

A company that has the capacity to manufacture over 8,000 chairs and nearly 4,000 desks in a single day has to have the most modern and reliable production equipment in their industry. Steelcase, Inc., Grand Rapids, Michigan, has it and it includes a dozen Minster presses ranging from 250 to 500 tons capacity.

Mr. Robert Ballard, Machine Superintendent, is directly involved in all equipment analysis, specifying, purchase and use in the Machine Division of the Steelcase Chair Plant. He says, "Reliability is the most important influencing factor in determining the press source. You don't make a nickel if the press isn't running. We have found that Reliability in our Minster presses."

Press capacity, size with accuracy and variable speed capability were also important items considered in the purchase of a new Minster 500 ton E2 HeviStamper® for large progressive die production of chair parts. Most parts being run are "base arms" 12⁷/₁₆" in length. The parts are made of 14¹/₂" wide 16 gauge coil steel fed to the press from a reel, straightener and single roll feed. When formerly made in a lower capacity press, one part to a stroke, scrap was a costly factor. In the new 500 ton Minster HeviStamper, Steelcase produces two parts per stroke, at 40 spm and more than doubled production.

Reliability Cited by Steelcase as Major Factor in Choosing Minster Presses

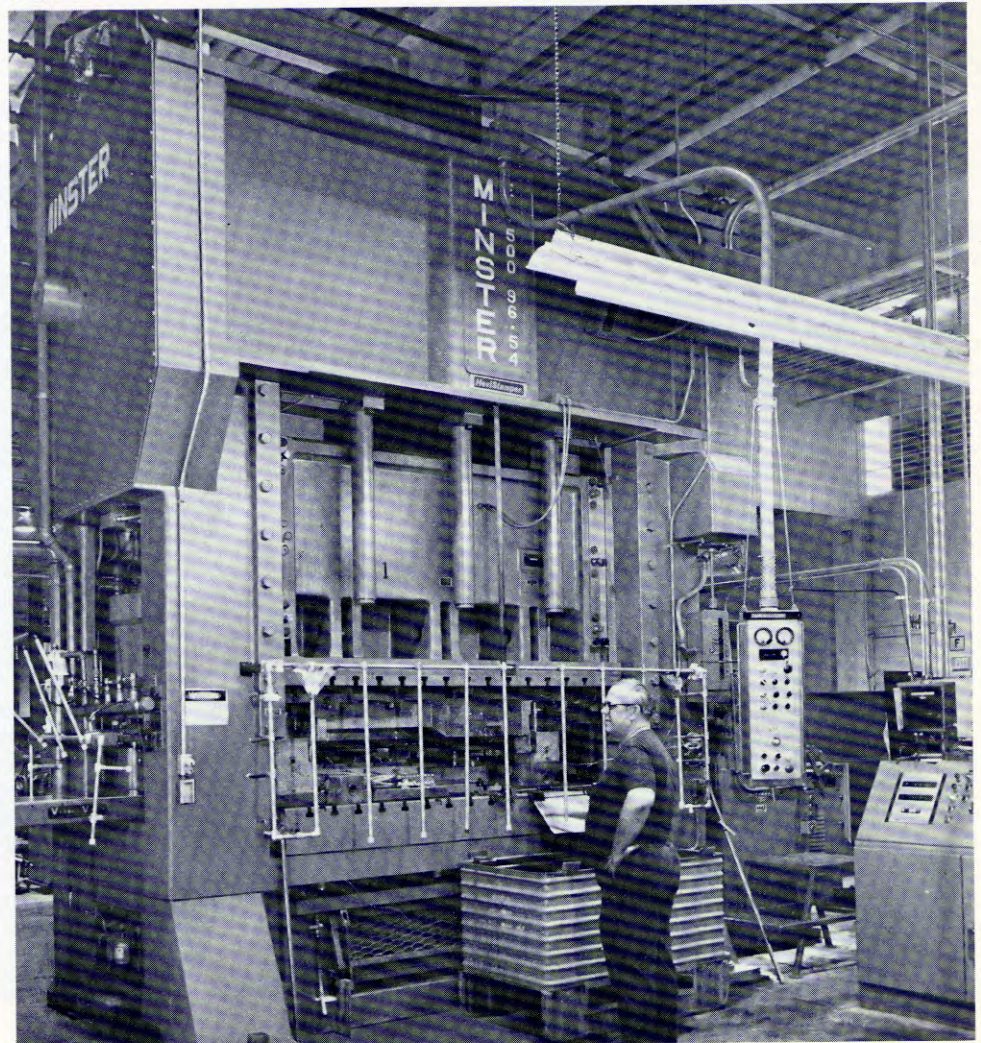
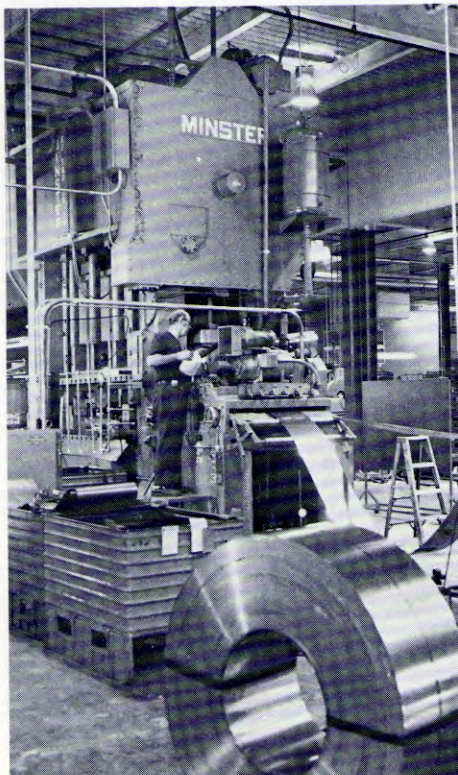
By nesting two parts with their angular configuration alternating, side by side, in the die, they not only get more parts per hour but realize a very significant material savings. The scrap skeleton which carries the part through the progression to final form and cut-off is extremely narrow. Estimated material savings is 40%. The parts are ejected in the fixed oriented position (see photograph) for handling on a conveyor running from the die area through the press upright opening.

