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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

Mass properties of Gantry Assembly

Output coordinate System : -- default --

Mass = 113.284 pounds

Volume = 1024.275 cubic inches

Surface area = 7998.597 square inches

Center of mass: (inches)

X = -3.79

Y = 18.06

Z = 4.43

Principal axes of inertia and principal moments of inertia: (pounds * square inches)

Taken at the center of mass.

Ix = (-0.391, -0.380, 0.838) Px = 16194.041

Iy = (0.914, -0.265, 0.306) Py = 17997.280

Iz = (0.106, 0.886, 0.451) Pz = 21095.069

Moments of inertia: (pounds * square inches)

Taken at the center of mass and aligned with the output coordinate system.

Lxx = 17756.12 Lxy = -22.361 Lxz = -738.915

Lyx = -22.36 Lyy = 20169.849 Lyz = -1812.618

Lzx = -738.91 Lzy = -1812.618 Lzz = 17360.413

Moments of inertia: (pounds * square inches)

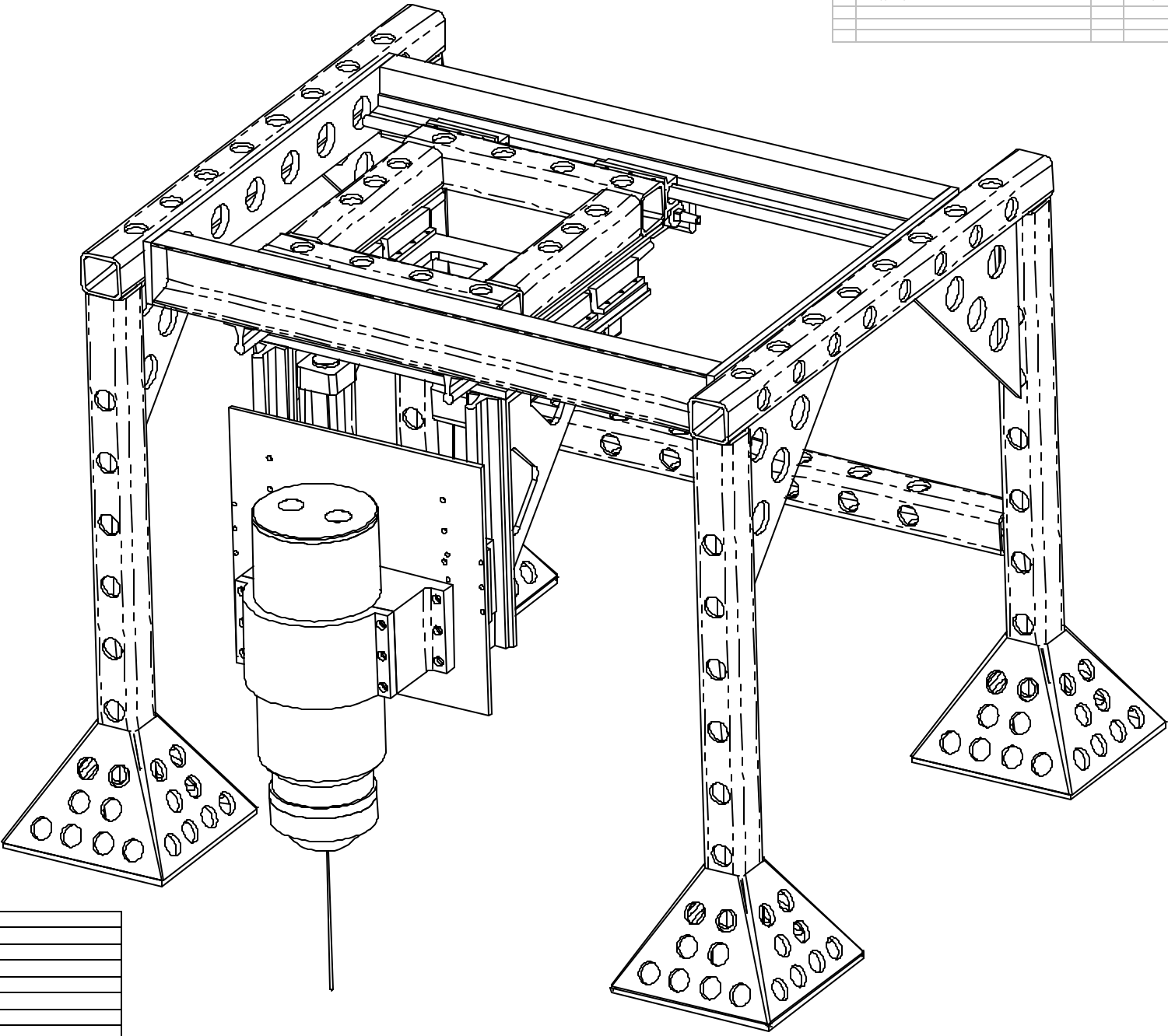
Taken at the output coordinate system.

Ixx = 56950.77 Ixy = -7780.033 Ixz = -2641.777

Iyx = -7780.03 Iyy = 24022.040 Iyz = 7255.743

Izx = -2641.77 Izy = 7255.743 Izz = 55958.540

ITEM NO.	QTY.	PART NO.	WEIGHT	DESCRIPTION
1	1	Landing Frame		
	4	SQ-Tube_2x2x24	3.03	
	4	Bottom Pad	1.57	Bottom Pad
	16	Triangle Plate	0.54	Triangle Plate
	2	SQ-Tube_2x2x26	2.96	
	4	Triangle Gusset	0.819	Triangle gusset
	1	SQ-Tube_2x2x27.5	3.10	
2	1	XYZ-Stage Assembly		
	2	SQ-Tube_2x2x12	1.38	
	10	Slide Guide	0.44	
	2	Slide Bar	2.03	
	2	SQ-Tube_2x2x3.65	1.16	
	2	Slide Bar-14	1.23	
	1	Mount Plate-1	3.98	
	2	Triangle Bracket	2.15	
	1	50493	3.09015	CYL - AIR (FESTO DNGUL-1-1/4-8-PPV-A)
	2	Channel_3x1.42	3.31	
	1	Angle_3x3x.25	3.74	Angle 3x3x.25
	1	Mount Plate	3.72	
	2	Slide Bar-12	2.57	
	2	Cylinder_8in	6.83458	CYL - AIR (FESTO DNGUL-1-1/4-8-PPV-A)
	2	Flat_Bar	1.898	
	1	XYZ-Head Assembly	15.367	
	1	Probe head housing	11.216	Part Template
	1	Dome collar	1.108	
	1	Dome		
	1	Dome seal collar	0.787	
	1	Fiber interface endcap	1.526	
	1	Laser Beam		
	1	Mounting Clamp	2.38	
	1	Probr Head Clamp	0.76	



Shop / Q.C.			
Inspector		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:	APPROVALS DATE
Shop Foreman		1. DIMENSIONS ARE IN INCHES.	DRAWN
ENGINEER		2. DIMENSION LIMITS HELD AFTER PLATING.	ENGINEER
		3. REMOVE BURRS AND SHARP EDGES (SD MAX).	CHECKED
		4. MACHINED FILED RADII (SD MAX).	
		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005.	PROJECT NO.
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX. .012 INCHES FOR SINGLE SURFACE.	PROJECT NAME
		DO NOT SCALE DRAWING	WEIGHT #
			SCALE
			CAD FILE
			SHEET 0 OF 0

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Gantry Assembly_WT&Balance
DWG. NO. SK-2002-108