

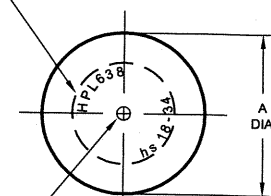
hi-shear
CORPORATION

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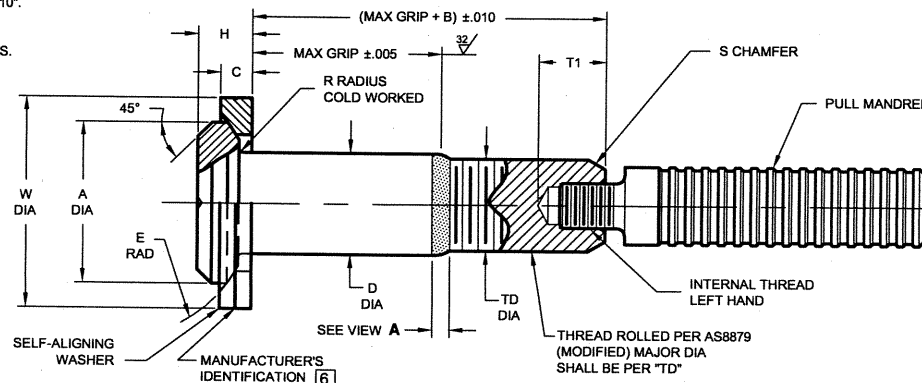
HI-SHEAR CORPORATION, U.S.A. (Patent Holder) CAGE No. 73197
a LI SI AEROSPACE Company
BLANC AERO INDUSTRIES, FRANCE (Licensee-ECC Countries)
a LI SI AEROSPACE Company

BLANC AERO INDUSTRIES, U.K. (Licensee) CAGE No. 0LB68
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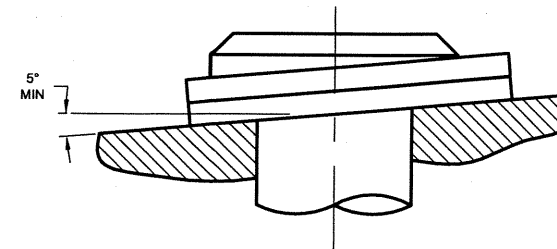
INDENTED HEAD MARKING MAXIMUM DEPTH .010".
"hs" INDICATES HI-SHEAR TRADEMARK.
THE NUMBER(S) FOLLOWING THE TRADEMARK
INDICATES FIRST AND SECOND DASH NUMBERS.
ARRANGEMENT OPTIONAL.



DRILL CENTER DIMPLE .035 MAX DIA
x .010 MAX DEPTH. CONCENTRIC TO
"A" DIA WITHIN .008 FIM.



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	37/64	1.051	.845	.303	.5771 .5761	.5550 .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	65,600	35,400	13,100
20	41/64	1.130	.935	.319	.6396 .6386	.6180 .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	80,600	44,800	16,600
24	49/64	1.291	1.125	.358	.7646 .7636	.7430 .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	115,100	75,500	27,900
28	57/64	1.449	1.315	.390	.8896 .8886	.8680 .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	154,700	101,800	37,700
32	1-1/64	1.602	1.500	.437	1.0146 1.0136	.9930 .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	201,200	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 HPL734 for oversize replacement.

CODE:

First dash number indicates nominal diameter in 1/32nds of the pin
which HPL638 oversize pin replaces.
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
HPL638BP18-34

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:

HPL638BP()-() = (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 3-23-04
TITLE HI-LITE® ST™ PIN SELF-ALIGNING TENSION HEAD ① NICKEL BASE ALLOY (INCONEL 718) SPECIAL THREAD, 1/64" OVERSIZE 1/16" GRIP VARIATION DRAWING NUMBER HPL638	