

MASS PROPERTIES OF THE PART BOTTOM

VOLUME = 1.1595147e+00 INCH^3  
SURFACE AREA = 3.5009570e+01 INCH^2  
DENSITY = 9.7500000e-02 POUND / INCH^3  
MASS = 1.1305269e-01 POUND

CENTER OF GRAVITY with respect to \_BOTTOM coordinate frame:  
X Y Z 1.7050834e-01 2.6959795e-01 0.0000000e+00 INCH

INERTIA with respect to \_BOTTOM coordinate frame: (POUND \*  
INCH^2)

INERTIA TENSOR:

Ixx Ixy Ixz 1.1153282e-01 -9.6563415e-03 0.0000000e+00  
Iyx Iyy Iyz -9.6563415e-03 2.6441667e-01 0.0000000e+00  
Izx Izy Izz 0.0000000e+00 0.0000000e+00 1.8726012e-01

INERTIA at CENTER OF GRAVITY with respect to \_BOTTOM coordinate  
frame:

(POUND \*

INCH^2)

INERTIA TENSOR:

Ixx Ixy Ixz 1.0331581e-01 -4.4594567e-03 0.0000000e+00  
Iyx Iyy Iyz -4.4594567e-03 2.6112988e-01 0.0000000e+00  
Izx Izy Izz 0.0000000e+00 0.0000000e+00 1.7575632e-01

PRINCIPAL MOMENTS OF INERTIA: (POUND \* INCH^2)

I1 I2 I3 1.0318989e-01 1.7575632e-01 2.6125579e-01

ROTATION MATRIX from \_BOTTOM orientation to PRINCIPAL AXES:

0.99960 0.00000 0.02822  
0.02822 0.00000 -0.99960  
0.00000 1.00000 0.00000

ROTATION ANGLES from \_BOTTOM orientation to PRINCIPAL AXES  
(degrees):

angles about x y z 90.000 1.617 0.000

RADII OF GYRATION with respect to PRINCIPAL AXES:

R1 R2 R3 9.5538438e-01 1.2468523e+00 1.5201713e+00 INCH

MASS PROPERTIES OF THE PART TOP

VOLUME = 6.2813612e-01 INCH^3  
SURFACE AREA = 2.1323506e+01 INCH^2  
DENSITY = 9.7500000e-02 POUND / INCH^3  
MASS = 6.1243272e-02 POUND

CENTER OF GRAVITY with respect to \_TOP coordinate frame:

X Y Z 1.5568774e+00 -1.1875000e+00 -8.3953552e-01 INCH

INERTIA with respect to \_TOP coordinate frame: (POUND \* INCH^2)

INERTIA TENSOR:

Ixx Ixy Ixz 1.6225926e-01 1.1322606e-01 8.6281682e-02  
Iyx Iyy Iyz 1.1322606e-01 2.7562634e-01 -6.1056384e-02  
Izx Izy Izz 8.6281682e-02 -6.1056384e-02 3.4676863e-01

INERTIA at CENTER OF GRAVITY with respect to \_TOP coordinate frame:

(POUND \* INCH^2)

INERTIA TENSOR:

Ixx Ixy Ixz 3.2731202e-02 0.0000000e+00 6.2334282e-03  
Iyx Iyy Iyz 0.0000000e+00 8.4015315e-02 0.0000000e+00  
Izx Izy Izz 6.2334282e-03 0.0000000e+00 1.1196049e-01

PRINCIPAL MOMENTS OF INERTIA: (POUND \* INCH^2)

I1 I2 I3 3.2243781e-02 8.4015315e-02 1.1244791e-01

ROTATION MATRIX from \_TOP orientation to PRINCIPAL AXES:

0.99696 0.00000 0.07796  
0.00000 1.00000 0.00000  
-0.07796 0.00000 0.99696

ROTATION ANGLES from \_TOP orientation to PRINCIPAL AXES (degrees):  
angles about x y z 0.000 4.471 0.000

RADII OF GYRATION with respect to PRINCIPAL AXES:

R1 R2 R3 7.2559418e-01 1.1712512e+00 1.3550225e+00 INCH