

ALMEN A STRIP SPECIFICATIONS

inches(mm)

SPECIFICATION	LENGTH		WIDTH		THICKNESS		FLATNESS	HARDNESS
<i>Electronics Inc. Grade A-1S</i>	<u>3.008</u> 2.985	2.9965 ± 0.0115	<u>0.750</u> 0.745	$.7475 \pm 0.0025$	<u>0.0513</u> 0.0505	0.0509 ± 0.0004	± 0.0005	HRC 45-48
	<u>(76.40)</u> (75.82)	(76.11 ± 0.29)	<u>(19.05)</u> (18.92)	(18.985 ± 0.065)	<u>(1.303)</u> (1.283)	(1.293 ± 0.01)	(± 0.013)	
<i>Electronics Inc Grade A-1B</i>	<u>3.015</u> 2.985	3.00 ± 0.015	<u>0.750</u> 0.745	$.7475 \pm 0.0025$	<u>0.0520</u> 0.0500	0.051 ± 0.001	± 0.0015	HRC 45-48
	<u>(76.58)</u> (75.82)	(76.20 ± 0.38)	<u>(19.05)</u> (18.92)	(18.985 ± 0.065)	<u>(1.321)</u> (1.270)	(1.295 ± 0.025)	(± 0.038)	
<i>Electronics Inc. Grade A-1</i>	<u>3.008</u> 2.985	2.9965 ± 0.0115	<u>0.750</u> 0.745	$.7475 \pm 0.0025$	<u>0.0516</u> 0.0500	0.0508 ± 0.0008	± 0.0010	HRC 44-50
	<u>(76.40)</u> (75.82)	(76.11 ± 0.29)	<u>(19.05)</u> (18.92)	(18.985 ± 0.065)	<u>(1.311)</u> (1.270)	(1.2905 ± 0.0205)	(± 0.025)	
<i>Electronics Inc. Grade A-2</i>	<u>3.015</u> 2.985	3.00 ± 0.015	<u>0.750</u> 0.745	$.7475 \pm 0.0025$	<u>0.0520</u> 0.0500	0.051 ± 0.001	± 0.0015	HRC 44-50
	<u>(76.58)</u> (75.82)	(76.20 ± 0.38)	<u>(19.05)</u> (18.92)	(18.985 ± 0.065)	<u>(1.321)</u> (1.270)	(1.295 ± 0.025)	(± 0.038)	
<i>Electronics Inc² Grade A-3</i> NSN 6635-00-512-1892	<u>3.015</u> 2.985	3.00 ± 0.015	<u>0.750</u> 0.745	$.7475 \pm 0.0025$	<u>0.0520</u> 0.0500	0.051 ± 0.001	± 0.0015	HRC 44-50
	<u>(76.58)</u> (75.82)	(76.20 ± 0.38)	<u>(19.05)</u> (18.92)	(18.985 ± 0.065)	<u>(1.321)</u> (1.270)	(1.295 ± 0.025)	(± 0.038)	
<i>AiResearch EMS92406 [Grade A-1S]</i>	<u>3.015</u> 2.985	3.00 ± 0.015	<u>0.750</u> 0.745	$.7475 \pm 0.0025$	<u>0.0515</u> 0.0505	0.051 ± 0.0005	± 0.0005	HRC 45-48
	<u>(76.58)</u> (75.82)	(76.20 ± 0.38)	<u>(19.05)</u> (18.92)	(18.985 ± 0.065)	<u>(1.308)</u> (1.283)	(1.2955 ± 0.0125)	(± 0.013)	
<i>ASTM B851-94 [Grade A-1]</i>	<u>3.008</u> 2.976	2.992 ± 0.016	<u>0.748</u> 0.744	0.746 ± 0.002	<u>0.0516</u> 0.0500	0.0508 ± 0.0008	± 0.0010	HRC 44-50
	<u>(76.40)</u> (75.60)	(76.0 ± 0.4)	<u>(19.00)</u> (18.90)	(18.95 ± 0.05)	<u>(1.311)</u> (1.270)	(1.2905 ± 0.0205)	(± 0.025)	
