

\$\$ NO,

```

*****
****DCC Mode "ON"
****Define "Active Clear Plane"
*****
MODE/DCC
CLEARP/ZPLUS,0.25,ZPLUS,0,OFF
MOVE/CLEARPLANE

```

\$\$ NO,

```

*****
****Define "DCC Alignment" DATUM Features
****with "avoid crash" Move commands
****(Precision Alignment)
*****

```

PLN-A

```

=FEAT/CONTACT/PLANE/ADAPTIVE_FREE_FORM_PLANE_SCAN,CARTESIAN,NONE,LEAST_SQR
THEO/<4.3303,1.8275,0>,<0,0,1>
ACTL/<4.3924,1.8194,-0.0008>,<-0.0004621,0.0001481,0.9999999>
TARG/<4.3303,1.8275,0>,<0,0,1>
ANGLE VEC=<1,0,0>,SQUARE
SHOW FEATURE PARAMETERS=NO
SHOW CONTACT PARAMETERS=YES
  NUMHITS=2831,NUMROWS=3
  SPACER=0
  AVOIDANCE MOVE=BOTH,DISTANCE BEFORE=0,DISTANCE AFTER=0.3937,DIRECTION=ALONG FEATURE VECTOR
  USE BOUNDARY OFFSET=NO
SHOW HITS=NO
MOVE/CLEARPLANE

```

PLN-B

```

=FEAT/CONTACT/PLANE/ADAPTIVE_FREE_FORM_PLANE_SCAN,CARTESIAN,NONE,LEAST_SQR
THEO/<4.3293,0,-0.4563>,<0,-1,0>
ACTL/<4.341,0.0001,-0.4599>,<0.0000148,-1,-0.0002567>
TARG/<4.3293,0,-0.4563>,<0,-1,0>
ANGLE VEC=<1,0,0>,SQUARE
SHOW FEATURE PARAMETERS=NO
SHOW CONTACT PARAMETERS=YES
  NUMHITS=1337,NUMROWS=3
  SPACER=0
  AVOIDANCE MOVE=BOTH,DISTANCE BEFORE=0,DISTANCE AFTER=0.3937,DIRECTION=ALONG FEATURE VECTOR
  USE BOUNDARY OFFSET=NO
SHOW HITS=NO
MOVE/CLEARPLANE

```

PLN-C

```

=FEAT/CONTACT/PLANE/ADAPTIVE_FREE_FORM_PLANE_SCAN,CARTESIAN,NONE,LEAST_SQR
THEO/<0,1.7153,-0.8022>,<-1,0,0>
ACTL/<0.0049,1.7331,-0.8041>,<-0.9999928,0.003653,-0.0009911>
TARG/<0,1.7153,-0.8022>,<-1,0,0>
ANGLE VEC=<0,0,1>,SQUARE
SHOW FEATURE PARAMETERS=NO
SHOW CONTACT PARAMETERS=YES
  NUMHITS=467,NUMROWS=3
  SPACER=0
  AVOIDANCE MOVE=BOTH,DISTANCE BEFORE=0,DISTANCE AFTER=0.3937,DIRECTION=ALONG FEATURE VECTOR
  USE BOUNDARY OFFSET=NO
SHOW HITS=NO
MOVE/CLEARPLANE

```

\$\$ NO,

```

*****
****DCC Alignment
*****

```

A2

```

=ALIGNMENT/START,RECALL:A1,LIST=YES
  ALIGNMENT/LEVEL,ZPLUS,PLN-A
  ALIGNMENT/TRANS,ZAXIS,PLN-A
  ALIGNMENT/ROTATE,YMINUS,TO,PLN-B,ABOUT,ZPLUS
  ALIGNMENT/TRANS,YAXIS,PLN-B
  ALIGNMENT/TRANS,XAXIS,PLN-C
ALIGNMENT/END

```

\$\$ NO,

```

*****
****Insert Features with "avoid crash" Move Commands
*****

```

CYL1

```

=FEAT/CONTACT/CYLINDER/ADAPTIVE_CYLINDER_SPIRAL_SCAN,CARTESIAN,IN,LEAST_SQR

```

THEO/<1,1,0>,<0,0,1>,1,0.95
ACTL/<0.9865,1.0134,0>,<0.0029066,-0.0000962,0.9999958>,1.0009,0.95
TARG/<1,1,0>,<0,0,1>
START ANG=0,END ANG=360
ANGLE VEC=<1,0,0>
DIRECTION=CCW
SHOW FEATURE PARAMETERS=NO
SHOW CONTACT PARAMETERS=YES
NUMHITS=1959,NUMLEVELS=4,DEPTH=0.1433,END OFFSET=0.163,PITCH=0.1394
SAMPLE METHOD=SAMPLE_HITS
SAMPLE HITS=3,SPACER=0
AVOIDANCE MOVE=BEFORE,DISTANCE BEFORE=0.3,DIRECTION=ALONG FEATURE VECTOR
FIND HOLE=DISABLED,ONERROR=NO,READ POS=NO
SHOW HITS=NO
MOVE/CLEARPLANE

\$\$ NO,

****Insert Dimensions

DATDEF/A,FEATURES=PLN-A,,
DATDEF/B,FEATURES=PLN-B,,
DATDEF/C,FEATURES=PLN-C,,

FCFLOC1

=GEOMETRIC_TOLERANCE/STANDARD=ASME Y14.5,SHOWEXPANDED=YES,
DESCRIPTION=OFF,,
FEATURE MATH=DEFAULT,DATUM MATH=DEFAULT,DISPLAY_COORDS=DRF,
UNITS=IN,OUTPUT=BOTH,ARROWDENSITY=100,
SIZE/NOMINAL=1,UPPER_TOLERANCE=0.005,LOWER_TOLERANCE=0.005,
REPORT_LOCAL_SIZE=OFF,
CYL1:
UAME SIZE:1.0006,
SEGMENT 1,POSITION,DIAMETER,0.03,_,_,<len>,_,A,B,_,C,_,
TEXT=OFF,CADGRAPH=OFF,REPORTGRAPH=OFF,MULT=10,
MEASURED:
CYL1:0.0349,

FCFLOC2

ADD
FEATURES/CYL1,,
=GEOMETRIC_TOLERANCE/STANDARD=ASME Y14.5,SHOWEXPANDED=YES,
DESCRIPTION=OFF,,
FEATURE MATH=DEFAULT,DATUM MATH=DEFAULT,DISPLAY_COORDS=DRF,
UNITS=IN,OUTPUT=BOTH,ARROWDENSITY=100,
SIZE/NOMINAL=1,UPPER_TOLERANCE=0.005,LOWER_TOLERANCE=0.005,
REPORT_LOCAL_SIZE=OFF,
CYL1:
UAME SIZE:1.0006,
SEGMENT 1,POSITION,DIAMETER,0.03,MMC,_,_,<len>,_,A,B,_,C,_,
TEXT=OFF,CADGRAPH=OFF,REPORTGRAPH=OFF,MULT=10,
MEASURED:
CYL1:0.0349,
ADD
FEATURES/CYL1,,

END OF MEASUREMENT FOR

PN=Lab-5-Demo DWG= SN=
TOTAL # OF MEAS =4 # OUT OF TOL =1 # OF HOURS =00:03:44