

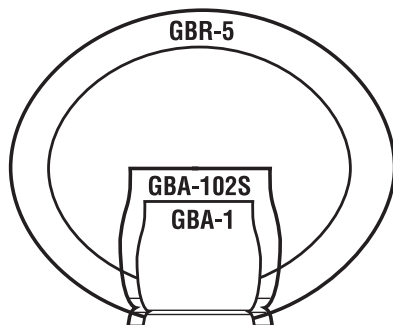
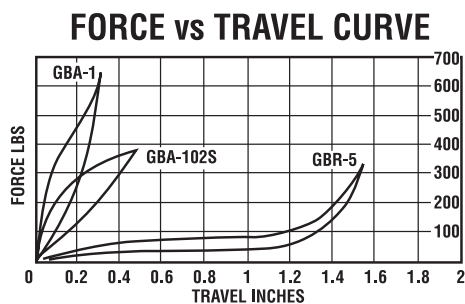
THE NEXT ADVANCE IN ENERGY ABSORPTION

The next advance in energy absorption is available today. TecsPak bumpers are highly engineered elastomeric products designed to absorb more energy per unit of weight and volume than most known materials. TecsPak bumpers are ideal for energy management problems involving shock isolation and vibration isolation. In addition, the performance characteristics of

TecsPak bumpers significantly outperform rubber, urethane, and coiled steel. The unmatched durability, performance and design flexibility provide the cost-effective solution to your energy absorption requirements. TecsPak is a patented thermoplastic elastomer originally developed for high end load railroad applications. The unique shape, combined with the proprietary processing of the DuPont HYTREL® base material, results in a bumper that precisely meets the required load rates.



TecsPak® Bumpers vs. Rubber and Polyurethane



TecsPak® bumpers offer an operation life which far exceeds that of other tested energy absorbing devices, lasting 20 times longer than urethane and 10 times longer than rubber in comparative tests. TecsPak is extremely inert and resists exposure to dirt, oils, hydraulic fluid, gasoline and diesel fuels. Operating temperature range is -40°F to 120°F.

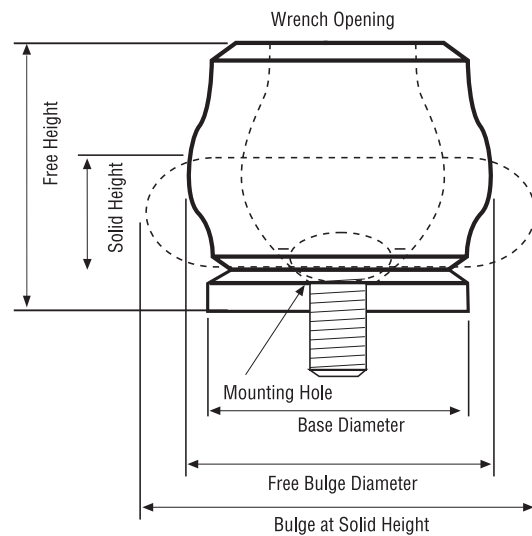
TecsPak bumpers represent the next step in energy absorption because they are engineered to meet demanding performance requirements in an array of applications. Superior durability cuts downtime maintenance for increased productivity. Design flexibility ranges from ultra light to massive end loads. Applications are found throughout the mining, automotive and general industrial markets where energy impact and vibration must be managed.

TecsPak® Bumpers

Typical applications include:

GBA

- Sawmill and Debarking Equipment
- Mining/Heavy Construction Machinery
- Gantry/Trolley, Shipyard Bulkhead and Heavy Door Bumpers
- Steel Mill Press Room, Stamping and Foundry Equipment



BUMPER	FREE HEIGHT	FREE BULGE	WRENCH OPENING	BASE DIA.	MOUNTING HOLE	SOLID HEIGHT	BULGE @ SOLID HT.	RATED ENERGY CAPACITY (IN-LBS.)	PEAK DYNAMIC FORCE (LBS.)	SHIPPING WEIGHT (OZ.)
GBA-1	0.76	0.85	0.41	0.75	0.31	0.40	1.07	100	700.00	0.16
GBA-2	1.01	1.11	0.56	0.98	0.31	0.53	1.43	250	1,200	0.37
GBA-3	1.18	1.35	0.66	1.16	0.31	0.63	1.70	400	2,000	0.62
GBA-4	1.31	1.47	0.72	1.28	0.31	0.69	1.88	550	2,400	0.86
GBA-5	1.37	1.55	0.80	1.35	0.42	0.73	1.97	700	2,500	1.00
GBA-6	1.49	1.70	0.79	1.48	0.42	0.80	2.15	900	3,600	1.40
GBA-7	1.62	1.83	0.93	1.61	0.55	0.86	2.33	1100	3,300	1.70
GBA-8	1.77	1.96	1.02	1.71	0.55	0.92	2.51	1400	3,800	2.00
GBA-9	1.86	2.14	1.04	1.85	0.55	0.99	2.69	1700	5,000	2.20
GBA-10	2.02	2.25	1.16	1.97	0.55	1.06	2.86	2000	5,000	3.10
GBA-11	2.11	2.43	1.23	2.08	0.55	1.12	3.05	2500	5,300	3.70
GBA-12	2.26	2.54	1.30	2.23	0.55	1.19	3.22	3000	6,100	4.60
GBA-13	2.38	2.70	1.38	2.35	0.55	1.25	3.40	3500	6,600	5.10
GBA-14	2.54	2.81	1.41	2.46	0.81	1.32	3.58	4000	7,500	6.10
GBA-15	2.72	3.10	1.57	2.71	0.79	1.45	3.94	5000	8,300	7.80
GBA-16	2.91	3.22	1.69	2.82	0.81	1.52	4.12	6000	8,700	9.10
GBA-17	3.00	3.35	1.70	2.95	0.81	1.58	4.30	7000	9,600	10.60
GBA-18	3.13	3.50	1.78	3.07	0.81	1.65	4.48	8000	10,800	11.80
GBA-19	3.37	3.83	1.92	3.34	0.81	1.78	4.83	10000	14,000	14.90
GBA-20	3.98	4.56	2.26	3.39	0.81	2.11	5.73	17000	18,500	26.10