<i>BAEP 2009 [Grade A-2]</i>	<u>3.015</u> 2.985	3.00 ± 0.015	<u>0.750</u> 0.745	$.7475 \pm 0.0025$	<u>0.0520</u> 0.0500	0.051 ± 0.001	± 0.0015	HRC 44-50
	<u>(76.58)</u> (75.82)	(76.20 ± 0.38)	<u>(19.05)</u> (18.92)	(18.985 ± 0.065)	<u>(1.321)</u> (1.270)	(1.2955 ± 0.0255)	(± 0.038)	
<i>Bell Helicopter TEXTRON BPS FW4409 [Grade A-1]</i>	<u>3.015</u> 2.985	3.00 ± 0.015	<u>0.750</u> 0.745	$.7475 \pm 0.0025$	<u>0.0520</u> 0.0500	0.051 ± 0.001	± 0.0010	HRC 44-50
	<u>(76.58)</u> (75.82)	(76.20 ± 0.38)	<u>(19.05)</u> (18.92)	(18.985 ± 0.065)	<u>(1.321)</u> (1.270)	(1.2955 ± 0.0255)	(± 0.025)	
<i>Boeing BAC5730 M [Grade A-1B]</i>	<u>3.015</u> 2.985	3.00 ± 0.015	<u>0.750</u> 0.745	$.7475 \pm 0.0025$	<u>0.0520</u> 0.0500	0.051 ± 0.001	± 0.0015	HRC 45-48
	<u>(76.58)</u> (75.82)	(76.20 ± 0.38)	<u>(19.05)</u> (18.92)	(18.985 ± 0.065)	<u>(1.321)</u> (1.270)	(1.2955 ± 0.0255)	(± 0.038)	
<i>Boeing BAC5730 N [Grade A-1B]</i>	<u>3.015</u> 2.985	3.00 ± 0.015	<u>0.750</u> 0.745	$.7475 \pm 0.0025$	<u>0.0520</u> 0.0500	0.051 ± 0.001	± 0.0015	HRC 45-48
	<u>(76.58)</u> (75.82)	(76.20 ± 0.38)	<u>(19.05)</u> (18.92)	(18.985 ± 0.065)	<u>(1.321)</u> (1.270)	(1.2955 ± 0.0255)	(± 0.038)	
<i>Boeing PSD 6-81 [Grade A-2]</i>	<u>3.015</u> 2.985	3.00 ± 0.015	<u>0.750</u> 0.745	$.7475 \pm 0.0025$	<u>0.0520</u> 0.0500	0.051 ± 0.001	± 0.0015	HRC 44-50
	<u>(76.58)</u> (75.82)	(76.20 ± 0.38)	<u>(19.05)</u> (18.92)	(18.985 ± 0.065)	<u>(1.321)</u> (1.270)	(1.2955 ± 0.0255)	(± 0.038)	
<i>Boeing PSD 6-88 [Grade A-2]</i>	<u>3.015</u> 2.985	3.00 ± 0.015	<u>0.750</u> 0.745	$.7475 \pm 0.0025$	<u>0.0520</u> 0.0500	0.051 ± 0.001	± 0.0015	HRC 44-50
	<u>(76.58)</u> (75.82)	(76.20 ± 0.38)	<u>(19.05)</u> (18.92)	(18.985 ± 0.065)	<u>(1.321)</u> (1.270)	(1.2955 ± 0.0255)	(± 0.038)	
<i>Boeing P.S. 14023 [Grade A-1]</i>	<u>3.008</u> 2.976	2.992 ± 0.016	<u>0.750</u> 0.742	0.746 ± 0.004	<u>0.0516</u> 0.0500	0.0508 ± 0.0008	± 0.0010	HRC 44-50
	<u>(76.40)</u> (75.60)	(76.0 ± 0.4)	<u>(19.05)</u> (18.85)	(18.95 ± 0.1)	<u>(1.311)</u> (1.270)	(1.2905 ± 0.0205)	(± 0.025)	
