MURCO POWER DRIVEN *forge* HAMMERS

TRADE MARK MURCO REG. U.S. PAT. OFF.

MOTOR DRIVEN

The MURCO Hammer, illustrated in the five sizes here, is extremely powerful, yet comparatively simple in design. It can be operated under perfect control, and with very little effort.

The RAM design is a special feature. A steel casting, balanced and carefully machined, operates in V guides. Large bearings for tee and toggle bolts. Guide bearings extra long and wide. Perfect alignment of Ram Travel prevents twisting because the Ram is parallel with travel. This is a very important feature in the MURCO Hammer.

BELT DRIVEN

Specifications

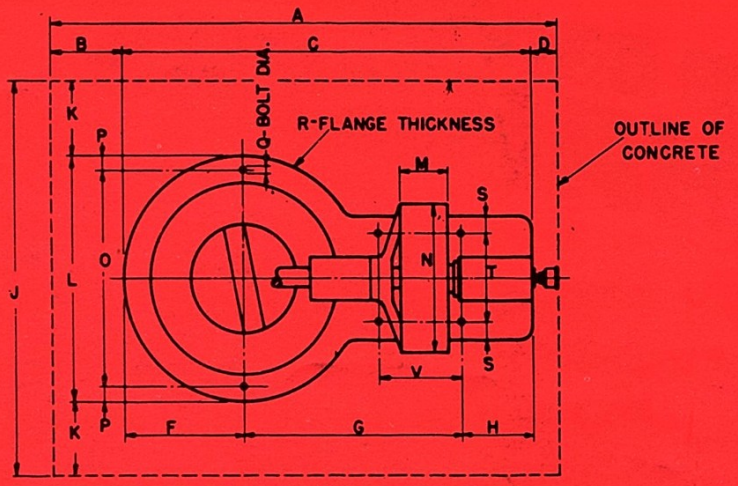
	25 LB.	50 LB.	100 LB.	250 LB.	500 LB.
FORGING CAPACITY FOR GENERAL WORK	2" RD.	3" RD.	4" RD.	6" RD.	7" RD.
FORGING CAPACITY FOR QUANTITY PRODUCTION	1 1/4" RD.	1 3/4" RD.	2 1/2" RD.	4" RD.	5" RD.
WILL HANDLE FLATS EDGEWISE WITHOUT ADJUSTMENT	2 1/2" WIDE	3 1/2" WIDE	4 1/2" WIDE	7" WIDE	8" WIDE
UPPER DIE SIZE OF FACE	3"X 2"	4"X 2 1/2"	6"X 3"	8"X 4"	10"X 5"
LOWER DIE SIZE OF FACE	4"X 2"	5"X 2 1/2"	6"X 3"	8"X 4"	10"X 5"
LOWER DIE PROJECTS ABOVE ANVIL	1 1/2"	1 3/4"	2 1/4"	3 1/4"	3 7/8"
MAXIMUM STROKE	7"	9"	12"	15"	21"
THROW OF CRANK	3 1/2"	5"	6 1/2"	8"	10"
DEPTH OF THROAT	9 1/4"	12"	14 1/4"	15 1/2	18"
DISTANCE BETWEEN GUIDE AND ANVIL BLOCK	4 1/4"	6"	9"	9 1/4"	15"
HEIGHT OF REMOVABLE ANVIL BLOCK	SPECIAL	SPECIAL	5 1/8"	6 3/4"	10"
BELT PULLEY, SIZE OF	10"X 3"	12"X 4"	16"X 5"	20"X 7"	24"X 9"
SPEED, REVOLUTIONS PER MINUTE	425	350	275	220	170
HEIGHT, FLOOR TO SHAFT CENTER	4'-6"	5'-0"	5'-10"	6'-6"	7'-4"
FLOOR SPACE REQUIRED	16"X 26"	20"X 34"	24"X 42"	30"X 50"	36"X 60"
HORSEPOWER RECOMMENDED	1	2	3	5	7 1/2
SPEED OF MOTOR	1200	1200	1200	900	720
V BELTS RECOMMENDED (OR EQUAL)	2-A51	4-A60	5-A68	6-B85	9-B105
V BELT MOTOR PULLEY OR SHEAVE RECOMMENDED (OR EQUAL)	3.8" P.D. 2 GROOVE	3.8" P.D. 4 GROOVE	4.0" P.D. 5 GROOVE	5.4" P.D. 6 GROOVE	6.0" P.D. 9 GROOVE
(PULLEY ON HAMMER IS AVAILABLE WITH FLAT FACE, CROWN FACE, OR GROOVED FOR V-BELT DRIVE)					
NET WEIGHT BELT DRIVEN OR MOTOR DRIVEN BUT WITHOUT MOTOR DRIVE	900 LBS.	1900 LBS.	3200 LBS.	6500 LBS.	12000 LBS.
APPROXIMATE NET WEIGHT WITH MOTOR DRIVE ATTACHED BASED ON 3 PHASE, 60 C., 220/440 V. MOTOR	1025 LBS.	2080 LBS.	3490 LBS.	6900 LBS.	12600 LBS.
BOXED FOR EXPORT - GROSS WEIGHT HAMMER WITHOUT MOTOR AND DRIVE	1200 LBS.	2400 LBS.	4100 LBS.	8000 LBS.	14000 LBS.
BOXED FOR EXPORT - GROSS WEIGHT HAMMER WITH MOTOR & DRIVE BASED ON 3 P., 60 C., 220/440 V. MOTOR	1410 LBS.	2690 LBS.	4550 LBS.	8600 LBS.	14800 LBS.

