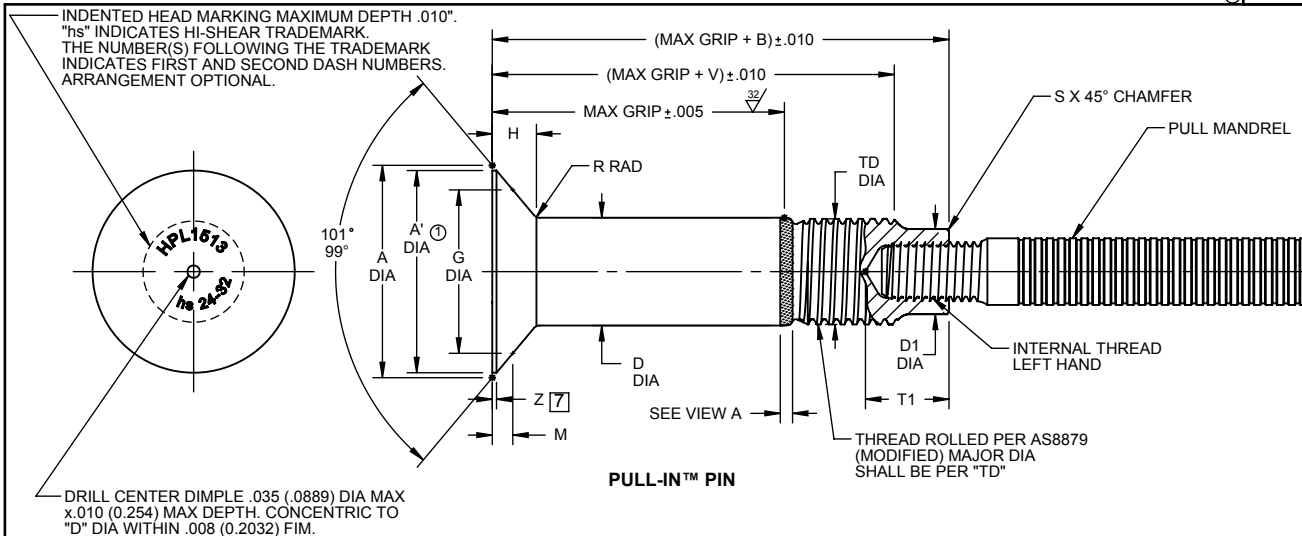




EXAMPLE OF PULL-IN™ PIN AND NUT/COLLAR AFTER ASSEMBLY

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

①																1	7																①	SYSTEM STRENGTH.					
FIRST DASH NO.	PIN NOM DIA	A DIA MAX	A4 DIA MIN	B REF	D DIA		TD DIA		D1 DIA		F REF	G GAGE DIA		H REF	M GAGE PROT.		R RAD ROLLED		S CHAMFER REF	V REF	Z MAX	THREAD MODIFIED	INTERNAL THREAD LEFT HAND			DOUBLE SHEAR STRENGTH		TENSILE STRENGTH	TENSION FATIGUE LOAD										
					MAX	MIN	MAX	MIN	MAX	MIN		MAX	MIN		MAX	MIN	T1 MAX	THREAD SIZE UNJF-3B					LOAD MAX	MIN	MAX	MIN	MAX												
24	3/4	1.3000 (33.02)	1.251 (31.78)	1.125 (28.58)	.7646 (19.421)	.7636 (19.395)	.7430 (18.872)	.7370 (18.720)	.6575 (16.700)	.6555 (16.650)	.012 (0.30)	1.1124 (28.255)	1.1122 (28.250)	.222 (5.64)	.0776 (1.971)	.0716 (1.819)	.050 (1.270)	.040 (1.016)	.020 (0.51)	.927 (23.54)	.022 (0.559)	7500-16 UNJF-3A	.625 (15.88)	7/16-SP	17 985 (80 000)	78 157 (347 658)	85 664 (381 054)	41 000 (182 377)	14 300 (63 610)										
28	7/8	1.5091 (38.33)	1.461 (37.11)	1.315 (33.40)	.8896 (22.596)	.8886 (22.570)	.8680 (22.047)	.8610 (21.870)	.7717 (19.600)	.7697 (19.550)	.014 (0.36)	1.3440 (34.138)	1.3438 (34.133)	.257 (6.53)	.0694 (1.763)	.0622 (1.580)	.050 (1.270)	.040 (1.016)	.020 (0.51)	1.021 (25.92)	.022 (0.559)	8750-14 UNJF-3A	.725 (18.42)	1/2-SP	25 853 (115 000)	105 570 (469 599)	115 935 (515 703)	52 000 (231 308)	18 200 (80 958)										
32	1	1.7201 (43.69)	1.671 (42.44)	1.500 (38.10)	1.0146 (25.771)	1.0136 (25.745)	.9930 (25.222)	.9860 (25.045)	.8819 (22.400)	.8799 (22.350)	.014 (0.36)	1.5732 (39.959)	1.5730 (39.954)	.292 (7.42)	.0617 (1.567)	.0536 (1.361)	.050 (1.270)	.040 (1.016)	.020 (0.51)	1.151 (29.22)	.022 (0.559)	1.0000-12 UNJF-3A	.830 (21.08)	9/16-SP	31 473 (140 000)	137 392 (611 151)	150 703 (670 360)	67 000 (298 031)	20 100 (89 409)										

- GENERAL NOTES:**
- Head edge out of roundness shall not exceed "F".
 - Concentricity: Conical surface of head to "D" diameter within .005 (0.127) FIM.
 - "H" is dimensioned from maximum "D" diameter.
 - Hole preparation per NAS618.
 - Dimensions are in inches (millimeters) and to be met after finish.
 - Surface texture per ASME B46.1.
 - Curved or flat edge manufacturer's option.
 - The maximum allowable installation load must not exceed the maximum load values in table or thread failure may occur.
 - Use HPL1613 for oversize replacement.

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

HEAT TREAT: Anneal per Hi-Shear Spec. 391-1.

FINISH: HPL1513NKA(-)(-) = HI-KOTE™ 1 NC aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
HPL1513NKW(-)(-) = HI-KOTE™ 1 NC aluminum coating per Hi-Shear Spec. 294, with color white on pin end and cetyl alcohol tube per Hi-Shear Spec. 305.

SPECIFICATION: HI-LITE™ Product Specification 391-1, except as noted.

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

EXAMPLES:

Pin Part Number
HPL1513NKA24-32
8/16 or 1/2 Maximum Grip Length
3/4 or 12/16 Nominal Diameter Pin
Finish Code
Pin Basic Part Number

THIS AREA OF SPECIAL CONFIGURATION
AND COLD WORKING TO MEET PHYSICAL
REQUIREMENTS



VIEW A

HI-LITE™ THREAD TRANSITION AREA
SEE SPECIFICATION FOR INSPECTION

"HI-KOTE", "HPL", "PULL-IN" AND "HPL", ARE TRADEMARKS OF HI-SHEAR CORPORATION			
DRAWN BY ASSYTEM	DATE 2012-02-20	TITLE PULL-IN™ PIN 100° FLUSH SPECIAL SHEAR HEAD TITANIUM (ANNEALED) SPECIAL THREAD 1/64 OVERSIZE, 1/16 GRIP VARIATION SPECIAL HIGH INTERFERENCE FIT	
APPROVED J. GOYER	DATE 2012-02-20	DRAWING NUMBER HPL1513	
REVISION 1	DATE K. TRAN 2017-11-17	1 OF 1	