



HEXAGON METROLOGY

DATE=11/14/2012 TIME=3:31:55 PM
PART NAME : kevin-2012
REV NUMBER : 1
SER NUMBER :
STATS COUNT : 1

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STARTUP   =ALIGNMENT/START,RECALL:,LIST=YES
          ALIGNMENT/END
          MODE/MANUAL
          CHECK/ 0.1,1
          MOVESPEED/ 30
          TOUCHSPEED/ 0.7
          MANRETRACT/5
          FORMAT/TEXT,OPTIONS, ID, HEADINGS, , ;MEAS,NOM,TOL,DEV,OUTTOL, ,
          LOADPROBE/B89
          TIP/T1A0B0, SHANKIJK=0, 0, 1, ANGLE=0
PLN1-A   =FEAT/PLANE, CARTESIAN, TRIANGLE
          THEO/<4.14404,2.67017,0.95>,<0,0,1>
          ACTL/<7.56307,9.19114,-16.80931>,<-0.0002058,0.0002418,0.9999999>
          MEAS/PLANE,3
          HIT/BASIC,NORMAL,<2.21832,3.57233,0.95>,<0,0,1>,<5.86361,10.94492,-16.81008>,USE THEO = YES
          HIT/BASIC,NORMAL,<3.06192,0.69331,0.95>,<0,0,1>,<6.03649,8.31419,-16.80941>,USE THEO = YES
          HIT/BASIC,NORMAL,<7.15188,3.74487,0.95>,<0,0,1>,<10.78912,8.3143,-16.80843>,USE THEO = YES
          ENDMEAS/
LIN1-B   =FEAT/LINE, CARTESIAN, UNBOUNDED
          THEO/<1.00836,0,0.49251>,<1,0,0>
          ACTL/<5.51923,7.72688,-17.07671>,<0.999882,0.015365,0>
          MEAS/LINE,2,WORKPLANE
          HIT/BASIC,NORMAL,<1.00836,0,0.44207>,<0,-1,0>,<5.51923,7.72688,-17.07671>,USE THEO = YES
          HIT/BASIC,NORMAL,<6.80443,0,0.54295>,<0,-1,0>,<11.18987,7.81402,-17.07672>,USE THEO = YES
          ENDMEAS/
LIN2-C   =FEAT/LINE, CARTESIAN, UNBOUNDED
          THEO/<0,0.69673,0.12348>,<0,1,0>
          ACTL/<4.10985,8.4636,-17.65619>,<-0.0142874,0.9998979,0>
          MEAS/LINE,2,WORKPLANE
          HIT/BASIC,NORMAL,<0,0.69673,0.09952>,<-1,0,0>,<4.10985,8.4636,-17.6562>,USE THEO = YES
          HIT/BASIC,NORMAL,<0,3.04767,0.14744>,<-1,0,0>,<4.07904,10.62007,-17.65618>,USE THEO = YES
          ENDMEAS/
POINT    =FEAT/POINT, CARTESIAN, NO
          THEO/<0,0,0.308>,<1,0,0>
          ACTL/<4.12069,7.70539,-17.36645>,<0.999882,0.015365,0>
          CONSTR/POINT,INT,LIN1-B,LIN2-C
          MODE/DCC
A1       =ALIGNMENT/START, RECALL:STARTUP, LIST=YES
          ALIGNMENT/LEVEL, ZPLUS, PLN1-A
          ALIGNMENT/ROTATE, XPLUS, TO, LIN1-B, ABOUT, ZPLUS
          ALIGNMENT/TRANS, XAXIS, POINT
          ALIGNMENT/TRANS, YAXIS, POINT
          ALIGNMENT/TRANS, ZAXIS, PLN1-A
          ALIGNMENT/END
          CLEARP/ZPLUS,0.2,ZPLUS,0,ON
          MOVE/POINT,NORMAL,<0,0,5>
          MOVE/CLEARPLANE
CIRCLE-1 =FEAT/CONTACT/CIRCLE, CARTESIAN, IN, LEAST_SQR
          THEO/<8.008,3,0>,<0,0,1>,1,0,360
          ACTL/<8.01143,2.99296,-0.00162>,<0.0011212,-0.0005084,0.9999992>,1.00517,0,360
          TARG/<8.008,3,0>,<0,0,1>
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ANGLE VEC=<1,0,0>
SHOW ADVANCED MEASUREMENT OPTIONS=NO
SHOW CONTACT PARAMETERS=YES
NUMHITS=4,DEPTH=0.1,PITCH=0
SAMPLE HITS=3,SPACER=0.1
AVOIDANCE MOVE=NO,DISTANCE=0
FIND HOLE=DISABLED,ONERROR=NO,READ POS=NO
SHOWHITS=NO
MOVE/CLEARPLANE

