```
SURFACE AREA = 4.3748484e+05 MM<sup>2</sup>
AVERAGE DENSITY = 2.9001016e-06 KILOGRAM / MM^3
MASS = 3.0340546e+00 KILOGRAM
CENTER OF GRAVITY with respect to DOOSAN PT coordinate frame:
            -1.7392138e+01 -1.0666058e+01 1.4300729e+02 MM
INERTIA with respect to DOOSAN_PT coordinate frame: (KILOGRAM * MM^2)
INERTIA TENSOR:
Ixx Ixy Ixz 9.1539750e+04 -2.4575266e+03 1.1416888e+04
Iyx Iyy Iyz -2.4575266e+03 9.4291735e+04 6.8901663e+03
Izx Izy Izz 1.1416888e+04 6.8901663e+03 1.2592517e+04
INERTIA at CENTER OF GRAVITY with respect to DOOSAN_PT coordinate frame:
(KILOGRAM * MM^2)
INERTIA TENSOR:
Ixx Ixy Ixz 2.9144870e+04 -1.8946926e+03 3.8705792e+03
Iyx Iyy Iyz -1.8946926e+03 3.1324263e+04 2.2622497e+03
Izx Izy Izz 3.8705792e+03 2.2622497e+03 1.1329588e+04
PRINCIPAL MOMENTS OF INERTIA: (KILOGRAM * MM^2)
           1.0203308e+04 2.9175118e+04 3.2420295e+04
I1 I2 I3
ROTATION MATRIX from DOOSAN PT orientation to PRINCIPAL AXES:
                     0.84028 -0.49964
      -0.21046
      -0.12276
                     0.48432
                                   0.86623
      0.96986
                     0.24365
                                   0.00122
ROTATION ANGLES from DOOSAN_PT orientation to PRINCIPAL AXES (degrees):
angles about x y z -89.919 -29.976
                                               -104.062
RADII OF GYRATION with respect to PRINCIPAL AXES:
R1 R2 R3 5.7990761e+01 9.8060616e+01 1.0337054e+02 MM
MASS PROPERTIES OF COMPONENTS OF THE ASSEMBLY
(in assembly units and the DOOSAN_PT coordinate frame)
  DENSITY
                                C.G.: X
                                                            Ζ
                      MASS
                                               Υ
                       MG0017A0
                                          MATERIAL:
  ERGAL70
        2.81000e-06 2.27934e-01 -2.50690e-02 -2.47574e-02 6.13000e+01
                       MG0018A0
                                          MATERIAL:
  ERGAL70
        2.81000e-06 6.44015e-03 1.28784e+01 -7.99318e+01 7.13989e+01
                       MG0018A0
                                          MATERIAL:
  ERGAL70
        2.81000e-06 6.44015e-03 -1.28784e+01 -7.99318e+01 7.13989e+01
          ANGLED_FOLDED_BEAM_V1
                                          MATERIAL:
  ERGAL70
```

VOLUME = 1.0461891e+06 MM^3

	2.87045e-02 ED_BEAM_V1	-2.91953e+01 -6.03939e+01 MATERIAL:	9.49345e+01
2.81000e-06	2.87045e-02 MG0018A0	2.91953e+01 -6.03939e+01 MATERIAL:	9.49345e+01
ERGAL70 2.81000e-06	6.44015e-03 MG0018A0	4.18476e+01 -4.02183e+01 MATERIAL:	1.22600e+02
ERGAL70 2.81000e-06	6.44015e-03 MG0018A0	-4.18476e+01 -4.02183e+01 MATERIAL:	1.22600e+02
ERGAL70			
2.81000e-06	6.44015e-03 MG0018A0	6.27838e+01 5.11189e+01 MATERIAL:	7.13989e+01
ERGAL70			
2.81000e-06 ANGLED_FOLD ERGAL70		7.56622e+01 2.88129e+01 MATERIAL:	7.13989e+01
2.81000e-06 ANGLED_FOLD		6.69003e+01 4.91307e+00 MATERIAL:	9.49345e+01
ERGAL70 2.81000e-06	2.87045e-02 MG0018A0	3.77050e+01 5.54809e+01 MATERIAL:	9.49345e+01
ERGAL70			
2.81000e-06	6.44015e-03 MG0018A0	1.39063e+01 5.63502e+01 MATERIAL:	1.22600e+02
ERGAL70			
2.81000e-06 ERGAL70	6.44015e-03 MG0018A0	5.57539e+01 -1.61319e+01 MATERIAL:	1.22600e+02
	6.44015e-03 MG0018A0	-7.56622e+01 2.88129e+01 MATERIAL:	7.13989e+01
ERGAL70			
ANGLED_FOLD		-6.27838e+01 5.11189e+01 MATERIAL:	7.13989e+01
ERGAL70			
	2.87045e-02 ED_BEAM_V1	-3.77050e+01 5.54808e+01 MATERIAL:	9.49345e+01
	2.87045e-02 MG0018A0	-6.69003e+01 4.91307e+00 MATERIAL:	9.49345e+01
ERGAL70			
2.81000e-06	6.44015e-03 MG0018A0	-5.57539e+01 -1.61319e+01 MATERIAL:	1.22600e+02
ERGAL70			
	6.44015e-03 MG0020A0	-1.39063e+01 5.63502e+01 MATERIAL:	1.22600e+02
ERGAL70	4 72425 21	1 24544- 00 7 77404 00	1 22600 00
2.81000e-06 TOP_HALF_TOC UNKNOWN		-1.34544e-02 -7.77121e-03 MATERIAL:	1.32699e+02
	1.64166e+00	-3.27176e+01 -1.93464e+01	2.14779e+02
		MATERIAL:	