<i>Caterpillar 1E 2054 [Grade A-1]</i>	<u>3.008</u> 2.976	2.992 ± 0.016	<u>0.750</u> 0.742	0.746 ± 0.004	<u>0.0520</u> 0.0500	0.051 ± 0.001	± 0.0010	HRC 44-50
	<u>(76.40)</u> (75.60)	(76.0 ± 0.4)	<u>(19.05)</u> (18.85)	(18.95 ± 0.1)	<u>(1.32)</u> (1.27)	(1.295 ± 0.025)	(± 0.025)	
<i>deHavilland Aircraft PPS. 17.03 [Grade A-2]</i>	<u>3.015</u> 2.985	3.00 ± 0.015	<u>0.750</u> 0.745	$.7475 \pm 0.0025$	<u>0.0520</u> 0.0500	0.051 ± 0.001	± 0.0015	HRC 44-50
	<u>(76.58)</u> (75.82)	(76.20 ± 0.38)	<u>(19.05)</u> (18.92)	(18.985 ± 0.065)	<u>(1.321)</u> (1.270)	(1.2955 ± 0.0255)	(± 0.038)	

Garrett Aviation GPE-00071 [Grade A-2]	<u>3.015</u>	<u>3.00 ± 0.015</u>	<u>0.750</u>	<u>.7475 ± 0.0025</u>	<u>0.0520</u>	<u>0.051 ± 0.001</u>	<u>±0.0015</u>	HRC 44-50
	<u>2.985</u>		<u>0.745</u>		<u>0.0500</u>			
	(76.58)	(76.20 ± 0.38)	(19.05)	(18.985 ± 0.065)	(1.321)	(1.2955 ± 0.0255)	(±0.038)	
General Dynamics FPS-1302 [Grade A-2]	<u>3.015</u>	<u>3.00 ± 0.015</u>	<u>0.750</u>	<u>.7475 ± 0.0025</u>	<u>0.0520</u>	<u>0.051 ± 0.001</u>	<u>±0.0015</u>	HRC 44-50
	<u>2.985</u>		<u>0.745</u>		<u>0.0500</u>			
	(76.58)	(76.20 ± 0.38)	(19.05)	(18.985 ± 0.065)	(1.321)	(1.2955 ± 0.0255)	(±0.038)	
GE D50TF14-S1 [Grade A-1]	<u>3.008</u>	<u>2.992 ± 0.016</u>	<u>0.750</u>	<u>.746 ± 0.004</u>	<u>0.0516</u>	<u>0.0508 ± 0.0008</u>	<u>±0.0010</u>	HRC 44-50
	<u>2.976</u>		<u>0.742</u>		<u>0.0500</u>			
	(76.40)	(76.0 ± 0.4)	(19.05)	(18.95 ± 0.1)	(1.311)	(1.2905 ± 0.0205)	(±0.025)	
GE P11C-AG4 Rev. D [Grade A-1S]	<u>3.015</u>	<u>3.00 ± 0.015</u>	<u>0.750</u>	<u>.7475 ± 0.0025</u>	<u>0.0520</u>	<u>0.051 ± 0.001</u>	<u>±0.0005</u>	HRC 44-50
	<u>2.985</u>		<u>0.745</u>		<u>0.0500</u>			
	(76.58)	(76.20 ± 0.38)	(19.05)	(18.985 ± 0.065)	(1.321)	(1.2955 ± 0.0255)	(±0.013)	
GE P11TF3-S6 [Grade A-1S]	<u>3.015</u>	<u>3.00 ± 0.015</u>	<u>0.750</u>	<u>.7475 ± 0.0025</u>	<u>0.0520</u>	<u>0.051 ± 0.001</u>	<u>±0.0005</u>	HRC 44-50
	<u>2.985</u>		<u>0.745</u>		<u>0.0500</u>			
	(76.58)	(76.20 ± 0.38)	(19.05)	(18.985 ± 0.065)	(1.321)	(1.2955 ± 0.0255)	(±0.013)	
GE P11TF3-S11 [Grade A-1S]	<u>3.015</u>	<u>3.00 ± 0.015</u>	<u>0.750</u>	<u>.7475 ± 0.0025</u>	<u>0.0520</u>	<u>0.051 ± 0.001</u>	<u>±0.0005</u>	HRC 44-50