CIRCLE-2 =FEAT/CONTACT/CIRCLE,CARTESIAN,IN,LEAST_SQR
THEO/<8.008,1,0>,<0,0,1>,1,0,360
ACTL/<8.00938,0.99401,-0.00141>,<0.0012401,0.0007286,0.999999>,1.00487,0,360
TARG/<8.008,1,0>,<0,0,1>
ANGLE VEC=<1,0,0>
SHOW ADVANCED MEASUREMENT OPTIONS=NO
SHOW CONTACT PARAMETERS=YES
NUMHITS=4,DEPTH=0.1,PITCH=0
SAMPLE HITS=3,SPACER=0.1
AVOIDANCE MOVE=NO,DISTANCE=0
FIND HOLE=DISABLED,ONERROR=NO,READ POS=NO
SHOWHITS=NO

CYLINDER-3 =FEAT/CONTACT/CYLINDER,CARTESIAN,IN,LEAST_SQR
THEO/<1,1,0>,<-0.0007688,0.0002449,0.9999997>,1,0.90259
ACTL/<1.00083,1.00092,-0.0001>,<-0.0004974,0.0004648,0.9999998>,1.00474,0.90259
TARG/<1,1,0>,<-0.0007688,0.0002449,0.9999997>
START ANG=0,END ANG=0
ANGLE VEC=<1,0,0>
SHOW ADVANCED MEASUREMENT OPTIONS=NO
SHOW CONTACT PARAMETERS=YES
NUMHITS=3,NUMLEVELS=2,STARTING DEPTH=0.1,ENDING DEPTH=0.4,PITCH=0
SAMPLE HITS=3,SPACER=0.05
AVOIDANCE MOVE=NO,DISTANCE=0
FIND HOLE=DISABLED,ONERROR=NO,READ POS=NO
SHOWHITS=NO

CIRCLE-4 =FEAT/CONTACT/CIRCLE,CARTESIAN,IN,LEAST_SQR
THEO/<1,3,0>,<0,0,1>,1,0,360
ACTL/<1.00276,3.00033,-0.00018>,<-0.0001469,-0.0001242,1>,1.00507,0,360
TARG/<1,3,0>,<0,0,1>
ANGLE VEC=<1,0,0>
SHOW ADVANCED MEASUREMENT OPTIONS=NO
SHOW CONTACT PARAMETERS=YES
NUMHITS=4,DEPTH=0.1,PITCH=0
SAMPLE HITS=3,SPACER=0.1
AVOIDANCE MOVE=NO,DISTANCE=0
FIND HOLE=DISABLED,ONERROR=NO,READ POS=NO
SHOWHITS=NO

CIRCLE-5 =FEAT/CONTACT/CIRCLE,CARTESIAN,IN,LEAST_SQR
THEO/<4.45,2,0>,<0,0,1>,2.5,0,360
ACTL/<4.45173,1.99679,0.00007>,<0.0002891,0.0002573,0.9999999>,2.49915,0,360
TARG/<4.45,2,0>,<0,0,1>
ANGLE VEC=<-0.7071068,0.7071068,0>
SHOW ADVANCED MEASUREMENT OPTIONS=NO
SHOW CONTACT PARAMETERS=YES
NUMHITS=4,DEPTH=0.1,PITCH=0
SAMPLE HITS=3,SPACER=0.1
AVOIDANCE MOVE=NO,DISTANCE=0
FIND HOLE=DISABLED,ONERROR=NO,READ POS=NO
SHOWHITS=NO

CIRCLE-6 =FEAT/CONTACT/CIRCLE,CARTESIAN,IN,LEAST_SQR
THEO/<4.45,2,-0.5>,<0,0,1>,2,0,360
ACTL/<4.45181,1.99662,-0.50056>,<0.0003943,0.0003383,0.9999999>,1.99953,0,360
TARG/<4.45,2,-0.5>,<0,0,1>
ANGLE VEC=<-0.7071068,0.7071068,0>
SHOW ADVANCED MEASUREMENT OPTIONS=NO
SHOW CONTACT PARAMETERS=YES

