

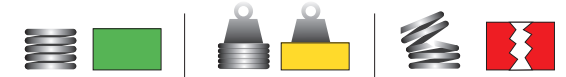


Monroe Rubber & Plastic, Inc.

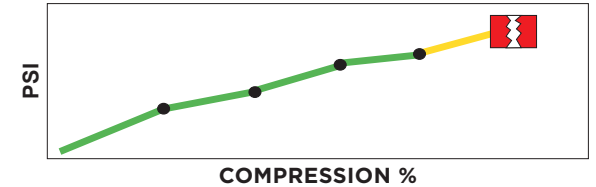
FUNCTIONAL RANGE OF MOTION

THE ONLY MOVING PARTS ON A CUTTING DIE ARE THE EJECTION MATERIALS.

MATERIAL	COMPRESSION / DEFLECTION FORCE (PSI) = FUNCTIONAL AREA										SHEET SIZE
	PERCENTAGE OF COMPRESSION										
	10%	20%	25%	30%	40%	50%	60%	70%	80%	90%	
Poly - blue, yellow, orange	1.4	1.5	1.7	1.8	2	2.7	4.5	7.6	21		26 x 37
MR 50	6	8.5	9	9.6	11.5	15	22.5	43.5	120		22 x 42
10000 Series	7	9.6	10.5	11.5	13.8	17.6	25.6	47.4	132		22 x 42
12000 Series	8	11.5	13	14.4	18	23.5	36.5	77.5	190		22 x 42
MR 1100	10.2	15	16.8	18.4	22.5	29	44.5	82	205		18 x 36
22000 Series	11.3	16	17.8	19.5	24	31	46.3	90.4	220		22 x 42
EPDM - Gray Closed Cell*	7.2	11.2	13.4	16	22.7	33.2	52.2	95	243		
Black Open Cell	9.5	14.6	17.4	20.2	27.2	38	63.3				18 x 36
15700	8.9	14.2	17.7	21.4	33.1	57					18 x 36
2700	10.7	16.6	18.4	21.4	29.6	43	74.9				18 x 36
MR 24	13.6	20.3	22.7	25	32.2	44	77	191			18 x 36
Red Rhino	15.5	23	25.2	27.6	33	41.5	60	114	250		18 x 36
6500	14.7	25.3	30	36.4	58.4	103.6					18 x 36
MR 35	19.5	29.8	33	36	43.3	55	80.5	155			18 x 36
75 Open Cell*	17	25.6	30	34.5	45.3	63.7	114.8				
MR 75	22.4	33	36.2	39.5	47.7	61	113.5	165			18 x 36
3500	18.5	30.2	35.6	42.5	64.6	113.2					18 x 36
MR 40	25.7	40	44.7	49.3	60.6	95	125	225			18 x 36
Green G'rilla	31	49.4	56	62	78.2	106.4	166	291			18 x 36
BK 85	32.4	52.5	59.5	66	82.8	110.5	167	300			18 x 36
Superstrip	39.5	59.7	66.2	72.5	86.8	110	154.2	267			10 x 20
13500 Cork	60.9	99.2	119.9	145.3	225.9						18 x 36



DENSIFICATION POINT



As with any moving mechanical or compressible part there is a maximum functional range of motion. Once that range is exceeded the item no longer functions properly which will lead to failure.

This chart shows the maximum functional range of motion in green for each product. Once the functional range is exceeded it enters the yellow densification point where the rubber becomes a solid and can no longer compress. Go beyond this point and the rubber will fail, breaking apart. For the ejection rubber to work properly it must remain within the green Functional Range of Motion.

*discontinued product no longer carried by Monroe.

Functional Range of Motion Densification Point Failure