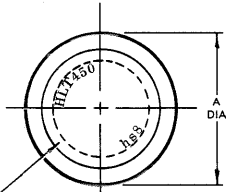


# STANDARDS COMMITTEE FOR HI-LOK® HI-TIGUE® PRODUCTS

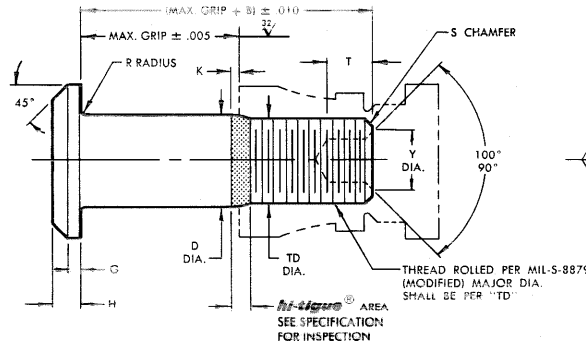
2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509 U.S.A.

HI-SHEAR CORPORATION, U.S.A. (Patent Holder) CAGE No. 73197  
 A Subsidiary of GFI Industries, France  
 AIR INDUSTRIES CO., INC. (Licensee - U.S. & Canada) CAGE No. 06728  
 HUCK INTERNATIONAL, INC., Deutch Operation, U.S.A. (Licensee) CAGE No. 97928  
 SPS TECHNOLOGIES, U.S.A. (Licensee) CAGE No. 56878  
 FAIRCHILD Aerospace Fastener Division, U.S.A. (Licensee) CAGE No. 92215  
 WEST COAST AEROSPACE INC., U.S.A. (Licensee) CAGE No. 60516  
 (Pins & Steel Collars)

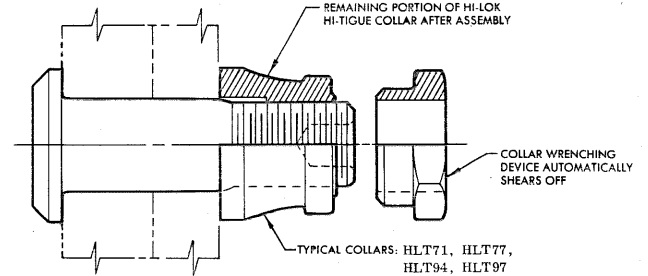
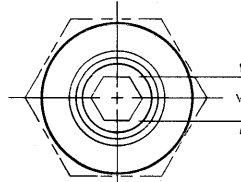
HI-SHEAR FASTENERS EUROPE, LTD., U.K. (Licensee) CAGE No. 0LB68  
 A Subsidiary of GFI Industries, France  
 HUCK INTERNATIONAL GmbH & Co. Germany (Licensee - EEC Countries)  
 ST. CHAMOND GRANAT, S.A. France (Licensee - EEC Countries)  
 SIMMONDS, S.A. France (Licensee - EEC Countries - Collars)  
 TOKYO SCREW COMPANY, Japan (Licensee - Japan)



INDENTED HEAD MARKING MAXIMUM DEPTH .010".  
 MANUFACTURER'S TRADEMARK PER HI-SHEAR  
 SPEC. 363. THE NUMBER(S) FOLLOWING THE  
 TRADEMARK INDICATE FIRST DASH NUMBER.  
 ARRANGEMENT OPTIONAL.