	<u>2.985</u>		<u>0.745</u>		<u>0.0500</u>			
	(76.58)	(76.20 ± 0.38)	(19.05)	(18.985 ± 0.065)	(1.321)	(1.2955 ± 0.0255)	(±0.013)	
GE P11TF3-S13 [Grade A-1S]	<u>3.015</u>	<u>3.00 ± 0.015</u>	<u>0.750</u>	<u>.7475 ± 0.0025</u>	<u>0.0520</u>	<u>0.051 ± 0.001</u>	<u>±0.0005</u>	HRC 44-50
	<u>2.985</u>		<u>0.745</u>		<u>0.0500</u>			
	(76.58)	(76.20 ± 0.38)	(19.05)	(18.985 ± 0.065)	(1.321)	(1.2955 ± 0.0255)	(±0.013)	
General Motors Engineering Standards GM 4283p [Grade A-1]	<u>3.007</u>	<u>2.992 ± 0.015</u>	<u>0.748</u>	<u>.746 ± .002</u>	<u>0.0524</u>	<u>0.0512 ± 0.0012</u>	<u>±0.0008</u>	HRC 44-55
	<u>2.977</u>		<u>0.744</u>		<u>0.0500</u>			
	(76.38)	(76.0 ± 0.38)	(19.00)	(18.95 ± 0.05)	(1.330)	(1.30 ± 0.03)	(±0.020)	
Hawker Siddeley Aviation S.29.46 [Grade A-1]	<u>3.015</u>	<u>3.00 ± 0.015</u>	<u>0.750</u>	<u>.7475 ± 0.0025</u>	<u>0.0520</u>	<u>0.051 ± 0.001</u>	<u>±0.0010</u>	HRC 44-50
	<u>2.985</u>		<u>0.745</u>		<u>0.0500</u>			
	(76.58)	(76.20 ± 0.38)	(19.05)	(18.985 ± 0.065)	(1.321)	(1.2955 ± 0.0255)	(±0.025)	
Lockheed-Georgia STP51-501 [Grade A-2]	<u>3.015</u>	<u>3.00 ± 0.015</u>	<u>0.750</u>	<u>.7475 ± 0.0025</u>	<u>0.0520</u>	<u>0.051 ± 0.001</u>	<u>±0.0015</u>	HRC 44-50
	<u>2.985</u>		<u>0.745</u>		<u>0.0500</u>			
	(76.58)	(76.20 ± 0.38)	(19.05)	(18.985 ± 0.065)	(1.321)	(1.2955 ± 0.0255)	(±0.038)	
MIL-P-81985 [Grade A-1]	<u>3.015</u>	<u>3.00 ± 0.015</u>	<u>0.750</u>	<u>.7475 ± 0.0025</u>	<u>0.0520</u>	<u>0.051 ± 0.001</u>	<u>±0.0010</u>	HRC 44-50
	<u>2.985</u>		<u>0.745</u>		<u>0.0500</u>			
	(76.58)	(76.20 ± 0.38)	(19.05)	(18.985 ± 0.065)	(1.321)	(1.2955 ± 0.0255)	(±0.025)	
MIL-S-13165C [Grade A-2]	<u>3.015</u>	<u>3.00 ± 0.015</u>	<u>0.750</u>	<u>.7475 ± 0.0025</u>	<u>0.0520</u>	<u>0.051 ± 0.001</u>	<u>±0.0015</u>	HRC 44-50
	<u>2.985</u>		<u>0.745</u>		<u>0.0500</u>			
	(76.58)	(76.20 ± 0.38)	(19.05)	(18.985 ± 0.065)	(1.321)	(1.2955 ± 0.0255)	(±0.038)	
Navistar International Transportation Corp. CEMS A-39 [Grade A-1]	<u>3.008</u>	<u>2.992 ± 0.016</u>	<u>0.750</u>	<u>.746 ± 0.004</u>	<u>0.0516</u>	<u>0.0508 ± 0.0008</u>	<u>±0.0010</u>	HRC 44-50
	<u>2.976</u>		<u>0.742</u>		<u>0.0500</u>			
