



Lamina

Marsh Mellow® Springs

LOADS AS A PERCENTAGE OF DEFLECTION

Hole Size	Actual O.D. x I.D.	10%	15%	20%	25%	30%	35%	40%
1½"	1⅞" x 5/16"	100	160	220	280	355	450	585
2"	1⅝" x 5/8"	220	330	465	625	860	1180	1640
2⅝"	2" x ¾"	290	470	650	910	1250	1750	2450
3¼"	2½" x ¾"	570	920	1300	1780	2450	3450	4760
4¼"	3¼" x 1"	925	1550	2050	2770	3710	5150	7390
5¼"	4" x 1"	1550	2450	3540	4810	6570	9540	13410
6½"	5" x 1"	2950	4600	6500	8850	11950	16670	23370
7⅝"	6" x 1"	4500	6800	9580	12950	17620	24000	40000

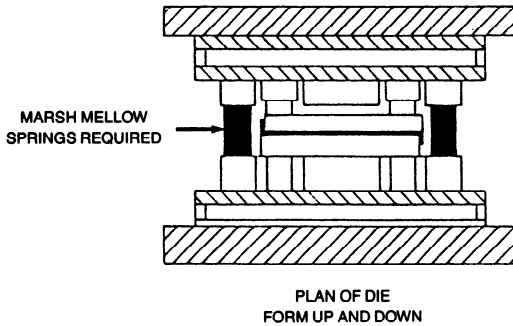
Application Ideas:

Marsh Mellow springs are designed to directly replace certain standard size coil die springs and nitrogen cylinders.

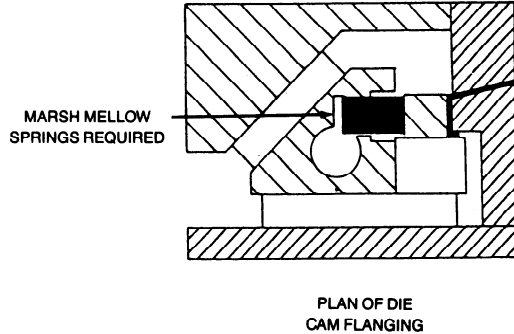
In addition, the larger diameter parts can exert forces from 425 lbs. to 40,000 lbs, each, and are an **extremely effective alternative to costly nitrogen cylinders as in CAM returns.**

1. Die storage blocks. SEE EXAMPLE 1
2. Running storage blocks (which will balance uneven press ram thereby improving part quality).
3. Floating upper shoe on blank dies (improving quick die change).
4. Floating punches on inverted stretch draws (replacing nitrogen cylinders).
5. Cam returns. SEE EXAMPLES 3 & 4
6. Die springs (on pads eliminating costly spring pockets).
7. Pressure control on trim, flange, and form dies.
8. Replace nitrogen modular press cushions on OBI presses.

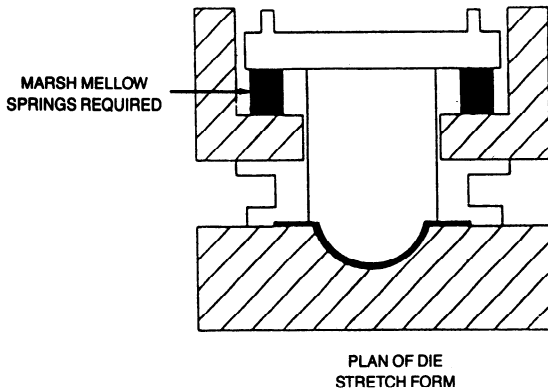
EXAMPLE 1



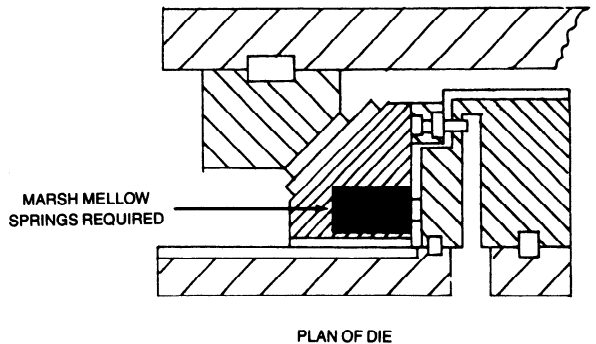
EXAMPLE 3



EXAMPLE 2



EXAMPLE 4



Cam Returns are an excellent application for Marsh Mellow die springs. As the Marsh Mellow die springs eliminate the sometimes awkward long coil springs required to produce enough pressure to return the cams.

NOTE: STORAGE BLOCKS TO BE SPACED AS FAR APART AS PRACTICAL.