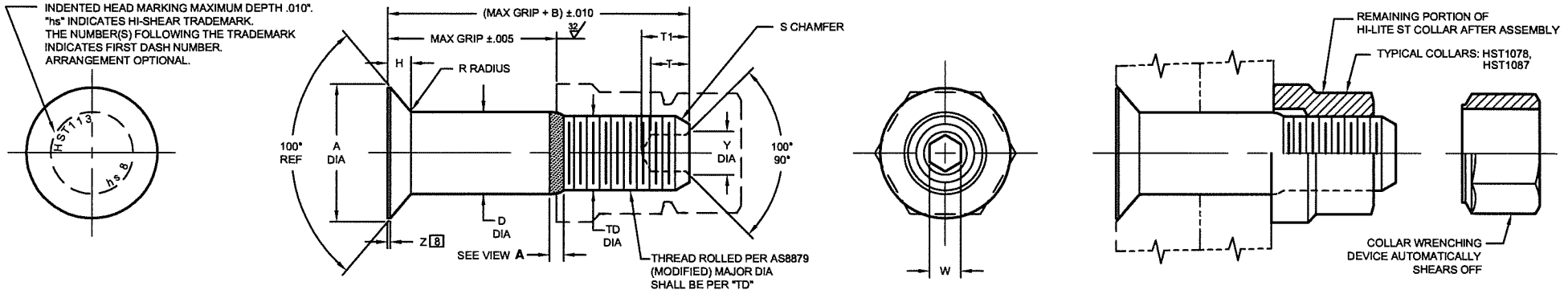


INDENTED HEAD MARKING MAXIMUM DEPTH .010".  
 "hs" INDICATES HI-SHEAR TRADEMARK.  
 THE NUMBER(S) FOLLOWING THE TRADEMARK  
 INDICATES FIRST DASH NUMBER.  
 ARRANGEMENT OPTIONAL.



HI-LITE ST PIN

HI-LITE ST PIN AND COLLAR AFTER ASSEMBLY

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 MIN	T1 DEPTH MAX	Y DIA		
5																		
NOTE: USE HST13-6 ( )																		
6	13/64	.3813 .3765	.300	.2026 .2021	.2026 .2016	.1840 .1810	.005	.0750 .0730	.030 .020	.015	1/32" x 37"	10-32UNJF-3A Modified	.0806 .0791	.080	.135	.119 .104	6,130	3,180
8	17/64	.5066 .5018	.330	.2651 .2646	.2651 .2641	.2440 .2410	.006	.1013 .0993	.030 .020	.015	1/32" x 37"	1/4-28UNJF-3A Modified	.0967 .0947	.090	.160	.142 .122	10,490	5,820
10	21/64	.6335 .6287	.390	.3276 .3271	.3276 .3266	.3060 .3020	.007	.1283 .1263	.040 .030	.015	3/64" x 37"	5/16-24UNJF-3A Modified	.1295 .1270	.110	.200	.180 .160	16,000	9,200
12	25/64	.7604 .7556	.430	.3901 .3896	.3901 .3891	.3680 .3640	.008	.1553 .1533	.040 .030	.015	3/64" x 37"	3/8-24UNJF-3A Modified	.1617 .1582	.140	.235	.217 .197	22,700	14,000
14	29/64	.8884 .8812	.510	.4526 .4521	.4526 .4516	.4310 .4260	.009	.1828 .1798	.050 .040	.022	3/64" x 37"	7/16-20UNJF-3A Modified	.1930 .1895	.150	.246	.253 .233	30,600	18,900
16	33/64	1.0139 1.0068	.610	.5151 .5146	.5151 .5141	.4930 .4880	.010	.2093 .2063	.050 .040	.022	3/64" x 37"	1/2-20UNJF-3A Modified	.2242 .2207	.170	.275	.289 .269	39,600	25,600
18	37/64	1.1408 1.1337	.710	.5771 .5766	.5771 .5761	.5550 .5500	.010	.2365 .2335	.050 .040	.025	1/16" x 37"	9/16-18UNJF-3A Modified	.2555 .2520	.200	.329	.326 .306	49,700	32,400
20	41/64	1.2723 1.2651	.790	.6396 .6391	.6396 .6386	.6180 .6120	.010	.2654 .2624	.050 .040	.025	1/16" x 37"	5/8-18UNJF-3A Modified	.2555 .2520	.210	.339	.326 .306	61,000	41,000
24	49/64	1.5308 1.5236	TBD	.7646 .7641	.7646 .7636	.7430 .7370	.012	.3214 .3184	.050 .040	.025	1/16" x 37"	3/4-16UNJF-3A Modified	.3185 .3150	.290	.452	.398 .378	87,200	59,500

