

ENERGY REQUIRED TO STAMP SHARP FACE CHARACTERS INTO METALS

Character Size	Energy Required to Stamp One Character	Cold Mild Steel		Soft Aluminum		Soft Brass		Carbon Steel		Stainless Steel	
		Energy	Characters	Energy	Characters	Energy	Characters	Energy	Characters	Energy	Characters
1 lb Hammer											
1/16" character	0.5	5.0	10.0	8.3	16.7	6.3	12.5	3.3	6.7	2.5	5.0
1/8" character	1.4	5.0	3.6	8.3	6.0	6.3	4.5	3.3	2.4	2.5	1.8
3/16" character	3.0	5.0	1.7	8.3	2.8	6.3	2.1	3.3	1.1	2.5	0.8
1/4" character	5.5	5.0	0.9	8.3	1.5	6.3	1.1	3.3	0.6	2.5	0.5
5/16" character	7.5	5.0	0.7	8.3	1.1	6.3	0.8	3.3	0.4	2.5	0.3
3/8" character	9.0	5.0	0.6	8.3	0.9	6.3	0.7	3.3	0.4	2.5	0.3
1.5 lb Hammer											
1/16" character	0.5	9.0	18.0	15.0	30.0	11.3	22.5	6.0	12.0	4.5	9.0
1/8" character	1.4	9.0	6.4	15.0	10.7	11.3	8.0	6.0	4.3	4.5	3.2
3/16" character	3.0	9.0	3.0	15.0	5.0	11.3	3.8	6.0	2.0	4.5	1.5
1/4" character	5.5	9.0	1.6	15.0	2.7	11.3	2.0	6.0	1.1	4.5	0.8
5/16" character	7.5	9.0	1.2	15.0	2.0	11.3	1.5	6.0	0.8	4.5	0.6
3/8" character	9.0	9.0	1.0	15.0	1.7	11.3	1.3	6.0	0.7	4.5	0.5
2 lb Hammer											
1/16" character	0.5	15.0	30.0	25.0	50.0	18.8	37.5	10.0	20.0	7.5	15.0
1/8" character	1.4	15.0	10.7	25.0	17.9	18.8	13.4	10.0	7.1	7.5	5.4
3/16" character	3.0	15.0	5.0	25.0	8.3	18.8	6.3	10.0	3.3	7.5	2.5
1/4" character	5.5	15.0	2.7	25.0	4.5	18.8	3.4	10.0	1.8	7.5	1.4
5/16" character	7.5	15.0	2.0	25.0	3.3	18.8	2.5	10.0	1.3	7.5	1.0
3/8" character	9.0	15.0	1.7	25.0	2.8	18.8	2.1	10.0	1.1	7.5	0.8
2.5 lb Hammer											
1/16" character	0.5	22.0	44.0	36.7	73.3	27.5	55.0	14.7	29.3	11.0	22.0
1/8" character	1.4	22.0	15.7	36.7	26.2	27.5	19.6	14.7	10.5	11.0	7.9
3/16" character	3.0	22.0	7.3	36.7	12.2	27.5	9.2	14.7	4.9	11.0	3.7
1/4" character	5.5	22.0	4.0	36.7	6.7	27.5	5.0	14.7	2.7	11.0	2.0
5/16" character	7.5	22.0	2.9	36.7	4.9	27.5	3.7	14.7	2.0	11.0	1.5
3/8" character	9.0	22.0	2.4	36.7	4.1	27.5	3.1	14.7	1.6	11.0	1.2
3 lb Hammer											
1/16" character	0.5	27.0	54.0	45.0	90.0	33.8	67.5	18.0	36.0	13.5	27.0
1/8" character	1.4	27.0	19.3	45.0	32.1	33.8	24.1	18.0	12.9	13.5	9.6
3/16" character	3.0	27.0	9.0	45.0	15.0	33.8	11.3	18.0	6.0	13.5	4.5
1/4" character	5.5	27.0	4.9	45.0	8.2	33.8	6.1	18.0	3.3	13.5	2.5
5/16" character	7.5	27.0	3.6	45.0	6.0	33.8	4.5	18.0	2.4	13.5	1.8
3/8" character	9.0	27.0	3.0	45.0	5.0	33.8	3.8	18.0	2.0	13.5	1.5

Energy: Energy provided by a typical swing with this hammer size.

Characters: Maximum number of characters that will be stamped with acceptable mark depth.