No. PH-647

D. J. MURRAY MANUFACTURING CO., WAUSAU, WISCONSIN, U.S.A.

FLOOR PLAN

Floor plan blueprint for motor drive sent on application.



U- SUGGESTED CONCRETE THICKNESS

HAMMER SIZE	PULLEY R.P.M.	DIMENSIONS IN INCHES																			
		A	B	C	D	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V
25 LB.	425	34	6	26	2	8	13	5	28	6	16	3½	10	14	1	½	1¼	1	6	18	
50LB.	350	42	6	34	2	10	18	6	32	6	20	5	12	18	1	¾	1½	1¼	7½	20	
100LB.	275	54½	8	42½	4	12¼	22	8¼	40	7¾	24½	6	16	22	1¼	1	2	1¾	9	24	
250LB.	220	64	8	50	6	15	30	5	46	8	30	7	20	26½	1¾	1	2	2¼	13½	36	13
500LB.	170	84	16	60	8	18	39¼	2¾	60	12	36	9	24	32	2	1¼	3	2½	19	48	14½

ADJUSTMENT. Murray Hammers are adaptable to a wide range of work, such as alternate blows on the flat and edge of rectangular stock. Yet adjustment for different thicknesses of dies and material is provided. This, an outstanding Murray feature, is important and should be considered when buying a power hammer. A split steel cross-head, clamped to the steel connecting rod, can be shifted up or down quickly and easily.

RAM GUIDE represents another of the main points of superiority found in the MURCO Power Hammer. The design is more durable, because bearing surfaces are made of metals suitable for this service and have larger area. Adjustment is easily made and is positive. To make the adjustment only two nuts need be loosened, then tighten two other nuts. Also, practically all the wear occurs at the lower end of the guides. With this arrangement adjustment is accurately controlled by a threaded screw. No shimming.

TOGGLE OR TEE BOLTS are made of alloy steels and the bearings have large area. These bearings can be easily replaced when worn out.

THE RAM ASSEMBLY DESIGN provides a perfect cushion at the upper extremity of the stroke, and imparts a multiplied impetus to the downward stroke. Steel castings, alloy steel forgings, and high grade steel springs and arm pins are used in this assembly.

BEARINGS are of metals which have been recognized as the best material for this type of service. The crank bearing is extra long and the shaft bearing bushings are removable and are a drive fit in the main frame.

FRICTION CLUTCH SPIDER is of the cone type, leather faced and gives the operator perfect control of speed and weight of blow and flexibility of operation. The pulley has removable bushing which runs on steel shaft. The friction clutch spider is held in position on the shaft by taper pin which can be removed in a few seconds.

DIES are made from high-grade special tool steel, accurately machined and properly tempered. They are keyed in machined slots and set at an angle that enables the working of long bars without interference with the frame. Standard dies are either flat or rounded face. Unless otherwise specified, they are furnished with rounded face suitable for plow work on the 25 lb. and 50 lb. hammers and flat forging face on the 100 lb., 250 lb. and 500 lb. hammers.

LUBRICATION. The pulley and rear shaft bearings are lubricated through hollow shaft. The front shaft bearing is provided with grease cup. Other moving parts are easily accessible for lubrication.

FRAME AND SOW BLOCK are of massive design and construction. Liberal allowances have been made for withstanding shock and giving rigidity. On the 250 lb. and 500 lb. sizes, the frame and sow block are separate castings. The frame is solid and sturdy.

Note the weight of MURCO Hammers; compare with others and you will find stability is built into the MURCO line of Power Hammers. This means longer life and less maintenance cost.

Workmanship and material in the MURCO Power Forging Hammer are of the best, and careful attention is given to all small details in design and manufacture, thus assuring the best kind of equipment for service intended.

Litho in U. S. A.