolled tolerances do not apply to Ni-Mo and Co-base alloys.

Note 4. Cold rolled tolerances do not apply to age-hardenable Ni-Cr alloys over 44 in. in width.

3.2 Cold Rolled Strip:

TABLE II

Nominal Thickness Inch	Thickness Tolerance, Inch, Plus and Minus	
	Width Ranges, Inches	
	Under 1	1 to 1¼ incl
Under 0.006	0.0003	0.0005
0.006 to 0.009, incl	0.0005	0.0008
Over 0.009 to 0.050, incl	0.001	0.0015
Over 0.050 to 0.093, incl	0.002	0.0025
Over 0.093 to 0.125, incl	0.0025	0.004

Note 1. Table II does not apply to age-hardenable Ni-Cr alloys for thicknesses over 0.025 in. and widths over 12 inches.

Note 2. Strip 0.020 in. thick and under is not obtainable in widths over 12 in. in Ni and Ni-Base alloys.

Note 3. Table II does not apply to Ni-Mo and Co-Base alloys.

3.3 Hot Rolled Plate:

TABLE III

Nominal Thickness (T) Inches	Thickness Tolerance, Inch, Plus			
	Width Ranges, Inches			
	Under 48	48 to 60 excl	60 to 72 excl	72 to 84 excl
0.1875 to 0.3125, excl	0.113T	0.132T	0.150T	0.169T
0.3125 to 0.375, excl	0.094T	0.113T	0.132T	0.150T
0.375 to 0.4375, excl	0.088T	0.094T	0.113T	0.132T
0.4375 to 0.500, excl	0.075T	0.088T	0.094T	0.113T
0.500 to 0.625, excl	0.063T	0.075T	0.088T	0.094T
0.625 to 0.750, excl	0.057T	0.069T	0.075T	0.088T
0.750 to 1.000, excl	0.050T	0.057T	0.069T	0.075T
1.000 and over	0.050T	0.050T	0.057T	0.069T

Note 1. Minus tolerance shall be 0.010 in. for all widths and all thicknesses.

Note 2. Tolerances above are only approximate for age-hardenable Ni-Cr alloys; failure to meet these tolerances will not be cause for rejection.

Note 3. The tolerances listed for "48 to 60 excl" shall apply to Ni-Mo and Co-base alloys for widths 48 in. and under. Tolerances for other width ranges listed are not applicable to these alloys.

4. WIDTH:

4.1 Sheet (widths 60 in. and less): Shall not vary in width more than +1/8 in., -0.

4.2 Strip

TABLE V

Nominal Thickness Inch	Nominal Width Inches	Width Tolerance, Inch
		Plus and Minus
0.009 and under	12 and under	0.005
Over 0.009 to 0.014, incl	12 and under	0.007
Over 0.014 to 0.075, incl	14 and under	0.007
Over 0.075 to 0.100, incl	14 and under	0.009
Over 0.100 to 0.125, incl	14 and under	0.012

Note 1. Table V does not apply to Ni-Mo and Co-base alloys.

4.3 Plate

TABLE VI

Nominal Thickness Inches	Width Tolerance, Inch, Plus		
	Width Ranges, Inches		
	30 and under	Over 30 to 72, incl	Over 72 to 84, incl
0.1875 to 0.3125, excl	0.1875	0.250	0.375
0.3125 to 0.500, excl	0.250	0.375	0.375
0.500 to 0.750, excl	0.375	0.375	0.500
0.750 to 1.000, excl	0.500	0.500	0.625
1.000 to 1.250, incl	0.625	0.625	0.750
Over 1.250	0.125	0.125	0.125

Note 1. Minus tolerance shall be 0.125 in. for all widths and all thicknesses except as specified in notes 2, 3, and 4.

Note 2. Tolerances for thicknesses over 1.250 in. are based on abrasive cutting or machining rather than shearing and are applicable only to specially flattened and annealed material. When specified, plates in these thicknesses may also be obtained with a tolerance of +0.250 in., -0.

Note 3. When specified, plates with thicknesses 1.250 in. and under may also be furnished abrasive cut or machined to tolerances specified in note 2.