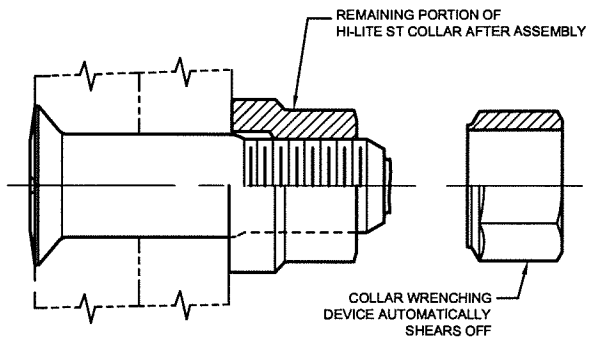
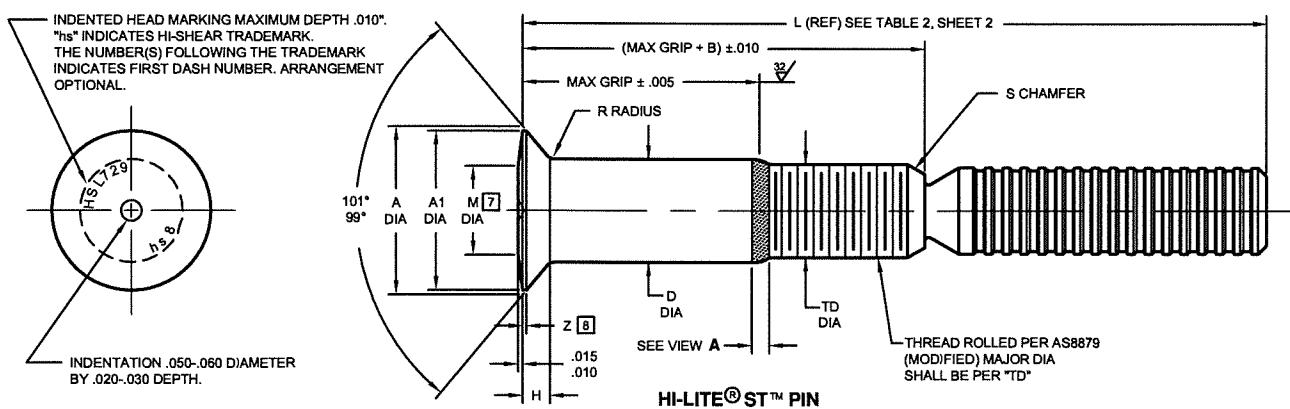


HI-SHEAR CORPORATION, U.S.A. (Patent Holder) CAGE No. 73197  
 a LISI AEROSPACE Company  
 AIR INDUSTRIES CO., INC., U.S.A. (Licensee - U.S.A & Canada) CAGE No. 08725  
 SPS TECHNOLOGIES, U.S.A. (Licensee) CAGE No. 58878  
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 a LISI AEROSPACE Company  
 TOKYO SCREW COMPANY, Japan (Licensee - Japan)



HI-LITE®ST™ PIN AND COLLAR AFTER ASSEMBLY

HI-LITE®ST™ PIN

**TABLE 1**

FIRST DASH NO.	PIN NOM DIA	A DIA	A1 DIA	B REF	D DIA BEFORE FINISH	D1 DIA MAX	F	TD DIA	H	K MAX	M DIA FLAT	R RAD	Z MAX	S CHAMFER REF	THREAD	DOUBLE SHEAR POUNDS	TENSION POUNDS MINIMUM
5	5/32																
NOTE: USE HSL629-6-( )																	
6	7/32	.3536 .2486	.346 .334	.325	.2182 .2177	.212	.005	.1840 .1810	.0568 .0547	.016	.155 .135	.030 .020	.015	1/32" x 37°	10-32UNJF-3A Modified	8,200 7,100	2,590
8	9/32	.4732 .4682	.466 .454	.395	.2807 .2802	.275	.006	.2440 .2410	.0807 .0786	.021	.200 .180	.030 .020	.015	1/32" x 37°	1/4-28UNJF-3A Modified	13,500 11,800	4,760
10	11/32	.5619 .5569	.555 .542	.500	.3432 .3427	.337	.007	.3060 .3020	.0917 .0896	.026	.265 .245	.040 .030	.015	3/64" x 37°	5/16-24UNJF-3A Modified	20,200 17,600	7,100
12	13/32	.6912 .6862	.684 .672	.545	.4057 .4052	.400	.008	.3680 .3640	.1198 .1177	.030	.325 .300	.040 .030	.015	3/64" x 37°	3/8-24UNJF-3A Modified	28,200 24,600	10,600
14	15/32	.8041 .7969	.797 .772	.635	.4682 .4677	.462	.009	.4310 .4260	.1409 .1379	.035	.380 .355	.050 .040	.022	3/64" x 37°	7/16-20UNJF-3A Modified	37,600 32,700	14,450
16	17/32	.9166 .9095	.910 .885	.685	.5307 .5302	.525	.010	.4930 .4880	.1619 .1589	.039	.445 .415	.050 .040	.022	3/64" x 37°	1/2-20UNJF-3A Modified	48,250 42,000	19,550

SEE COLLAR STANDARDS FOR COLLAR STRENGTHS. LOWER STRENGTH (PIN OR COLLAR) DETERMINES SYSTEM STRENGTH.