2.98939e-06 6.56649e-01 -3.42172e-02 -4.91799e-02 V4-10_UNI5931-ISO4762 MATERIAL:	1.86820e+01
AISI304 7.78000e-06 1.78907e-03 -5.86231e+01 -2.08819e+01 V4-10_UNI5931-ISO4762 MATERIAL:	1.34412e+02
AISI304 7.78000e-06 1.78907e-03 -5.86231e+01 -1.13819e+01 V4-10_UNI5931-ISO4762 MATERIAL:	1.34412e+02
AISI304 7.78000e-06 1.78907e-03 -4.73958e+01 -4.03281e+01 V4-10_UNI5931-ISO4762 MATERIAL:	1.34412e+02
AISI304 7.78000e-06 1.78907e-03 -3.91686e+01 -4.50781e+01 V4-10_UNI5931-ISO4762 MATERIAL:	1.34412e+02
AISI304 7.78000e-06 1.78907e-03 5.11198e+01 -2.08819e+01 V4-10_UNI5931-ISO4762 MATERIAL:	1.22267e+02
AISI304 7.78000e-06 1.78907e-03 5.11198e+01 -1.13819e+01 V4-10_UNI5931-ISO4762 MATERIAL:	1.22267e+02
AISI304 7.78000e-06 1.78907e-03 4.36442e+01 -3.38300e+01 V4-10_UNI5931-ISO4762 MATERIAL:	1.22267e+02
AISI304 7.78000e-06 1.78907e-03 3.54169e+01 -3.85800e+01 V4-10_UNI5931-ISO4762 MATERIAL:	1.22267e+02
AISI304 7.78000e-06 1.78907e-03 1.12272e+01 6.12100e+01 V4-10_UNI5931-ISO4762 MATERIAL:	1.34412e+02
AISI304 7.78000e-06 1.78907e-03 1.94545e+01 5.64600e+01 V4-10_UNI5931-ISO4762 MATERIAL:	1.34412e+02
AISI304 7.78000e-06 1.78907e-03 -1.12272e+01 6.12100e+01 V4-10_UNI5931-ISO4762 MATERIAL:	1.34412e+02
AISI304 7.78000e-06 1.78907e-03 -1.94545e+01 5.64600e+01 V4-10 UNI5931-ISO4762 MATERIAL:	1.34412e+02
AISI304 7.78000e-06 1.78907e-03 5.11198e+01 -2.08819e+01 V4-10 UNI5931-ISO4762 MATERIAL:	1.22267e+02
AISI304 7.78000e-06 1.78907e-03 5.11198e+01 -1.13819e+01 V4-10 UNI5931-ISO4762 MATERIAL:	1.22267e+02
AISI304 7.78000e-06 1.78907e-03 4.36442e+01 -3.38300e+01 V4-10 UNI5931-ISO4762 MATERIAL:	1.22267e+02
AISI304 7.78000e-06 1.78907e-03 3.54169e+01 -3.85800e+01 V4-10_UNI5931-ISO4762 MATERIAL:	1.22267e+02
AISI304 7.78000e-06 1.78907e-03 4.73958e+01 -4.03281e+01 V4-10 UNI5931-ISO4762 MATERIAL:	1.34412e+02
AISI304	

