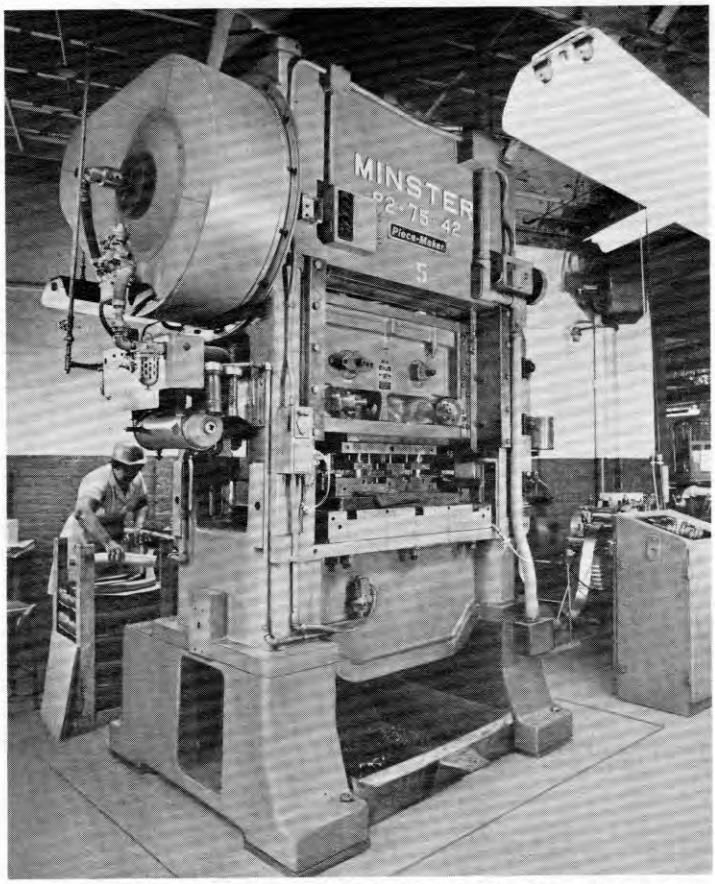
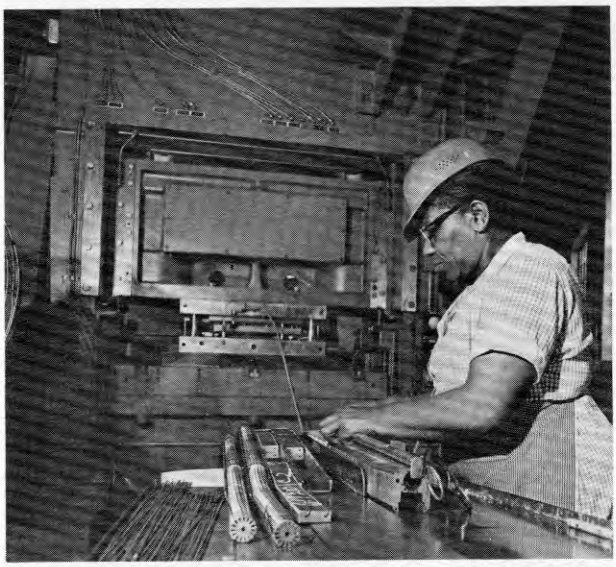


This Minster P2 Piece-Maker® runs 24 hours a day, producing motor laminations at MSL Steel Company, Chicago.



Two full sets of laminations for shaded pole induction motors are made with a two-up die on each cycle of this Minster press. Each set consists of rotor, stator and bar laminations.

MSL Steel Goes After the Tough Stampings— with Minster Presses

MSL Steel Company located in Chicago, Ill., a division of MSL Industries, is a custom producer of motor laminations. They have built their business by going after the more difficult stampings, capitalizing on their vast technical know-how and ability to control materials. Minster presses have been an important factor in the success of the Company.

"The qualities we like in a press are rigidity and stability, low maintenance costs and high production rate," Mr. John Mullen, Director of Engineering for MSL revealed, "and we get a good combination of these factors in our Minster presses." MSL has 15 Minster Piece-Maker® Lamination presses of various sizes installed. The oldest was purchased in the 1950's and the two newest, a P2-75 and P2-100, in April, 1971.

