

Pelvis_weight_bench inertia data

Position wrt Waist [m]:

X = -0.035

Y = 0.0

Z = 0.075

VOLUME = 1.5034657e+06 MM^3
SURFACE AREA = 1.7182677e+05 MM^2
AVERAGE DENSITY = 3.6767307e-06 KILOGRAM / MM^3
MASS = 5.5278386e+00 KILOGRAM

CENTER OF GRAVITY with respect to ASSY_SYS coordinate frame:
X Y Z 0.0000000e+00 0.0000000e+00 1.8846109e+02 MM

INERTIA with respect to ASSY_SYS coordinate frame: (KILOGRAM * MM^2)

INERTIA TENSOR:
Ixx Ixy Ixz 3.4828614e+05 0.0000000e+00 0.0000000e+00
Iyx Iyy Iyz 0.0000000e+00 3.4847012e+05 0.0000000e+00
Izx Izy Izz 0.0000000e+00 0.0000000e+00 5.1389419e+03

INERTIA at CENTER OF GRAVITY with respect to ASSY_SYS coordinate frame: (KILOGRAM * MM^2)

INERTIA TENSOR:
Ixx Ixy Ixz 1.5195067e+05 0.0000000e+00 -2.4191890e-01
Iyx Iyy Iyz 0.0000000e+00 1.5213465e+05 0.0000000e+00
Izx Izy Izz -2.4191890e-01 0.0000000e+00 5.1389419e+03

PRINCIPAL MOMENTS OF INERTIA: (KILOGRAM * MM^2)
I1 I2 I3 5.1389419e+03 1.5195067e+05 1.5213465e+05

ROTATION MATRIX from ASSY_SYS orientation to PRINCIPAL AXES:
0.00000 1.00000 -0.00001
0.00000 0.00001 1.00000
1.00000 0.00000 0.00000

ROTATION ANGLES from ASSY_SYS orientation to PRINCIPAL AXES (degrees):
angles about x y z -90.000 0.000 -90.000

RADI OF GYRATION with respect to PRINCIPAL AXES:
R1 R2 R3 3.0490123e+01 1.6579584e+02 1.6589618e+02 MM

MASS PROPERTIES OF COMPONENTS OF THE ASSEMBLY
(in assembly units and the ASSY_SYS coordinate frame)

DENSITY	MASS	C.G.: X	Y	Z
ADVR0032	MATERIAL:			
ERGAL70				
2.80000e-06	7.86194e-01	-1.70042e-03	0.00000e+00	
7.56564e+00				
ADVR0033	MATERIAL:			
ERGAL70				
2.80000e-06	2.68944e+00	0.00000e+00	0.00000e+00	
1.12831e+02				
ADVR0034	MATERIAL:			
STEEL				
7.82708e-06	1.98592e+00	0.00000e+00	0.00000e+00	
3.68538e+02				
V8-12--_U5931_GC	MATERIAL:			
UNKNOWN				
7.85000e-06	1.10478e-02	0.00000e+00	3.25000e+01	
7.48563e+00				
V8-12--_U5931_GC	MATERIAL:			
UNKNOWN				
7.85000e-06	1.10478e-02	-2.81458e+01	1.62500e+01	
7.48563e+00				
V8-12--_U5931_GC	MATERIAL:			
UNKNOWN				
7.85000e-06	1.10478e-02	-2.81458e+01	-1.62500e+01	
7.48563e+00				
V8-12--_U5931_GC	MATERIAL:			
UNKNOWN				
7.85000e-06	1.10478e-02	0.00000e+00	-3.25000e+01	
7.48563e+00				
V8-12--_U5931_GC	MATERIAL:			
UNKNOWN				
7.85000e-06	1.10478e-02	2.81458e+01	-1.62500e+01	
7.48563e+00				
V8-12--_U5931_GC	MATERIAL:			
UNKNOWN				
7.85000e-06	1.10478e-02	2.81458e+01	1.62500e+01	
7.48563e+00				