	(76.40)	(76.0 ± 0.4)	(19.05)	(18.95 ± 0.1)	(1.311)	(1.2905 ± 0.0205)	(±0.025)	
NSN 6635-00-512-1892 [Grade A-3] ²	<u>3.015</u>	<u>3.00 ± 0.015</u>	<u>0.750</u>	<u>.7475 ± 0.0025</u>	<u>0.0520</u>	<u>0.051 ± 0.001</u>	<u>±0.0015</u>	HRC 44-50
	<u>2.985</u>		<u>0.745</u>		<u>0.0500</u>			
	(76.58)	(76.20 ± 0.38)	(19.05)	(18.985 ± 0.065)	(1.321)	(1.2955 ± 0.0255)	(±0.038)	
Pratt & Whitney 70-41-02 [Grade A-1]	<u>3.008</u>	<u>2.992 ± 0.016</u>	<u>0.750</u>	<u>.746 ± 0.004</u>	<u>0.0516</u>	<u>0.0508 ± 0.0008</u>	<u>±0.0010</u>	HRC 44-50
	<u>2.976</u>		<u>0.742</u>		<u>0.0500</u>			
	(76.40)	(76.0 ± 0.4)	(19.05)	(18.95 ± 0.1)	(1.311)	(1.2905 ± 0.0205)	(±0.025)	
Pratt & Whitney PT444143 A [Grade A-1S]	<u>3.008</u>	<u>2.992 ± 0.016</u>	<u>0.750</u>	<u>.746 ± 0.004</u>	<u>0.0515</u>	<u>0.051 ± 0.0005</u>	<u>±0.0005</u>	HRC 45-49
	<u>2.976</u>		<u>0.742</u>		<u>0.0505</u>			
	(76.40)	(76.0 ± 0.4)	(19.05)	(18.95 ± 0.1)	(1.308)	(1.2955 ± 0.0125)	(±0.013)	
Pratt & Whitney PWA 36906 [Grade A-1]	<u>3.008</u>	<u>2.992 ± 0.016</u>	<u>0.750</u>	<u>.746 ± 0.004</u>	<u>0.0516</u>	<u>0.0508 ± 0.0008</u>	<u>±0.0010</u>	HRC 44 - 50
	<u>2.976</u>		<u>0.742</u>		<u>0.0500</u>			
	(76.40)	(76.0 ± 0.4)	(19.05)	(18.95 ± 0.1)	(1.311)	(1.2905 ± 0.0205)	(±0.025)	

Pratt & Whitney TAM34744 M [Grade A-1]	<u>3.015</u> 2.985	<u>3.00 ± 0.015</u>	<u>0.750</u> 0.745	.7475 ± 0.0025	<u>0.0520</u> 0.0500	<u>0.051 ± 0.001</u>	±0.0010	HRC 44-50
	(76.58) (75.82)	(76.20 ± 0.38)	(19.05) (18.92)	(18.985 ± 0.065)	(1.321) (1.270)	(1.2955 ± 0.0255)	(±0.025)	
SAE-AMS-13165C [Grade A-2]	<u>3.015</u> 2.985	<u>3.00 ± 0.015</u>	<u>0.750</u> 0.745	.7475 ± 0.0025	<u>0.0520</u> 0.0500	<u>0.051 ± 0.001</u>	±0.0015	HRC 44-50
	(76.58) (75.82)	(76.20 ± 0.38)	(19.05) (18.92)	(18.985 ± 0.065)	(1.321) (1.270)	(1.2955 ± 0.0255)	(±0.038)	
SAE AMS2430L ¹ [Grade A-1]	<u>3.008</u> 2.976	<u>2.992 ± 0.016</u>	<u>0.750</u> 0.742	.746 ± 0.004	<u>0.0516</u> 0.0500	<u>0.0508 ± 0.0008</u>	±0.0010	HRC 44-50
	(76.40) (75.60)	(76.0 ± 0.4)	(19.05) (18.85)	(18.95 ± 0.1)	(1.311) (1.270)	(1.2905 ± 0.0205)	(±0.025)	
