SERIES "1"
BULLETIN 138

MINSTER

OPEN BACK INCLINABLE

PRESSES

THE MINSTER MACHINE CO.
MINSTER, OHIO, U. S. A.

MINSTER OPEN BACK INCLINABLES

THE MINSTER MACHINE COMPANY, manufacturers of the MINSTER line of Presses, is a self-contained unit with undivided responsibility. Every step through Engineering, Pattern Department, Foundry, Machine Depart-

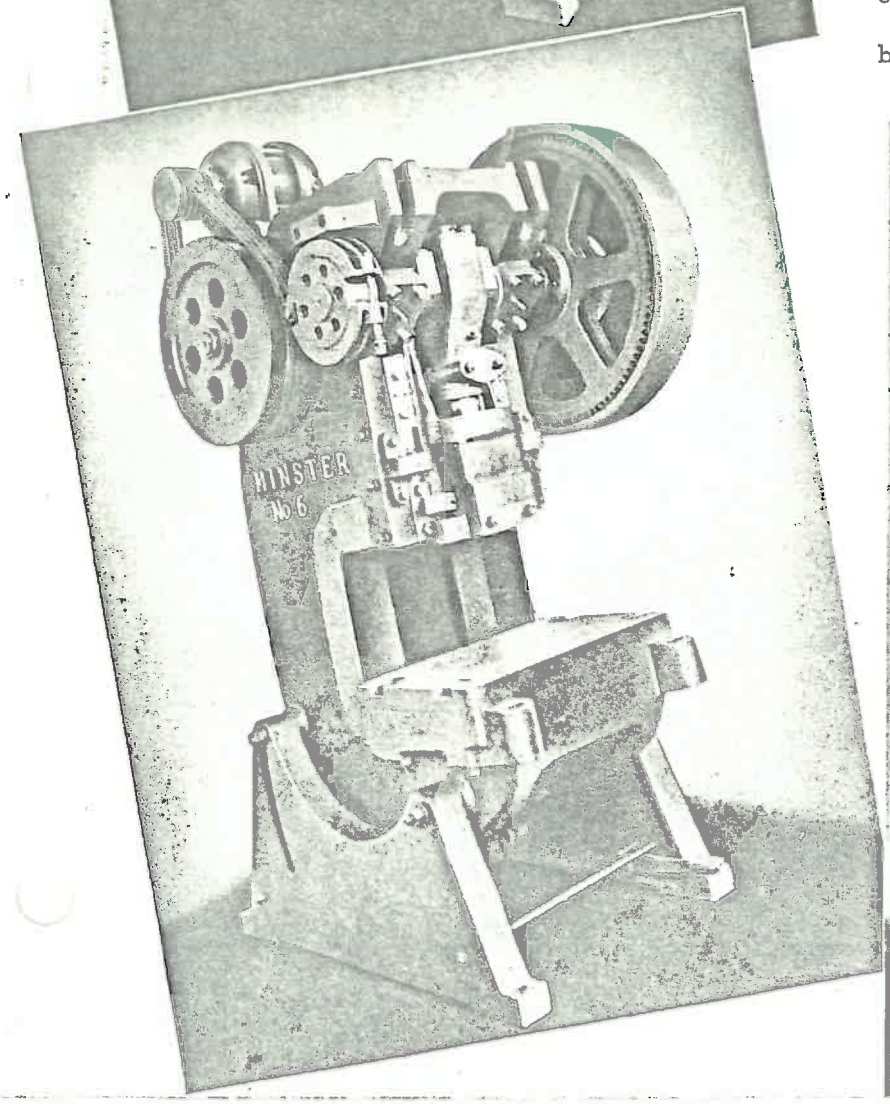
STUDY THESE

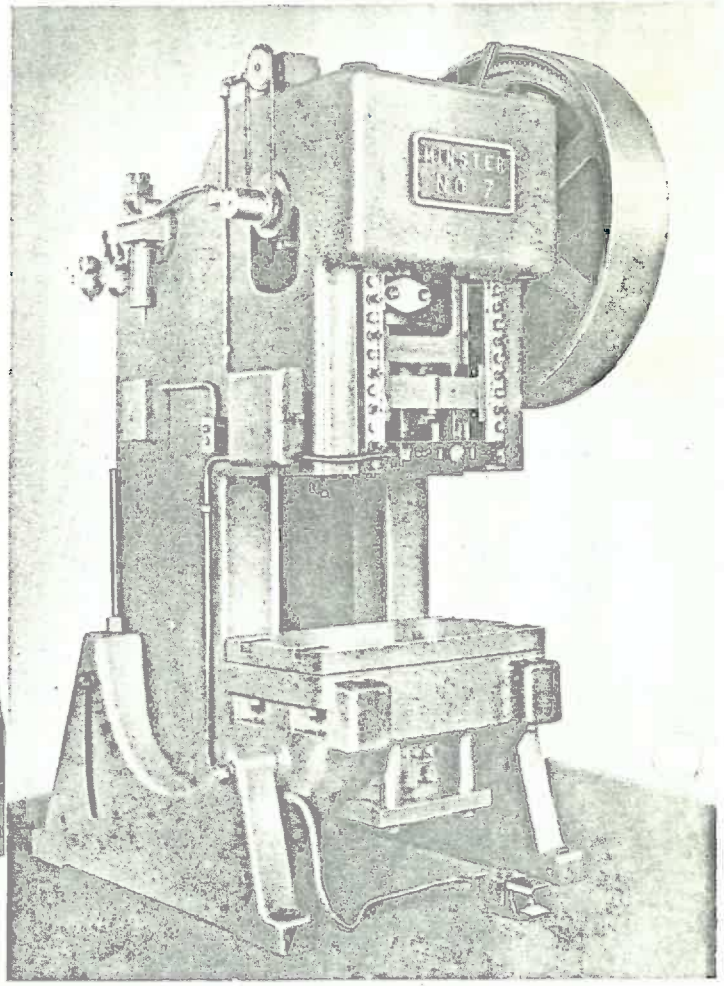
A TRULY up-to-date design with frame cast from high tensile strength pearlitic semi-steel. The upper part of the frame is of a box type construction with 45° overhanging crankshaft bearings, on sizes Nos. 1 to 6 inclusive. Sizes Nos. 7, 8 and 9 the bearings are entirely surrounded by the frame.

TRUE-RING nickel bronze bushings are used for the crankshaft bearings and tapered anti-friction bearings are used on the drive shaft.

SELF-COMPENSATING ball and socket slide connection with removable nickel bronze socket and cap in the slide. Buttress thread connection screw with flat of thread on the pressure side. The slide and gib designs incorporate generous length of slide ways with accurately ground removable gibs on all sizes, having 90° "V" on sizes No. 1 to No. 6 inclusive. For Nos. 7, 8 and 9 box type slide with ways on four corners. Flat rear ways and 45° front ways.

Cross bar knockout in slide with the knockout brackets mounted on the frame instead of the gibs.





