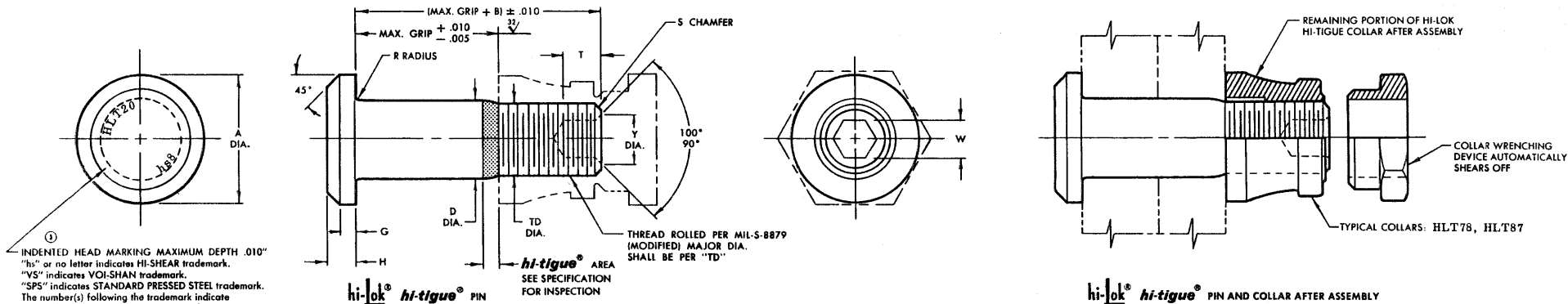


STANDARDS COMMITTEE FOR HI-LOK® HI-TIGUE® PRODUCTS

2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509

① HI-SHEAR CORPORATION, U.S.A. (Patent Holder) U.S. Federal Code I.D. No. 73197
 Division of Hi-Shear Industries Inc.
 VOI-SHAN, Division of VSI Corp., U.S.A. (Licensee) U.S. Federal Code I.D. No. 92215
 SPS TECHNOLOGIES, U.S.A. (Licensee) U.S. Federal Code I.D. No. 56878
 LITTON FASTENING SYSTEMS, U.S.A. (Licensee) U.S. Federal Code I.D. No. 97928

KAMAX-WERKE, Germany (Licensee)
 Rudolph Keilerman GmbH & Co.
 ST. CHAMOND-GRANAT, S.A. France (Licensee)
 TOKYO SCREW COMPANY, Japan (Licensee)



① INDENTED HEAD MARKING MAXIMUM DEPTH .010" "h" or no letter indicates HI-SHEAR trademark. "VS" indicates VOI-SHAN trademark. "SPS" indicates STANDARD PRESSED STEEL trademark. 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.	TD DIA.	G REF.	H	R RAD.	S CHAMFER REF.	THREAD	SOCKET			DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM	MIN. GRIP LENGTH
											W HEX.	T DEPTH	Y DIA.			
-5	5/32	.322 .306	.312	.1695 .1685	.1595 .1570	.030	.065 .055	.025 .016	1/32" x 45°	8-32UNJC-3A Modified	.0801 .0791	.100 .080	.104 .094	4,210	2,180	-2
-6	3/16	.377 .357	.325	.1955 .1945	.1840 .1810	.035	.074 .064	.025 .015	1/32" x 45°	10-32UNJF-3A Modified	.0806 .0791	.100 .080	.119 .104	5,550	3,180	-2
-8	1/4	.440 .415	.395	.2555 .2545	.2440 .2410	.045	.090 .080	.025 .015	1/32" x 45°	1/4-28UNJF-3A Modified	.0967 .0947	.110 .090	.142 .122	9,620	5,820	-2
-10	5/16	.505 .475	.500	.3180 .3170	.3060 .3020	.055	.112 .102	.030 .020	3/64" x 45°	5/16-24UNJF-3A Modified	.1295 .1270	.130 .110	.180 .160	14,890	9,200	-2
-12	3/8	.600 .565	.545	.3805 .3795	.3680 .3640	.075	.140 .130	.030 .020	3/64" x 45°	3/8-24UNJF-3A Modified	.1617 .1582	.160 .140	.217 .197	21,430	14,000	-3
-14	7/16	.676 .641	.635	.4430 .4420	.4310 .4260	.095	.160 .150	.030 .020	3/64" x 45°	7/16-20UNJF-3A Modified	.1930 .1895	.190 .170	.253 .233	29,000	18,900	-4
-16	1/2	.770 .735	.685	.5055 .5045	.4930 .4880	.095	.188 .178	.030 .020	3/64" x 45°	1/2-20UNJF-3A Modified	.2242 .2207	.220 .200	.289 .269	37,900	25,600	-4

⑥ SEE COLLAR STANDARDS FOR COLLAR STRENGTHS. LOWER STRENGTH (PIN OR COLLAR) DETERMINES SYSTEM STRENGTH.

- GENERAL NOTES:
1. Concentricity: "A" to "D" diameter within .010 FIR.
 2. Dimensions to be met after finish.
 - ① 3. Surface texture per ANSI B46.1.
 4. Use HLT120 for oversize replacement.
 5. Install per Hi-Shear Spec. 299.
 - ⑥ 6. Minimum required for head and Hi-Tigue feature.

MATERIAL: Alloy steel per MIL-S-5000, MIL-S-5626 or MIL-S-6049.

HEAT TREAT: 160,000-180,000 psi tensile per MIL-H-6875.

① FINISH: HLT20-()-() = Cadmium plate per QQ-P-416, Type II, Class 2, and cetyl alcohol lube per Hi-Shear Spec. 305.

SPECIFICATION: Hi-Lok Hi-Tigue Product Spec. 342.

CODE: First dash number indicates nominal diameter in 1/32nds. Second dash number indicates maximum grip in 1/16ths.

HOW TO ORDER EXAMPLES:

Pin Part Number Only
 HLT20-8-8
 — 8/16 or 1/2 Maximum Grip Length
 — 8/32 or 1/4 Nominal Diameter Pin
 — Pin Part Number

Pin and Collar Assembly Part Number Combination
 HLT2078-8-8
 — Size and Grip Length, See Above Example
 — Collar Part Number
 — Pin Part Number

① U.S. patents 3,138,987; 3,390,906; 3,578,367; and foreign patents. "Hi-Lok," "HL," "Hi-Tigue," and "HLT" are Registered Trademarks of Hi-Shear Corporation.	
DRAWN VAN	DATE 2-9-71
APPROVED D.P.S.	DATE 3-3-81
hi-lok® hi-tigue® PIN PROTRUDING TENSION HEAD ALLOY STEEL 1/16" GRIP VARIATION	
DRAWING NUMBER HLT20	

HLT20