NUMHITS=4,DEPTH=0.1,PITCH=0
 SAMPLE HITS=3,SPACER=0.1
 AVOIDANCE MOVE=NO,DISTANCE=0
 FIND HOLE=DISABLED,ONERROR=NO,READ POS=NO
 SHOWHITS=NO
 MOVE/CLEARPLANE
 MOVE/POINT,NORMAL,<0,-3.6,5>
 LOADPROBE/B89
 TIP/T1A90B180, SHANKIJK=-0.01074, -0.99994, -0.00019, ANGLE=179.99584
 CLEARP/YMINUS,-0.2,ZPLUS,0.2,ON
 MOVE/CLEARPLANE

DAT-B-PLANE=FEAT/CONTACT/PLANE,CARTESIAN,TRIANGLE
 THEO/<5.05656,0,-0.5>,<0,-1,0>
 ACTL/<5.05656,-0.00038,-0.5>,<0.0000055,-0.9999993,0.0011776>
 TARG/<5.05656,0,-0.5>,<0,-1,0>
 ANGLE VEC=<0,0,1>,SQUARE
 SHOW ADVANCED MEASUREMENT OPTIONS=NO
 SHOW_CONTACT_PARAMETERS=YES
 NUMHITS=2,NUMROWS=3
 SPACER=0
 AVOIDANCE MOVE=NO,DISTANCE=0
 SHOWHITS=NO
 MOVE/CLEARPLANE
 CLEARP/ZPLUS,4,YMINUS,-0.2,ON
 MOVE/CLEARPLANE
 MOVE/POINT,NORMAL,<0,12,5>
 MOVE/CLEARPLANE
 LOADPROBE/B89
 TIP/T1A90B0, SHANKIJK=0.01536, 0.99988, 0.0003, ANGLE=-179.99577
 CLEARP/YPLUS,4.15,ZPLUS,4,ON
 MOVE/CLEARPLANE

PLANE =FEAT/CONTACT/PLANE,CARTESIAN,TRIANGLE
 THEO/<5.73033,3.95,-0.36907>,<0,1,0>
 ACTL/<5.73033,3.94845,-0.36907>,<-0.0000502,0.9999998,0.0006249>
 TARG/<5.73033,3.95,-0.36907>,<0,1,0>
 ANGLE VEC=<0,0,1>,SQUARE
 SHOW ADVANCED MEASUREMENT OPTIONS=NO
 SHOW_CONTACT_PARAMETERS=YES
 NUMHITS=2,NUMROWS=3
 SPACER=0
 AVOIDANCE MOVE=NO,DISTANCE=0
 SHOWHITS=NO
 MOVE/POINT,NORMAL,<0,4.5,5>
 MOVE/CLEARPLANE
 LOADPROBE/B89
 TIP/T1A0B0, SHANKIJK=0.00007, -0.0003, 1, ANGLE=-0.88012

DIM LOC1= LOCATION OF CIRCLE CIRCLE-1 UNITS=IN , \$

GRAPH=OFF TEXT=OFF MULT=10.00 OUTPUT=BOTH

AX	MEAS	NOMINAL	+TOL	-TOL	DEV	OUTTOL
X	8.01143	8.00800	0.00100	0.00100	0.00343	0.00243
Y	2.99296	3.00000	0.00100	0.00100	-0.00704	0.00604
D	1.00517	1.00000	0.00100	0.00100	0.00517	0.00417

END OF DIMENSION LOC1

DIM LOC2= LOCATION OF CIRCLE CIRCLE-2 UNITS=IN , \$

GRAPH=OFF TEXT=OFF MULT=10.00 OUTPUT=BOTH

AX	MEAS	NOMINAL	+TOL	-TOL	DEV	OUTTOL
X	8.00938	8.00800	0.00100	0.00100	0.00138	0.00038
Y	0.99401	1.00000	0.00100	0.00100	-0.00599	0.00499
D	1.00487	1.00000	0.00100	0.00100	0.00487	0.00387

END OF DIMENSION LOC2

DIM LOC3= LOCATION OF CYLINDER CYLINDER-3 UNITS=IN , \$

GRAPH=OFF TEXT=OFF MULT=10.00 OUTPUT=BOTH

AX	MEAS	NOMINAL	+TOL	-TOL	DEV	OUTTOL
X	1.00106	1.00000	0.00100	0.00100	0.00106	0.00006
Y	1.00072	1.00000	0.00100	0.00100	0.00072	0.00000
D	1.00474	1.00000	0.00100	0.00100	0.00474	0.00374

