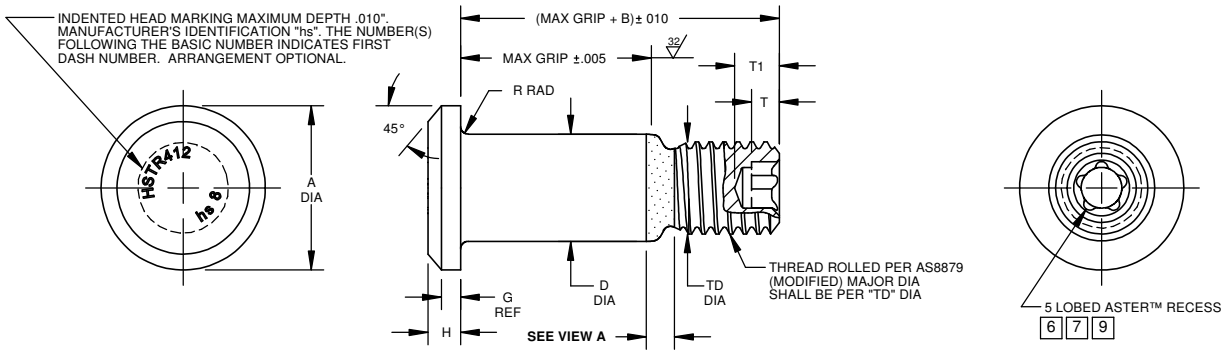
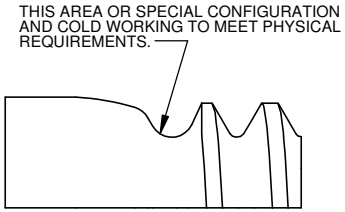
lisi AEROSPACE
hi-shear corporation
2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509 U.S.A.

Design Holder for HSTR™ fastener is LISI AEROSPACE Company		
Hi-Shear Corporation, U.S.A. a LISI AEROSPACE Company	Licensee	CAGE No. 73197
BLANC AERO INDUSTRIES SA, France a LISI AEROSPACE Company	Licensee	CAGE No. F0188-C
LISI AEROSPACE CANADA, Canada a LISI AEROSPACE Company	Licensee	CAGE No. L4528



HI-LITE™ PIN WITH ASTER™ RECESS

	FIRST DASH NO.	PIN NOM DIA	A DIA	B REF	D DIA WITHOUT ALUMINUM COATING	D DIA WITH ALUMINUM COATING	TD DIA	G REF	H	R RAD	S CHAMFER REF	THREAD MODIFIED	ASTER™ RECESS SIZE CODE	ASTER™ RECESS T1 DEPTH MAX	ASTER™ RECESS T DEPTH MIN	DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
	5	NOTE: USE HSTR112( )6-( )															
	6	7/32	.390 .370	.300	.2182 .2177	.2182 .2172	.1840 .1810	.035	.074 .064	.025 .015	1/32 X 37°	.1900-32 UNJF-3A	A5L-06	.116	.069	7,100	3,180
	7	NOTE: USE HSTR12( )8-( )															
	8	9/32	.460 .435	.330	.2807 .2802	.2807 .2797	.2440 .2410	.045	.090 .080	.025 .015	1/32 X 37°	.2500-28 UNJF-3A	A5L-08	.118	.069	11,800	5,820
	10	11/32	.520 .490	.390	.3432 .3427	.3432 .3422	.3060 .3020	.055	.112 .102	.030 .020	3/64 X 37°	.3125-24 UNJF-3A	A5L-10	.127	.070	17,600	9,200
	12	13/32	.620 .590	.430	.4057 .4052	.4054 .4047	.3680 .3640	.075	.140 .130	.030 .020	3/64 X 37°	.3750-24 UNJF-3A	A5L-12	.147	.087	24,600	14,000
②	14	15/32	.695 .660	.510	.4682 .4677	.4682 .4672	.4310 .4260	.095	.160 .150	.030 .020	3/64 X 37°	.4375-20 UNJF-3A	A5L-14	.196	.116	32,700	18,900
②	16	17/32	.790 .755	.610	.5307 .5302	.5307 .5297	.4930 .4880	.095	.188 .178	.030 .020	3/64 X 37°	.5000-20 UNJF-3A	A5L-16	.236	.139	42,000	25,600



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

② **GENERAL NOTES:**
1. CONCENTRICITY: "A" DIAMETER TO "D" DIAMETER WITHIN .010 FIM.
2. DIMENSIONS ARE IN INCHES AND TO BE MET AFTER FINISH.
3. SURFACE TEXTURE PER ANSI B46.1.
4. HOLE PREPARATION PER NAS618.

② [5.] REMOVED

[6.] US PATENT 6632057; OTHER US & FOREIGN PATENTS GRANTED AND PENDING PROPERTY OF LISI AEROSPACE.

[7.] BROACH PETALS REMOVED.

8. OVERSIZE REPLACEMENT FOR HSTR112.

[9.] NO IDENTIFICATION COLORANT IS ALLOWED IN THE ASTER™ RECESS.

MATERIAL: 6AL-4V TITANIUM ALLOY PER AMS4928 OR AMS4967.

② **HEAT TREAT:** 160,000 PSI TENSILE MINIMUM (95,000 PSI SHEAR MINIMUM FOR SIZES UP TO 3/4).

FINISH: HSTR412NKJ( )-( ) = HI-KOTE™ 1 NC ALUMINUM PIGMENTED COATING PER HI-SHEAR SPEC. 294 WITH COLOR SILVER ON THREAD END AND CETYL ALCOHOL LUBE PER HI-SHEAR SPEC.305.

HSTR412NKK( )-( ) = SULFURIC ACID ANODIZING PER ISO8080 AND HI-KOTE™ 1 NC ALUMINUM PIGMENTED COATING PER HI-SHEAR SPEC. 294 ON THREADS ONLY WITH COLOR SILVER ON THREAD END AND CETYL ALCOHOL LUBE PER HI-SHEAR SPEC. 305.

HSTR412NKL( )-( ) = HI-KOTE™ 1 NC ALUMINUM PIGMENTED COATING PER HI-SHEAR SPEC. 294 ON THREADS ONLY WITH COLOR SILVER ON THREAD END AND CETYL ALCOHOL LUBE PER HI-SHEAR SPEC. 305.

② **SPECIFICATION:** HI-LITE™ PRODUCT SPECIFICATION 410.
ASTER™ RECESS PER A5L-QA02.

CODE: FIRST DASH NUMBER INDICATES NOMINAL DIAMETER IN 1/32NDS OF THE PIN WHICH HSTR412 OVERSIZE PIN REPLACES.
SECOND DASH NUMBER INDICATES MAXIMUM GRIP IN 1/16THS.
SEE FINISH NOTE FOR EXPLANATION OF CODE LETTERS.

HOW TO ORDER PIN PART NUMBER ONLY

EXAMPLES: HSTR412 NKJ 8-8
- 8/16 OR 1/2 MAXIMUM GRIP LENGTH
- 8/32 OR 1/4 NOMINAL DIAMETER PIN
- FINISH CODE
- PIN BASIC PART NUMBER

DRAWN BY	DATE	TITLE
F. CARINGELLA	11/03/14	HI-LITE™ PIN, ASTER™ RECESS PROTRUDING TENSION HEAD TITANIUM 1/16 GRIP VARIATION, 1/32 OVERSIZE
APPROVED	DATE	
C. REITZ	11/03/14	
REVISION	DATE	DRAWING NUMBER
②	F.C. 3/30/16	HSTR412 1 OF 1

HSTR412