7.78000e-06 1.78907e-03 V4-10_UNI5931-ISO4762 AISI304	3.91686e+01 -4.50781e+01 MATERIAL:	1.34412e+02
7.78000e-06 1.78907e-03 V4-10_UNI5931-ISO4762	5.86231e+01 -2.08819e+01 MATERIAL:	1.34412e+02
AISI304 7.78000e-06 1.78907e-03 V4-10_UNI5931-ISO4762	5.86231e+01 -1.13819e+01 MATERIAL:	1.34412e+02
AISI304 7.78000e-06 1.78907e-03 V4-10_UNI5931-ISO4762	5.11198e+01 -2.08819e+01 MATERIAL:	1.22267e+02
AISI304 7.78000e-06 1.78907e-03 V4-10_UNI5931-ISO4762	5.11198e+01 -1.13819e+01 MATERIAL:	1.22267e+02
AISI304 7.78000e-06 1.78907e-03 V4-10_UNI5931-ISO4762	4.36442e+01 -3.38300e+01 MATERIAL:	1.22267e+02
AISI304 7.78000e-06 1.78907e-03 V4-10_UNI5931-ISO4762	3.54169e+01 -3.85800e+01 MATERIAL:	1.22267e+02
AISI304 7.78000e-06 1.78907e-03 V4-10_UNI5931-ISO4762	1.55574e+01 -7.50720e+01 MATERIAL:	5.95876e+01
AISI304 7.78000e-06 1.78907e-03 V4-10_UNI5931-ISO4762	7.33013e+00 -7.98220e+01 MATERIAL:	5.95876e+01
AISI304	-1.55574e+01 -7.50720e+01 MATERIAL:	5.95876e+01
AISI304	-7.33013e+00 -7.98220e+01	5.95876e+01
AISI304 7.78000e-06 1.78907e-03	1.10818e+01 -8.63200e+01	7.17321e+01
	MATERIAL: 1.93090e+01 -8.15700e+01	7.17321e+01
V4-10_UNI5931-IS04762 AISI304 7.78000e-06 1.78907e-03	MATERIAL: -1.93090e+01 -8.15700e+01	7.17321e+01
V4-10_UNI5931-IS04762 AISI304 7.78000e-06 1.78907e-03	MATERIAL: -1.10818e+01 -8.63200e+01	7.17321e+01
V4-10_UNI5931-IS04762 AISI304 7.78000e-06 1.78907e-03	MATERIAL: 5.72356e+01 5.10091e+01	5.95876e+01
V4-10_UNI5931-IS04762 AISI304		
V4-10_UNI5931-IS04762 AISI304	MATERIAL:	
7.78000e-06 1.78907e-03 V4-10_UNI5931-ISO4762 AISI304	7.27929e+01 2.40629e+01 MATERIAL:	2.490/864.01

7.78000e-06 1.78907e-03 V4-10_UNI5931-ISO4762	7.27929e+01 3.35629e+01 MATERIAL:	5.95876e+01
AISI304		
7.78000e-06 1.78907e-03 V4-10 UNI5931-ISO4762	6.92145e+01 5.27571e+01 MATERIAL:	7.17321e+01
AISI304	TATERIAE.	
7.78000e-06 1.78907e-03		7.17321e+01
V4-10_UNI5931-IS04762 AISI304	MATERIAL:	
7.78000e-06 1.78907e-03	8.02962e+01 2.40629e+01	7.17321e+01
V4-10_UNI5931-ISO4762	MATERIAL:	
AISI304	0.02062-101 2.25620-101	7 17221 - : 01
7.78000E-06 1.78907E-03 V4-10 UNI5931-ISO4762	8.02962e+01 3.35629e+01 MATERIAL:	7.1/3210+01
AISI304		
	-7.27929e+01 2.40629e+01	5.95876e+01
V4-10_UNI5931-IS04762 ATST304	MATERIAL:	
7.13.13.1	-7.27929e+01 3.35629e+01	5.95876e+01
V4-10_UNI5931-ISO4762	MATERIAL:	
AISI304	F 722FCa (01 F 10001a (01	F 050760:01
7.78000E-06 1.78907E-03 V4-10_UNI5931-IS04762	-5.72356e+01 5.10091e+01 MATERIAL:	5.958/66+01
AISI304		
	-6.54628e+01 4.62591e+01	5.95876e+01
V4-10_UNI5931-IS04762 AISI304	MATERIAL:	
	-8.02962e+01 3.35629e+01	7.17321e+01
V4-10_UNI5931-ISO4762	MATERIAL:	
AISI304	0.02062-101 2.40620-101	7 17221 - : 01
7.78000E-06 1.78907E-03 V4-10_UNI5931-IS04762	-8.02962e+01 2.40629e+01	7.1/321e+01
AISI304	TO THE TABLE	
	-6.09872e+01 5.75071e+01	7.17321e+01
V4-10_UNI5931-IS04762 AISI304	MATERIAL:	
HIDIDOH		

7.78000e-06 1.78907e-03 -6.92145e+01 5.27571e+01 7.17321e+01