END OF DIMENSION LOC3

DIM LOC4= LOCATION OF CIRCLE CIRCLE-4 UNITS=IN , \$

GRAPH=OFF TEXT=OFF MULT=10.00 OUTPUT=BOTH

AX	MEAS	NOMINAL	+TOL	-TOL	DEV	OUTTOL
X	1.00276	1.00000	0.00100	0.00100	0.00276	0.00176
Y	3.00033	3.00000	0.00100	0.00100	0.00033	0.00000
D	1.00507	1.00000	0.00100	0.00100	0.00507	0.00407

END OF DIMENSION LOC4

DIM LOC5= LOCATION OF CIRCLE CIRCLE-5 UNITS=IN , \$

GRAPH=OFF TEXT=OFF MULT=10.00 OUTPUT=BOTH

AX	MEAS	NOMINAL	+TOL	-TOL	DEV	OUTTOL
X	4.45173	4.45000	0.00100	0.00100	0.00173	0.00073
Y	1.99679	2.00000	0.00100	0.00100	-0.00321	0.00221
D	2.49915	2.50000	0.00100	0.00100	-0.00085	0.00000

END OF DIMENSION LOC5

DIM DIST2= 2D DISTANCE FROM CIRCLE CIRCLE-1 TO CIRCLE CIRCLE-2 PAR TO YAXIS, NO_RADIUS UNITS=IN , \$

GRAPH=OFF TEXT=OFF MULT=10.00 OUTPUT=BOTH

AX	MEAS	NOMINAL	+TOL	-TOL	DEV	OUTTOL
M	1.99895	2.00000	0.00100	0.00100	-0.00105	0.00005

DIM DIST3= 2D DISTANCE FROM CYLINDER CYLINDER-3 TO CIRCLE CIRCLE-4 PAR TO YAXIS, NO_RADIUS UNITS=IN , \$

GRAPH=OFF TEXT=OFF MULT=10.00 OUTPUT=BOTH

AX	MEAS	NOMINAL	+TOL	-TOL	DEV	OUTTOL
M	1.99940	2.00000	0.00100	0.00100	-0.00060	0.00000

DIM DIST4= 2D DISTANCE FROM CIRCLE CIRCLE-1 TO CYLINDER CYLINDER-3 PAR TO XAXIS, NO_RADIUS UNITS=IN , \$

GRAPH=OFF TEXT=OFF MULT=10.00 OUTPUT=BOTH

AX	MEAS	NOMINAL	+TOL	-TOL	DEV	OUTTOL
M	7.01059	7.00800	0.00100	0.00100	0.00259	0.00159

DIM CONCEN1= CONCENTRICITY FROM CIRCLE CIRCLE-5 TO CIRCLE CIRCLE-6 UNITS=IN , \$

GRAPH=OFF TEXT=OFF MULT=10.00 OUTPUT=BOTH

AX	MEAS	NOMINAL	+TOL	-TOL	DEV	OUTTOL
M	0.00037	0.00000	0.00039	0.00000	0.00037	0.00000

DIM PERP1= PERPENDICULARITY OF PLANE DAT-B-PLANE,RFS TO LINE LIN2-C,RFS UNITS=IN , \$

GRAPH=OFF TEXT=OFF MULT=10.00 OUTPUT=BOTH

AX	MEAS	NOMINAL	+TOL	-TOL	DEV	OUTTOL
M	0.00709	0.00000	0.00039	0.00000	0.00709	0.00670

DIM FLAT1= FLATNESS OF PLANE PLN1-A UNITS=IN , \$

GRAPH=OFF TEXT=OFF MULT=10.00 OUTPUT=BOTH

AX	MEAS	NOMINAL	+TOL	-TOL	DEV	OUTTOL
M	0.00000	0.00000	0.00039	0.00000	0.00000	0.00000

DIM PARL1= PARALLELISM OF PLANE DAT-B-PLANE,RFS TO PLANE PLANE,RFS UNITS=IN , \$

GRAPH=OFF TEXT=OFF MULT=10.00 OUTPUT=BOTH

AX	MEAS	NOMINAL	+TOL	-TOL	DEV	OUTTOL
M	0.00139	0.00000	0.00039	0.00000	0.00139	0.00100

END OF MEASUREMENT FOR

PN=kevin-2012 DWG=1 SN=
 TOTAL # OF MEAS =22 # OUT OF TOL =16 # OF HOURS =00:05:19