

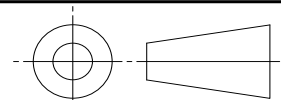
Technical drawing of a 1/4-20 UNF-3A screw with a 32-degree thread profile. The drawing includes the following dimensions and specifications:

- Lengths:** L (total length), A (thread length).
- Diameters:** $\varnothing .344$ (major diameter), $\varnothing .291$ (minor diameter).
- Thread Profile:** 32 (32-degree thread profile).
- Thread Specifications:** 1/4-20 UNF-3A PER AS8879.
- Surface Finish:** $45^\circ \pm 10^\circ$ (both ends).
- Table of Tolerances:**

$\varnothing$	$\varnothing .003$	$\textcircled{M}$	D	$\textcircled{M}$
$\varnothing$	$\varnothing .353$		D	$\varnothing .343$
$\varnothing$	$\varnothing .006$		D	
$\varnothing$	$\varnothing .006$		E	
- Section Through Thread Profiles:** A detailed view of the thread profile showing the 32-degree angle and the 32-degree thread profile.

FIGURE 1

THIRD ANGLE PROJECTION



PROCUREMENT SPECIFICATION: AS7477



(R) STUD, STEPPED - 2.5 DIA ENGAGEMENT,
PD SHANK, AMS5731
.4375-20 UNJF-3A X .3750-24 UNJF-3A

REV.
B

TABLE 1

PART NUMBER	L	A	B MAX	C MIN	APPROX MASS LB/100
AS3142-05	1.802 - 1.822	.709 - .729	.621	.537	5.94
AS3142-06	1.865 - 1.885	.771 - .791	.683	.599	6.11
AS3142-07	1.928 - 1.948	.834 - .854	.746	.662	6.27
AS3142-08	1.990 - 2.010	.897 - .917	.772	.688	6.44
AS3142-09	2.115 - 2.135	1.021 - 1.041	.772	.688	6.80
AS3142-10	2.240 - 2.260	1.147 - 1.167	.772	.688	7.11
AS3142-11	2.365 - 2.385	1.271 - 1.291	.772	.688	7.46
AS3142-12	2.490 - 2.510	1.396 - 1.416	.772	.688	7.79
AS3142-13	2.615 - 2.635	1.521 - 1.541	.772	.688	8.12
AS3142-14	2.740 - 2.760	1.646 - 1.666	.772	.688	8.46
AS3142-15	2.865 - 2.885	1.771 - 1.791	.772	.688	8.80
AS3142-16	2.990 - 3.010	1.896 - 1.916	.772	.688	9.14
AS3142-17	3.115 - 3.135	2.021 - 2.041	.772	.688	9.50
AS3142-18	3.240 - 3.260	2.146 - 2.166	.772	.688	9.81
AS3142-19	3.365 - 3.385	2.271 - 2.291	.772	.688	10.16
AS3142-20	3.490 - 3.510	2.396 - 2.416	.772	.688	10.49
AS3142-21	3.615 - 3.635	2.521 - 2.541	.772	.688	10.82
AS3142-22	3.740 - 3.760	2.646 - 2.666	.772	.688	11.16
AS3142-23	3.865 - 3.885	2.771 - 2.791	.772	.688	11.50
AS3142-24	3.990 - 4.010	2.896 - 2.916	.772	.688	11.84
AS3142-25	4.115 - 4.135	3.021 - 3.041	.772	.688	12.20
AS3142-26	4.240 - 4.260	3.146 - 3.166	.772	.688	12.51
AS3142-27	4.365 - 4.385	3.271 - 3.291	.772	.688	12.86
AS3142-28	4.490 - 4.510	3.396 - 3.416	.772	.688	13.19
AS3142-29	4.615 - 4.635	3.521 - 3.541	.772	.688	13.52
AS3142-30	4.740 - 4.760	3.646 - 3.666	.772	.688	13.86
AS3142-31	4.865 - 4.885	3.771 - 3.791	.772	.688	14.20
AS3142-32	4.990 - 5.010	3.896 - 3.916	.772	.688	14.54
AS3142-33	5.115 - 5.135	4.021 - 4.041	.772	.688	14.90
AS3142-34	5.240 - 5.260	4.146 - 4.166	.772	.688	15.21

NOTES:

1. MATERIAL: CORROSION AND HEAT RESISTANT STEEL AMS5731.
2. PROCUREMENT SPECIFICATION AS7477: EXCEPT REQUIREMENTS RELATED TO BOLT HEADS NOT APPLICABLE.
3. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES Ra.
4. FLUORESCENT PENETRANT INSPECTION PER ASTM E1417/E1417M TYPE 1. SENSITIVITY LEVEL 2 MIN.
5. BREAK SHARP EDGES .003 TO .015 UNLESS OTHERWISE SPECIFIED.
6. DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS $\pm .010$
7. DIMENSIONING AND TOLERANCING: ANSI Y14.5M-1982 (ASME PUBLICATION).
8. MARK PART NUMBER PER AS478-37.
9. DO NOT USE UNASSIGNED PART NUMBERS.