SAE AMS2432B [Grade A-1S]	<u>3.008</u> 2.976	<u>2.992 ± 0.016</u>	<u>0.750</u> 0.742	.746 ± 0.004	<u>0.0513</u> 0.0503	<u>0.0508 ± 0.0005</u>	±0.0005	HRC 45-48
	(76.40) (75.60)	(76.0 ± 0.4)	(19.05) (18.85)	(18.95 ± 0.1)	(1.303) (1.278)	(1.2905 ± .0125)	(±0.013)	
SAE J442 JAN-95 [Grade A-1]	<u>3.008</u> 2.976	<u>2.992 ± 0.016</u>	<u>0.750</u> 0.742	.746 ± 0.004	<u>0.0516</u> 0.0500	<u>0.0508 ± 0.0008</u>	±0.0010	HRC 44 - 50
	(76.40) (75.60)	(76.0 ± 0.4)	(19.05) (18.85)	(18.95 ± 0.1)	(1.311) (1.270)	(1.2905 ± 0.0205)	(±0.025)	
Sikorsky Aircraft [Grade A-2]	<u>3.015</u> 2.985	<u>3.00 ± 0.015</u>	<u>0.750</u> 0.745	.7475 ± 0.0025	<u>0.0520</u> 0.0500	<u>0.051 ± 0.001</u>	±0.0015	HRC 44-50
	(76.58) (75.82)	(76.20 ± 0.38)	(19.05) (18.92)	(18.985 ± 0.065)	(1.321) (1.270)	(1.2955 ± 0.0255)	(±0.038)	
SPOP 501 [Grade A-1]	<u>3.008</u> 2.976	<u>2.992 ± 0.016</u>	<u>0.750</u> 0.742	.746 ± 0.004	<u>0.0516</u> 0.0500	<u>0.0508 ± 0.0008</u>	±0.0010	HRC 44-50
	(76.40) (75.60)	(76.0 ± 0.4)	(19.05) (18.85)	(18.95 ± 0.1)	(1.311) (1.270)	(1.2905 ± 0.0205)	(±0.025)	
Volvo Aero Corp 18 22 58 [Grade A-1S]	<u>3.008</u> 2.976	<u>2.992 ± 0.016</u>	<u>0.750</u> 0.742	0.746 ± 0.004	<u>0.0513</u> 0.0503	<u>0.0508 ± 0.0005</u>	±0.0005	HRC 45-48
	(76.40) (75.60)	(76.0 ± 0.4)	(19.05) (18.85)	(18.95 ± 0.1)	(1.303) (1.278)	(1.29 ± .01)	(±0.013)	

NOTE: ¹ SAE AMS2430L section 3.2.2 states Test Strips: Shall conform to SAE J442 ...

² Guaranteed to meet the Spec for NSN6635-00-512-1892 but not certified

	References the length measured in inches	References the width measured in inches	References the thickness measured in inches	References the flatness measured in inches	References measured in Rockwell hardness C scale
Electronics Inc. Grade A-1	<u>3.008</u> 2.985	2.9965 ± 0.0115	<u>0.750</u> 0.745	$.7475 \pm 0.0025$	<u>0.0516</u> 0.0500
	(<u>76.40</u>) (<u>75.82</u>)	(76.11 ± 0.29)	(<u>19.05</u>) (<u>18.92</u>)	(18.985 ± 0.065)	(<u>1.311</u>) (<u>1.270</u>)
	A	B	C	D	E

References to the specification it meets References the length measured in millimeters References the width measured in inches References the thickness measured in inches References the flatness measured in millimeters