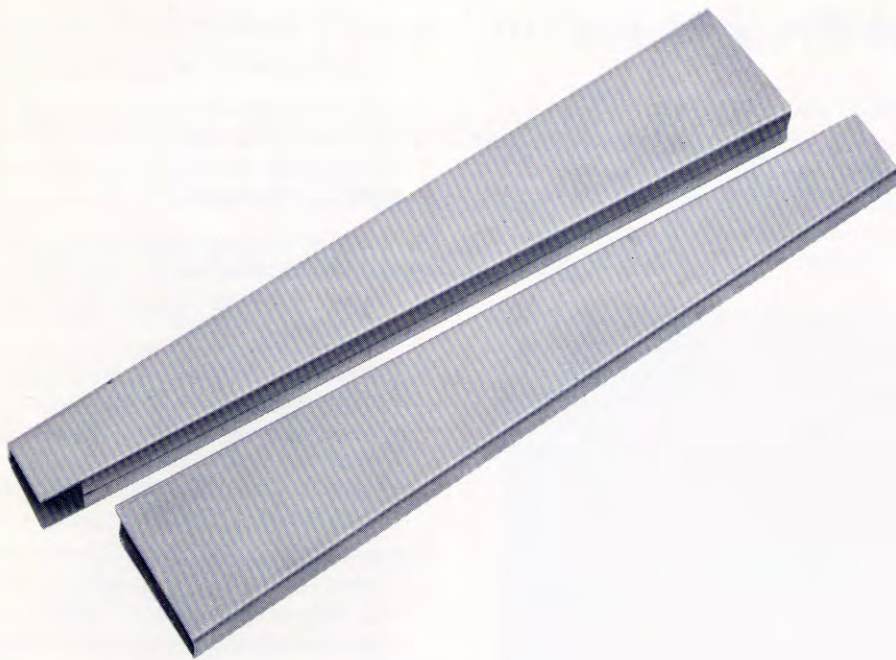
The Minster E2 HeviStamper press was specifically developed for heavy material, progressive die, blanking, and forming. It is massive and structurally stable, built with quality and precision to extend die life and provide exacting part accuracy.

Steelcase has applied a very effective radio-field die area protective device to the press. As shown, this Minster press is equipped with a Centralized Control Panel with all Operator Controls in a Pendant-type Station. It has a speed range of 0-80 SPM with Eddy Current Drive. Length of Stroke is 10" and shutheight on the bolster is 21".

Robert Ballard stated "Next in importance (to reliability) is Service. The service, assistance and know-how we get quickly out of the Minster Service and Repair Department...the service of Minster's distributor representative who is above average in both interest and technical knowledge of stamping methods and dies."

Press slide, bed and bolster area is 96" left to right and 54" front to back to accommodate large progressive dies.





One of fourteen lines of chairs produced by Steelcase. Base arms are made on the Minster 500 ton E2 HeviStamper press.

Chair "base arms" of various sizes and shapes are produced in Minster presses. This photo shows how two arms are positioned as they are produced in progressive dies, two per stroke. Note the exceptionally smooth and tight closure which is accomplished without a mandrel in the die.

Steelcase

is a very famous name in office furniture. The company began in Grand Rapids, making steel wastebaskets in 1912. By 1920 they had added desks and steel files and were selling nation-wide. In 1939 Steelcase began producing chairs. The company has an impressive list of "firsts" in its history, including the first office furniture in colors introduced in 1953. Growth has been steady. In the past decade, sales volume at Steelcase has more than tripled.

Today the company has the largest office furniture manufacturing facilities in the world and manufacture two complete office furniture systems, fifteen lines of desks, fourteen lines of chairs, nine lines of storage and filing cabinets, plus products for institutional and educational use. Steelcase has its major production facility (4,357,000 sq. ft.) in Grand Rapids where, in 1974, it completed a new chair plant. Other plants are located in California, North Carolina, Ontario, Canada, Tokyo and Osaka, Japan...Strasbourg and Sarrebourg, France.

Steelcase products are functional, beautiful and used everywhere. Minster is pleased to play a role in the company's manufacturing process.

