

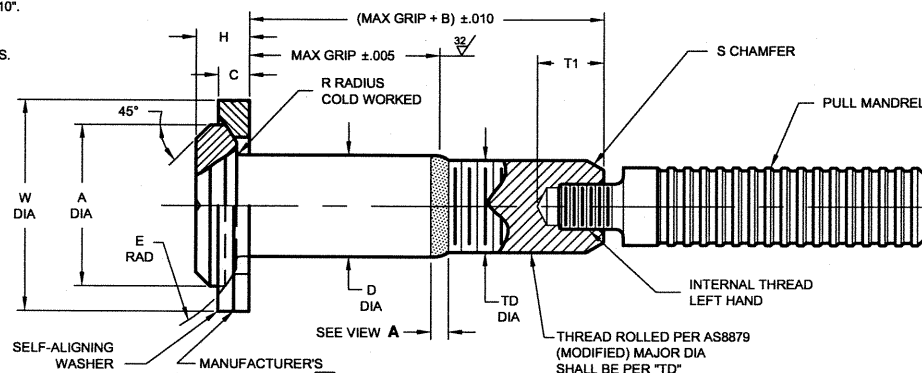
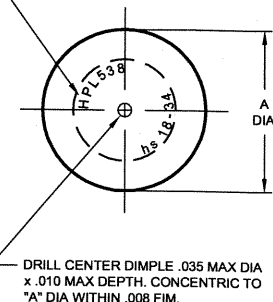
hi-shear
CORPORATION

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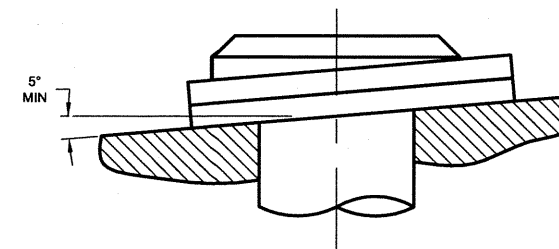
HI-SHEAR CORPORATION, U.S.A. (Patent Holder) CAGE No. 73197
a LISI AEROSPACE Company
BLANC AERO INDUSTRIES, FRANCE (Licensee-ECC Countries)
a LISI AEROSPACE Company

BLANC AERO INDUSTRIES, U.K. (Licensee) CAGE No. 0LB68
a LISI AEROSPACE Company
SPS TECHNOLOGIES, U.S.A. (Licensee) CAGE No. 56878

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



HI-LITE ST PIN



DIMENSIONS MUST ALLOW IN ALL DIRECTIONS A 5° MINIMUM INCLINATION OF THE WASHER FROM THE AXIS.

HI-LITE ST PIN AND WASHER AFTER ASSEMBLY

FIRST DASH NO.	PIN NOM DIA	A DIA REF	B REF	C REF	D DIA	TD DIA	H MAX	Q RAD REF	R RAD	S CHAMFER REF	THREAD	E RAD	W DIA	INTERNAL THREAD LEFT HAND [5]			DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM	TENSION-FATIGUE POUNDS
														T1 MAX	THREAD SIZE UNJF-2B	LOAD MAX			
18	9/16	1.051	.845	.303	.5615 .5605	.5537 .5500	.382	.687	.040 .025	1/16" x 45°	9/16-18UNJF-3A Modified	.687	1.307 1.291	.465	5/16-SP	11,500	62,100	35,400	13,100
20	5/8	1.130	.935	.319	.6240 .6230	.6165 .6120	.406	.750	.040 .025	1/16" x 45°	5/8-18UNJF-3A Modified	.750	1.437 1.421	.520	3/8-SP	14,200	76,700	44,800	16,600
24	3/4	1.291	1.125	.358	.7490 .7480	.7415 .7370	.547	.875	.045 .031	1/16" x 45°	3/4-16UNJF-3A Modified	.875	1.689 1.673	.625	7/16-SP	19,100	110,400	75,500	27,900
28	7/8	1.449	1.315	.390	.8740 .8730	.8663 .8610	.634	1.000	.050 .035	5/64" x 45°	7/8-14UNJF-3A Modified	1.000	1.921 1.906	.725	1/2-SP	31,500	149,300	101,800	37,700
32	1	1.602	1.500	.437	.9990 .9980	.9913 .9860	.713	1.125	.060 .045	5/64" x 45°	1-12UNJF-3A Modified	1.125	2.134 2.118	.830	9/16-SP	38,200	195,000	132,100	48,900

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

GENERAL NOTES:

- Concentricity: "A" to "D" diameter within .010 FIM.
- Dimensions to be met after finish, except as noted.
- Surface texture per ANSI B46.1.
- Hole preparation per NAS618.
- The maximum allowable installation load must not exceed the maximum load values in table or thread/mandrel failure may occur.
- One line indicates Blanc Aero Industries, France as manufacturer.
- Use HPL638 for oversize replacement.

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:

Pin Part Number Only
HPL538BP18-34

34/16 or 17/8 Maximum Grip Length
18/32 or 9/16 Nominal Diameter Pin
Finish
Pin Part Number

MATERIAL:

Pin = Nickel Base Alloy per AMS5662.
Washer = 6Al-4V titanium alloy per AMS4928, AMS4967 or British Standard 2TA 28.

HEAT TREAT:

Pin = 125,000 psi shear minimum.
Washer = 160,000 psi tensile minimum. ①

FINISH:

HPL538BP() (Pin only) Hi-Kote 1 NC aluminum coating per Hi-Shear Spec. 294, with color blue on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
Washer = Hi-Kote 1 NC aluminum coating per Hi-Shear Spec. 294, with white paint spot on outer diameter and cetyl alcohol lube per Hi-Shear Spec. 305.

SPECIFICATION:

Hi-Lite Product Specification 391, except fatigue loads as tabulated.

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.O.	DATE 3-15-04
APPROVED M.Cawley	DATE 3-15-04
REVISION ①	DATE jfo 3-23-04
TITLE HI-LITE® ST™ PIN SELF-ALIGNING TENSION HEAD ① NICKEL BASE ALLOY (INCONEL 718) SPECIAL THREAD 1/16" GRIP VARIATION	
DRAWING NUMBER HPL538	