ARE QUALITY PRODUCTION TOOLS

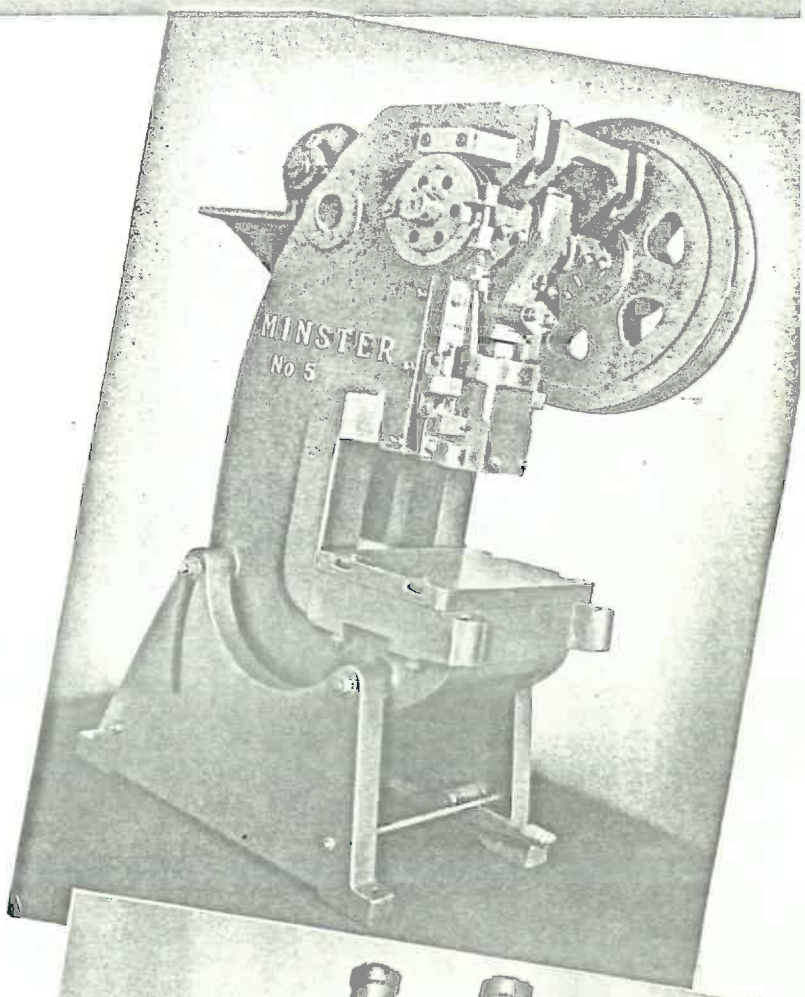
ment and Assembly is closely controlled to make MINSTER Presses a product with machine tool precision. A visit to our plant will reveal an interesting modern tool set up.

