

Results

Reaction Force and Moment on Constraints

Constraint Name	Reaction Force		Reaction Moment	
	Magnitude	Component (X,Y,Z)	Magnitude	Component (X,Y,Z)
Pin Constraint:4	12645.8 lbf	7297.9 lbf	4365.27 lbf ft	3896.96 lbf ft
		10070.2 lbf		-1967.06 lbf ft
		-2291.06 lbf		0 lbf ft
Pin Constraint:1	12841.7 lbf	7042.09 lbf	4476.18 lbf ft	-4023.32 lbf ft
		10491.6 lbf		1961.9 lbf ft
		2290.24 lbf		0 lbf ft
Frictionless Constraint:1	11150.3 lbf	-9277.94 lbf	4358.75 lbf ft	-2840.28 lbf ft
		-6184.67 lbf		3053.26 lbf ft
		0 lbf		1268.51 lbf ft
Frictionless Constraint:2	17861.7 lbf	-2313.34 lbf	7438.58 lbf ft	7148.86 lbf ft
		17711.2 lbf		1252.9 lbf ft
		0 lbf		1629.9 lbf ft
Frictionless Constraint:3	18135.9 lbf	-2293.36 lbf	7663.77 lbf ft	-7376 lbf ft
		17990.3 lbf		-1272.8 lbf ft
		0 lbf		1645.62 lbf ft
Frictionless Constraint:4	11225 lbf	-9381.67 lbf	4403.51 lbf ft	2852.8 lbf ft
		-6163.13 lbf		-3105.42 lbf ft
		0 lbf		1268.38 lbf ft
Frictionless Constraint:5	17603.6 lbf	-7811.41 lbf	6182.79 lbf ft	-5890.85 lbf ft
		15775.6 lbf		-1869.5 lbf ft
		0 lbf		-172.477 lbf ft
Frictionless Constraint:6	17944.5 lbf	-7628.35 lbf	6339.32 lbf ft	6074.31 lbf ft
		16242.3 lbf		1802.65 lbf ft
		0 lbf		-200.41 lbf ft

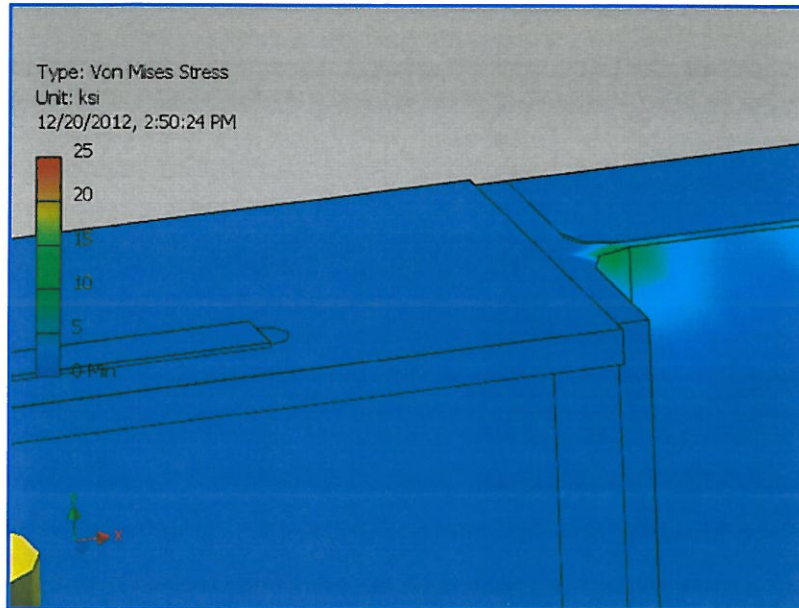
Frictionless Constraint:7	26815.6 lbf	9586.45 lbf	9333.82 lbf ft	-8622.04 lbf ft
		25043.5 lbf		3250.12 lbf ft
		0 lbf		-1489.12 lbf ft
Frictionless Constraint:8	7870.15 lbf	7075.94 lbf	2929.2 lbf ft	-878.5 lbf ft
		3445.33 lbf		2648.81 lbf ft
		0 lbf		-890.107 lbf ft
Frictionless Constraint:9	7849.37 lbf	7152.19 lbf	2904.41 lbf ft	718.564 lbf ft
		3233.98 lbf		-2716.32 lbf ft
		0 lbf		-735.428 lbf ft
Frictionless Constraint:10	19901.4 lbf	8038.19 lbf	6546.08 lbf ft	5881.7 lbf ft
		18205.8 lbf		-2449.26 lbf ft
		0 lbf		-1502.66 lbf ft

**Result Summary**

Name	Minimum	Maximum
Volume	99190.2 in <sup>3</sup>	
Mass	28165.6 lbmass	
Von Mises Stress	0.000427585 ksi	40.0967 ksi
1st Principal Stress	-6.87723 ksi	39.3757 ksi
3rd Principal Stress	-44.1742 ksi	7.96086 ksi
Displacement	0.00000265542 in	0.321214 in
Safety Factor	0.74876 ul	15 ul

**Figures**

**Von Mises Stress**



**1st Principal Stress**