

Punch Press Shearing Forces

SHAPE	MATERIAL	# OF HOLES	Hole Diameter	LENGTH OF CUT			THICKNESS	SHEAR STRENGTH (psi)	TONNAGE=TN=SLT/2000			STRIPPING FORCE	Center of Pressure from Origin (from SW)
				Stage 1 (stamp holes)	Stage 2 (outside shape)	TOTAL (Stage 1 + Stage 2)			Stage 1 (stamp holes)	Stage 2 (outside shape)	TOTAL (Stage 1 + Stage 2)	TNs = 3500LT/2000	
NAMEPLATE	ALUMINUM 1100-0	4	0.094	1.181	5.94	7.121	0.0320	9,000	0.17	0.86	1.03	0.40	0.36
TYPE A 3/4 WASHER	1020 ANNEALED	1	0.812	2.551	4.615	7.166	0.1600	42,000	8.57	15.51	24.08	2.01	0.57
Spacer with two holes	16 ga Steel (.0598)	2	0.25			0.000		42,000	0.00	0.00	0.00	0.00	1.000

S = Shear Strength in PSI (Pounds per Square Inch)

L = Length of Cut

T = Thickness of Material

For Stripping Force use the Total Length of Cut

04/15/20