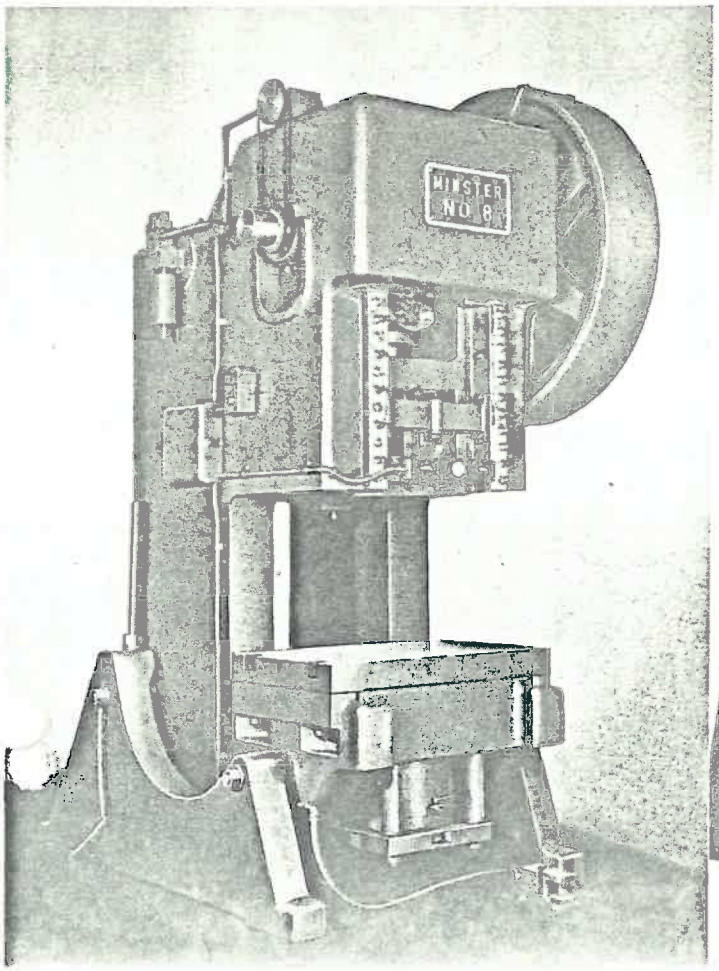
FEATURES

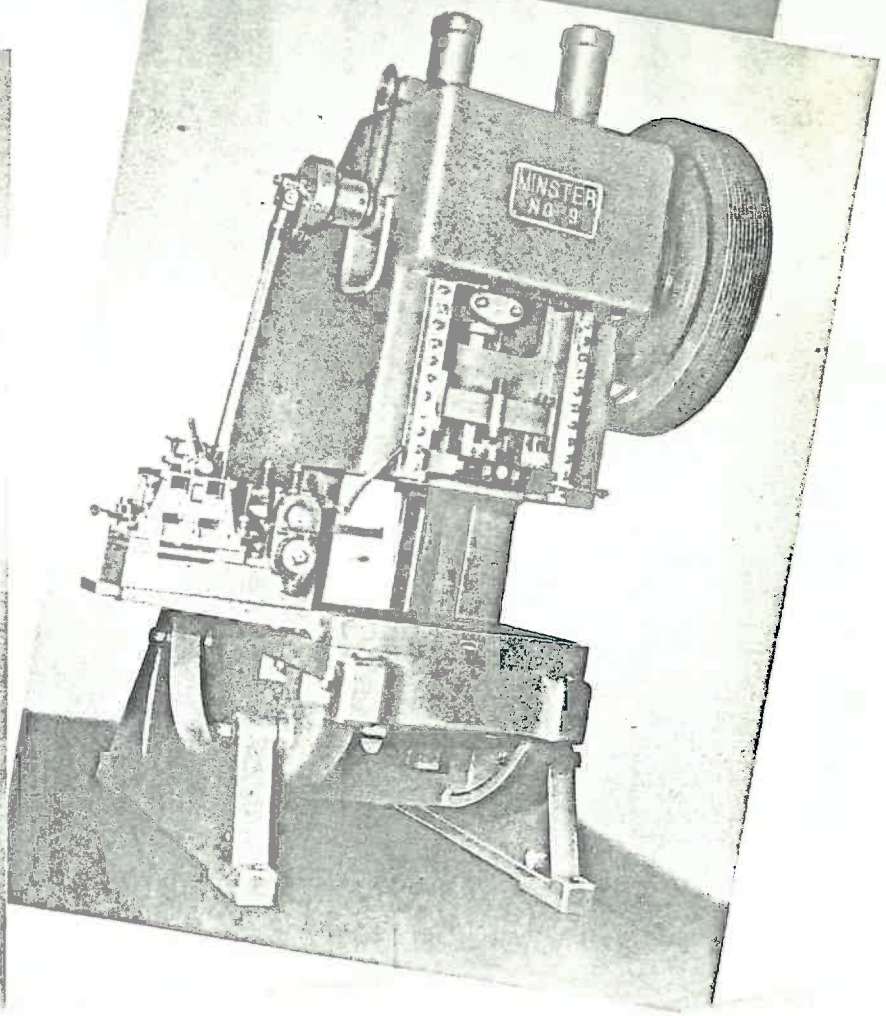
LARGE, wide faced ventilating brake wheel with two-piece constant tension, finned brake band. Brake band is lined with four segments of oil-proof, molded lining. No brake band studs to shear off or break because brake band is held in a floating, self-adjusting position by a large lug cast integral with the frame.

CRANKSHAFT is made of a high carbon, annealed steel forging and heat treated. All crankshafts are semi-eccentric type having a diameter at the crankpin one and one-half times greater than the diameter at the bearing, reducing bearing pressure per unit area and increasing rigidity.

SLIDING KEY CLUTCH with individual full length driving and locking keys provide smooth, split second action. Clutch parts are reversible giving double life to clutch parts. The clutch is enclosed in the clutch wheel between tapered roller bearings. Geared presses Nos. 6, 7, 8 and 9 can also be furnished with electric push button controlled pneumatic operated combination multiple disc friction clutch and brake.