HI-LOK HI-TIGUE PIN



HI-LOK HI-TIGUE PIN AND COLLAR AFTER ASSEMBLY

FIRST DASH NO.	NOM. DIA.	A DIA.	B REF.	D DIA. [4]		TD DIA.	G REF.	H	K REF.	R RAD.	S CHAMFER REF.	THREAD	SOCKET			DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
				WITHOUT HI-KOTE 1 OR HI-KOTE 2	WITH HI-KOTE 1 OR HI-KOTE 2								W HEX.	T DEPTH	Y DIA.		
4	1/8	.250 .230	.294	.1375 .1370	.1375 .1365	.1335 .1310	.020	.042 .032	.010	.020 .010	1/32" x 37°	6-32UNJC-3A Modified	.0645 .0635	.100 .080	[5]	2,840	1,350
5	5/32	.262 .242	.312	.1635 .1630	.1635 .1625	.1595 .1570	.020	.047 .037	.013	.025 .015	1/32" x 37°	8-32UNJC-3A Modified	.0801 .0791	.100 .080	[5]	4,010	1,940
6	3/16	.315 .295	.325	.1895 .1890	.1895 .1885	.1840 .1810	.025	.055 .045	.016	.025 .015	1/32" x 37°	10-32UNJF-3A Modified	.0806 .0791	.100 .080	.119 .104	5,380	2,500
8	1/4	.412 .387	.395	.2495 .2490	.2495 .2485	.2440 .2410	.030	.069 .059	.021	.025 .015	1/32" x 37°	1/4-28UNJF-3A Modified	.0967 .0947	.110 .090	.142 .122	9,300	4,300
10	5/16	.505 .475	.500	.3120 .3115	.3120 .3110	.3060 .3020	.035	.078 .068	.026	.030 .020	3/64" x 37°	5/16-24UNJF-3A Modified	.1295 .1270	.130 .110	.180 .160	14,600	6,300
12	3/8	.600 .565	.545	.3745 .3740	.3745 .3735	.3680 .3640	.040	.088 .078	.030	.030 .020	3/64" x 37°	3/8-24UNJF-3A Modified	.1617 .1582	.160 .140	.217 .197	21,000	8,700
14	7/16	.676 .641	.635	.4370 .4365	.4370 .4360	.4310 .4260	.045	.105 .093	.035	.030 .020	3/64" x 37°	7/16-20UNJF-3A Modified	.1930 .1895	.190 .170	.253 .233	28,600	12,100
16	1/2	.770 .735	.685	.4995 .4990	.4995 .4985	.4930 .4880	.050	.116 .103	.039	.030 .020	3/64" x 37°	1/2-20UNJF-3A Modified	.2242 .2207	.220 .200	.289 .269	37,300	15,300
18	9/16	.864 .829	.770	.5615 .5610	.5615 .5605	.5550 .5500	.055	.127 .112	.039	.040 .025	1/16" x 37°	9/16-18UNJF-3A Modified	.2555 .2520	.260 .240	.326 .306	47,200	19,000
20	5/8	.953 .918	.825	.6240 .6235	.6240 .6230	.6180 .6120	.060	.137 .122	.044	.040 .025	1/16" x 37°	5/8-18UNJF-3A Modified	.2555 .2520	.260 .240	.326 .306	58,300	23,000
24	3/4	1.108 1.066	1.050	.7490 .7485	.7490 .7480	.7430 .7370	.070	.151 .136	.044	.045 .030	1/16" x 37°	3/4-16UNJF-3A Modified	.3185 .3150	.330 .300	.398 .378	83,900	30,700

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

**GENERAL NOTES:**

1. Concentricity: "A" to "D" diameter within .010 FIM.
2. Surface texture per ANSI B46. 1.
3. Hole preparation per NAS618.
4. Maximum "D" diameter may be increased by .0002 to allow for solid film lube application.
5. Evidence of broken edge across points.
6. Use HLT434 for oversize replacement.

**MATERIAL:**

6Al-4V titanium alloy per Spec. AMS4928 or AMS4967.

**HEAT TREAT:**

95,000 psi shear minimum.

**FINISH:**

- HLT450(-)(-) = Cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT450AP(-)(-) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT450FB(-)(-) = Grit blast top of head, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT450TB(-)(-) = Hi-Kote 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT450TF(-)(-) = Hi-Kote 2 solid film lube per Hi-Shear Spec. 292.
- Ⓢ HLT450MA(-)(-) = Solid film lube per Kal-Gard RA.

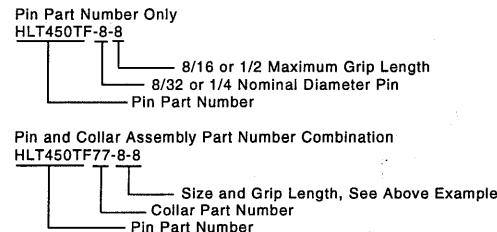
**SPECIFICATION:**

Hi-Lok Hi-Tigue Product Specification 342.

**CODE:**

First dash number indicates nominal diameter in 1/32nds. Second dash number indicates maximum grip in 1/16ths. See Finish note for explanation of code letters.

**HOW TO ORDER EXAMPLE:**



DRAWN DATE		TITLE	
D.P.S. 4-5-83		HI-LOK® HI-TIGUE® PIN PROTRUDING SHEAR HEAD TITANIUM 1/16" GRIP VARIATION	
APPROVED DATE		DRAWING NUMBER	
R.Ting 4-6-83		HLT450	
REVISION (8)	DATE		
J.Henderson	7-21-97		