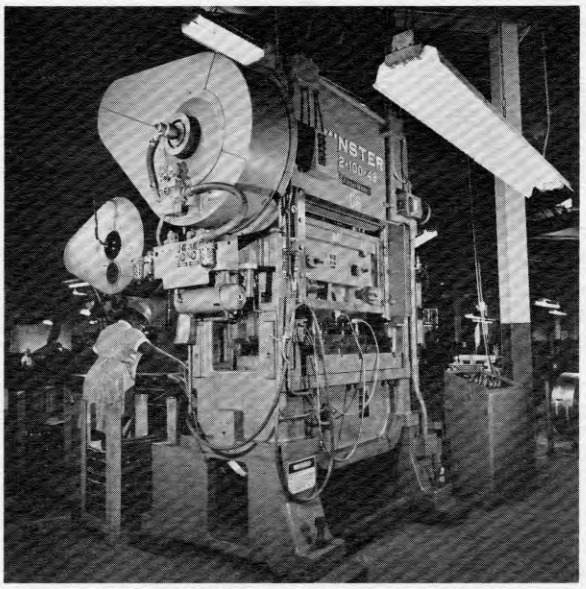
MSL Steel is a successor of one of the pioneer lamination producers in the country, the Lamination Division of the Webster-Chicago Corporation, later known as Webcor, Inc. Originally a producer of transformer laminations, the Company diversified into motor laminations naturally because of their investment in specialized high speed presses and annealing equipment. Their business today is based on their ability to do a better job producing laminations than motor manufacturers can do themselves.

Laminations ranging in size from a little under ¾" in diameter to over 6", in all standard types and shapes, as well as many special configurations, are produced by MSL Steel. The Company makes laminations in quantities of several million per month for a number of its customers. With this volume, press performance is critical and is closely analyzed. MSL is specific on the press features which contribute to their success.

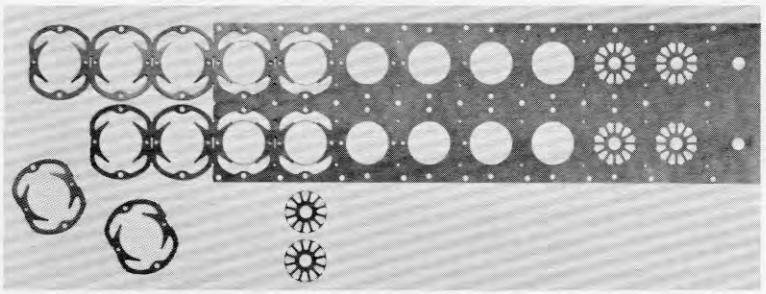
Mr. Mullen cited low maintenance costs as a big benefit with Minsters. "Even after several years of service, we find the clearances are well maintained in Minster presses. And at the end of the year, the figure for servicing and repair is lower than for any of our other presses."

One feature Mr. Mullen feels is especially important is the lock-up slide adjustment mechanism. This is a "no-clearance" lock-up arrangement on the adjusting screws designed for lamination presses. It eliminates clearances between slide adjustment parts and slide by effectively clamp-

Strings of laminations weighing as much as 40 lbs. each are carefully stacked in heavy duty containers.



Another of the 15 high speed Minster Lamination presses installed at MSL Steel.



ing those components together. This reduces snap-thru shock and increases die life. According to Mr. Mullen, this feature provides even greater rigidity than the earlier model Minster presses they have.

Roller cam feeds warranted particular comment by Mr. Mullen, too. "We have used a variety of feeds on laminations—and still have different kinds — but we feel the roller cam feed is a choice par excellence because it gives you utterly reliable feed every time. Incidence of misfeed is drastically reduced. Time and material required—and wasted—in adjusting to get the correct length is entirely eliminated. Potentiality of damage to the dies due to improper feed length is virtually eliminated."

MSL Steel ships millions of laminations to a number of customers each month.