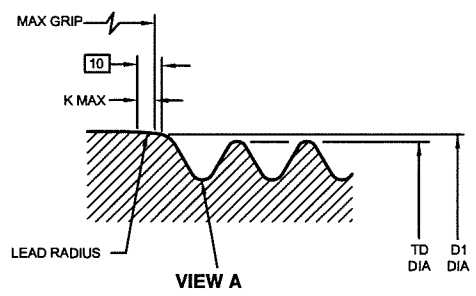
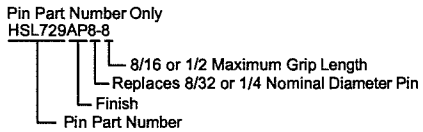
**GENERAL NOTES:**

- Head edge out of roundness shall not exceed "F".
- Concentricity: Conical surface of head to "D" diameter within .005 FIM.
- "H" is dimensioned from maximum "D" diameter.
- Dimensions to be met after finish, except as noted.
- Surface texture per ANSI B46.1.
- Hole preparation per NAS618.
- Flat permissible within "M" diameter.
- Curved or flat edge manufacturer's option.
- "D" diameter may increase by .0005" after application of solid film lube and .001" after application of aluminum coating.
- Lead radius must be tangent to "D" diameter within "K" distance and be continuous within this area.
- Oversize replacement for HSL529 and HSL629.
- Shorter or longer grips than those listed may be available as specials.

**CODE:**

First dash number indicates nominal diameter in 1/32nds of the pin which HSL729 oversize pin replaces. Second dash number indicates maximum grip in 1/16ths. See "Finish" note for explanation of code letters.

**HOW TO ORDER EXAMPLE:**



VIEW A  
 HI-LITE THREAD TRANSITION AREA. THIS AREA OF SPECIAL CONFIGURATION AND COLD WORKING TO MEET PHYSICAL REQUIREMENTS. SEE SPECIFICATION FOR INSPECTION.

**MATERIAL:**

6AL-4V titanium alloy per AMS4928 or AMS4967.

**HEAT TREAT:**

95,000 psi shear minimum.

**FINISH:**

HSL729DL( )-( ) = Kalgard FA or EM620C solid film lube per AS5272, Type I, and cetyl alcohol lube per Hi-Shear Spec. 305.  
 HSL729AP( )-( ) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.

**SPECIFICATION:**

Hi-Lite Product Specification 380-2.

U.S. Patents 4,326,825; 4,485,510 and 4,957,401.  
 Other U.S. and international patents pending.  
 "Hi-Lite" and "HST" are registered trademarks and "Hi-Lite ST" is a trademark of Hi-Shear Corporation.

DRAWN	DATE	TITLE
J.F.Obispo	7-29-92	HI-LITE®ST™ PIN
APPROVED	DATE	100° FLUSH CROWN (MS20426) HEAD BREAK STEM, SPECIAL THREAD TITANIUM
DAW	7-30-92	1/16" GRIP VARIATION, 1/32" OVERSIZE
REVISION	DATE	DRAWING NUMBER
4	JFO 9-2-2008	<b>HSL729</b>

**HSL729**

**TABLE 2**

SECOND DASH NUMBER	L (REF) 12					
	-6 DIA.	-8 DIA.	-10 DIA.	-12 DIA.	-14 DIA.	-16 DIA.
1	-	-	-	-	-	-
2	.955	.940	-	-	-	-
3	1.080	1.065	1.185	-	-	-
4	1.205	1.190	1.310	1.300	-	-
5	1.330	1.315	1.435	1.425	1.530	-
6	1.455	1.440	1.560	1.550	1.655	1.645
7	1.580	1.565	1.685	1.675	1.780	1.770
8	1.705	1.690	1.810	1.800	1.905	1.895
9	1.830	1.815	1.935	1.925	2.030	2.020
10	1.955	1.940	2.060	2.050	2.155	2.145
11	2.080	2.065	2.185	2.175	2.280	2.270
12	2.205	2.190	2.310	2.300	2.405	2.395
13	2.330	2.315	2.435	2.425	2.530	2.520
14	2.455	2.440	2.560	2.550	2.655	2.645
15	2.580	2.565	2.685	2.675	2.780	2.770
16	2.705	2.690	2.810	2.800	2.905	2.895
17	2.830	2.815	2.935	2.925	3.030	3.020
18	2.955	2.940	3.060	3.050	3.155	3.145
19	3.080	3.065	3.185	3.175	3.280	3.270
20	3.205	3.190	3.310	3.300	3.405	3.395
21	3.330	3.315	3.435	3.425	3.530	3.520
22	3.455	3.440	3.560	3.550	3.655	3.645
23	3.580	3.565	3.685	3.675	3.780	3.770
24	3.705	3.690	3.810	3.800	3.905	3.895
25	-	-	3.935	3.925	4.030	4.020
26	-	-	4.060	4.050	4.155	4.145
27	-	-	4.185	4.175	4.280	4.270
28	-	-	4.310	4.300	4.405	4.395
29	-	-	-	-	4.530	4.520
30	-	-	-	-	4.655	4.645
31	-	-	-	-	4.780	4.770
32	-	-	-	-	4.905	4.895

HSL729