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

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
D.P.S.	12-20-91	HI-LITE® ST™ PIN
APPROVED	DATE	100° FLUSH MS24694 TENSION HEAD TITANIUM
A. Brown	1-16-92	1/16" GRIP VARIATION, 1/64" OVERSIZE
REVISION	DATE	DRAWING NUMBER
8	J.Obispo 11-10-09	HST113

Sheet 1 of 2

HST113

- GENERAL NOTES:**
1. Head edge out of roundness shall not exceed "F".
  2. Concentricity: Conical surface of head to "D" diameter within .005 FIM.
  3. "H" is dimensioned from maximum "D" diameter.
  4. Dimensions to be met after finish.
  5. Surface texture per ANSI B46.1.
  6. Hole preparation per NAS618.
  7. Curved or flat edge manufacturer's option.
  8. Broach petals removed.
  9. Use HST413 for oversize replacement.

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

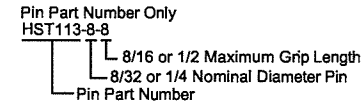
**HEAT TREAT:** 160,000 psi tensile minimum (95,000 psi shear minimum).

- FINISH:**
- HST113(-)(-) = Cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST113AB(-)(-) = I.V.D. aluminum coating per BAC315 with conversion coating (.0003-.0006 thick) per MIL-C-5541, Class 1A and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST113AG(-)(-) = Hi-Kote 1 aluminum pigmented coating per Hi-Shear Spec. 294, with color orange on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST113AP(-)(-) = Hi-Kote 1 aluminum pigmented coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST113AZ(-)(-) = Hi-Kote 1 aluminum pigmented coating per Hi-Shear Spec. 294, with color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST113BJ(-)(-) = I.V.D. aluminum coating per MIL-DTL-83488, Type II, Class 3, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - ▣ HST113CT(-)(-) = Color orange on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - ⊙ HST113GD(-)(-) = Hi-Kote 1 aluminum pigmented coating on threads only per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - ⊙ HST113GM(-)(-) = Hi-Kote 1 aluminum pigmented coating per Hi-Shear Spec. 294 on threads (no overspray on the shank is allowed) and top of head only (.005 max overspray on the head bearing surface permissible) with color white on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - ▣ HST113K(-)(-) = Solid film lube per "Lubeco" 905.
  - HST113HK(-)(-) = Hi-Kote 4 aluminum coating per Hi-Shear Spec. 397.
  - ▣ HST113MA(-)(-) = Solid film lube per KalGard RA.
  - HST113RP(-)(-) = Phosphate fluoride treat with color orange on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST113RS(-)(-) = Phosphate fluoride treat, solid film lube per AS5272, Type I, and color orange on thread end.
  - HST113RV(-)(-) = Phosphate fluoride treat, Hi-Kote 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST113SU(-)(-) = Hi-Kote 1 aluminum pigmented coating per Hi-Shear Spec. 294, with color light blue on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST113TB(-)(-) = Hi-Kote 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST113UV(-)(-) = Surface coating per Hi-Shear Spec. 306, Type II, Hi-Kote 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST113VF(-)(-) = Surface coating per Hi-Shear Spec. 306, Type I, color blue, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST113WF(-)(-) = Surface coating per Hi-Shear Spec. 306, Type I, color blue, with color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST113YW(-)(-) = Hi-Kote 2 solid film lube per Hi-Shear Spec. 292 on threads only, with color white 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 HST113 oversize pin replaces.  
 Second dash number indicates maximum grip in 1/16ths.  
 See Finish note for explanation of code letters.

**HOW TO ORDER EXAMPLES:**



DRAWING NUMBER

**HST113**