DIMENSIONS

MINSTER OPEN BACK INCLINABLE PRESSES

NO. OF MACHINE	1	2	3	4	5	6	7	8	9
Tonnage	12	16	22	32	45	56	71	88	106
Diam. of crankshaft at br'g. and pin	2–3	2¼–3⅜	2½–3¾	3–4½	3⅝-5¼	4–6	4½–6¾	5–7½	5½—8¼
Width of opening in back	7	8	9	10½	13½	15	18	21	24
Width between gibs	5¼	5¾	6½	7½	8½	9½	14½	17½	20
Area top of bolster, F. to B., R. to L.	9x16	10x17	12x20	14x22	18x28	21x32	22x35	26x40	28x45
St'd. opening in bed, F. to B., R. to L.	5x8	6x9½	7½x11	9x12	12x16	14x18	14x20	16x24	18x28
Diam. of intersecting circle in bed	6½	7	8½	10	14	16	16	18	20
Distance back from center of slide	5	5½	6½	7½	9½	11	12	14	15
Available area of slide, F. to B., R. to L.	6x4¾	6¾x5¼	7½x6	8½x7	10¼x8	11¼x9	14½x13½	15½x16½	16½x19
*Dist. bolster to slide stroke down adj. up	6¼	6½	7	7½	8½	10½	11½	14	16
Standard stroke of slide	1½	2	2½	3	3	4	4	4	5
*Maximum stroke of slide	3	3½	4	5	6	7	‡7	‡8	‡9
Adjustment of slide	1½	1¾	2	2¼	2¾	3	3¼	3½	3½
Diam. of hole for punch shank	1⅝	1⅝	1⅝	1⅝	2	2	2	2½	3
Thickness of bolster plate	1¼	1½	1¾	2	2¼	2½	3	4	4½
Height from floor to center of crankshaft	56¾	59¾	63½	67¼	71¾	78¼	85½	92½	104
Floor space of legs. F. to B., R. to L.	27x19	30x21½	35x24	40x25¾	50x30½	56x35	64x45½	76x52	84x58¼
FLY WHEEL PRESS									
Approximate weight	1400	1650	2750	4100	6000	8250	14500	22500	26000
No. of strokes per minute	125	115	115	100	90	90	80	75	75
Diam. and face of flywheel	22x3½	24x4	28x4½	32x5½	36x6	42x6½	46x6½	51x7	55x7½
Weight of flywheel, lbs.	200	300	450	650	900	1200	1400	1800	2100
Floor Space, F. to B., R. to L.	34x28¾	37½x30	43¼x35¼	49½x39	58x46	67x46	76x57	88½x63	97x70
H. P. and speed of motor	1–900	1½–900	2–900	2–900	3–900	5–900	7½–900	7½–900	10–900
SINGLE GEARED PRESS									
Approximate weight				4300	6600	9200	16000	25500	30000
No. of strokes per minute				55	50	45	40	37	37
Ratio of gearing				6:1	6½:1	6½:1	7.8:1	7.8:1	7.8:1
Diam. and face of flywheel				19x7	23x7	26x7	25x13	28x15	30x15
Weight of flywheel, lbs.				450	600	700	976	1400	1765
Speed of drive shaft				330	325	292	312	288	288
Floor Space, F. to B., R. to L.				49½x39	58x46	66x48	76x47	88½x54	97x60
H. P. and speed of motor				2–1200	3–1200	5–1200	7½–1200	7½–1200	10–1200

* When strokes greater than standard are used, we increase the length of the pitman connection to compensate for the increase in stroke so that the bottom of the slide will not enter into the gibs. When increasing the stroke, the die space is reduced by an amount equal to the difference between the standard stroke and the increased stroke.

When the stroke is less than standard the die space is increased by an amount equal to one-half the difference between the standard stroke and the decreased stroke.

‡ Longer stroke up to twice the diameter of the crankshaft main bearing may be had on special order.

Inclinable — Horning — Punching — Straight Side — Gap — and Knuckle Joint Embossing Presses

The Minster Machine Co. • • Minster, Ohio, U. S. A.

Series 1, Bulletin 139A 4-49 G4843P