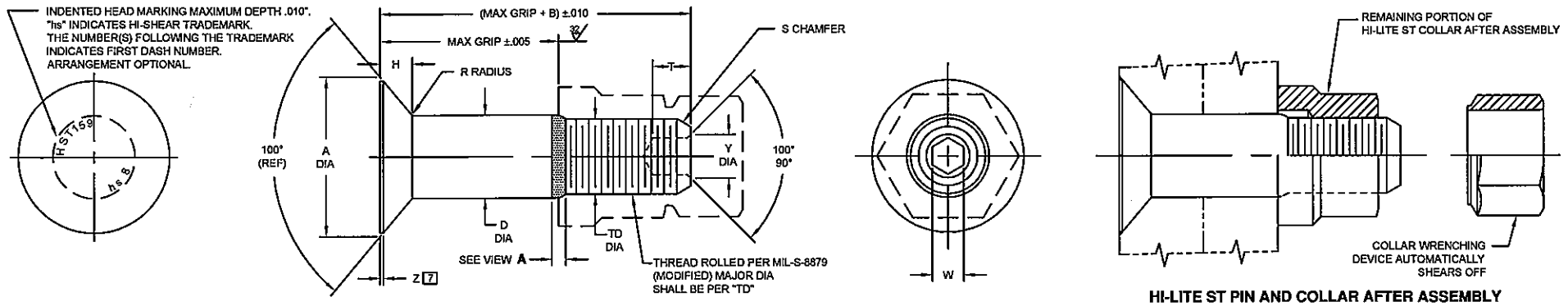


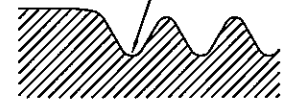
2 HI-SHEAR CORPORATION, U.S.A. (Patent Holder) CAGE Code. 73197	LISI AEROSPACE FRANCE (Licensee) CAGE Code. FU100
a Lisi Aerospace Company	a Lisi Aerospace Company
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	a Lisi Aerospace Company



HI-LITE ST PIN AND COLLAR AFTER ASSEMBLY

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

THIS AREA OF SPECIAL CONFIGURATION AND COLD WORKING TO MEET PHYSICAL REQUIREMENTS



VIEW A  
HI-LITE THREAD TRANSITION AREA  
SEE SPECIFICATION FOR INSPECTION

FIRST DASH NO.	PIN NOM DIA	A DIA	B REF	D DIA		TD DIA	F REF	H	R RAD	Z MAX	S CHAMFER REF	THREAD	SOCKET			DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
				WITHOUT COATING OR SOLID FILM	WITH COATING OR SOLID FILM								W HEX	T DEPTH	Y DIA		
5																	
NOTE: USE HST59( J6- )																	
6	13/64	.3813 .3765	.300	.2025 .2021	.2026 .2016	.1840 .1810	.005	.0750 .0730	.030 .020	.015	1/32" x 45°	10-32UNJF-3A Modified	.0806 .0791	.100 .080	.119 .104	8,100	4,350
8	17/64	.5066 .5018	.330	.2651 .2646	.2651 .2641	.2440 .2410	.006	.1013 .0993	.030 .020	.015	1/32" x 45°	1/4-28UNJF-3A Modified	.0967 .0947	.110 .090	.142 .122	13,800	7,750
10	21/64	.6335 .6287	.390	.3276 .3271	.3276 .3266	.3060 .3020	.007	.1283 .1263	.030 .020	.015	3/64" x 45°	5/16-24UNJF-3A Modified	.1295 .1270	.130 .110	.180 .160	21,100	12,300
12	25/64	.7604 .7556	.430	.3901 .3896	.3901 .3891	.3680 .3640	.008	.1553 .1533	.040 .030	.015	3/64" x 45°	3/8-24UNJF-3A Modified	.1617 .1582	.160 .140	.217 .197	30,000	19,100
14	29/64	.8884 .8812	.510	.4526 .4521	.4526 .4516	.4310 .4260	.009	.1828 .1798	.050 .040	.022	3/64" x 45°	7/16-20UNJF-3A Modified	.1930 .1895	.190 .170	.253 .233	40,300	25,800
16	33/64	1.0139 1.0068	.610	.5151 .5146	.5151 .5141	.4930 .4880	.010	.2093 .2063	.050 .040	.022	3/64" x 45°	1/2-20UNJF-3A Modified	.2242 .2207	.220 .200	.289 .269	52,500	34,300

- 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.
  - Surface texture per ANSI B46.1.
  - Hole preparation per NAS618.
  - Curved or flat edge manufacturer's option.
  - Broach petals removed.

**MATERIAL:** Nickel base alloy per AMS5662.

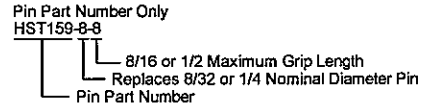
**HEAT TREAT:** 125,000 psi shear minimum.

- FINISH:**
- HST159-( )-( ) = Passivate per Hi-Shear 258 and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST159AC( )-( ) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294 with color code green on thread end and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST159AG( )-( ) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294 with color code orange on thread end and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST159AP( )-( ) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST159DU( )-( ) = Solid film lube per AS5272, Type I.
  - HST159MA( )-( ) = Solid film lube per Kalgard RA.
  - HST159TB( )-( ) = Hi-Kote 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST159TP( )-( ) = Hi-Kote 2 solid film lube per Hi-Shear Spec. 292 with color code orange on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.

**SPECIFICATION:** Hi-Lite Product Specification 380.

**CODE:** First dash number indicates nominal diameter in 1/32nds of the pin which HST159 oversize pin replaces. Second dash number indicates maximum grip in 1/16ths. See Finish note for explanation of code letters.

**HOW TO ORDER EXAMPLE:**



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 J.F. Obispo	DATE 10-17-96
<b>TITLE</b> <b>HI-LITE® ST™ PIN</b>	
APPROVED MC	DATE 10-21-96
<b>100° FLUSH MS24694 TENSION HEAD NICKEL BASE ALLOY (INCONEL 718) 1/16" GRIP VARIATION, 1/64" OVERSIZE</b>	
REVISION 2	DATE L.G. Valencia 03-18-09
<b>DRAWING NUMBER</b> <b>HST159</b>	

HST159