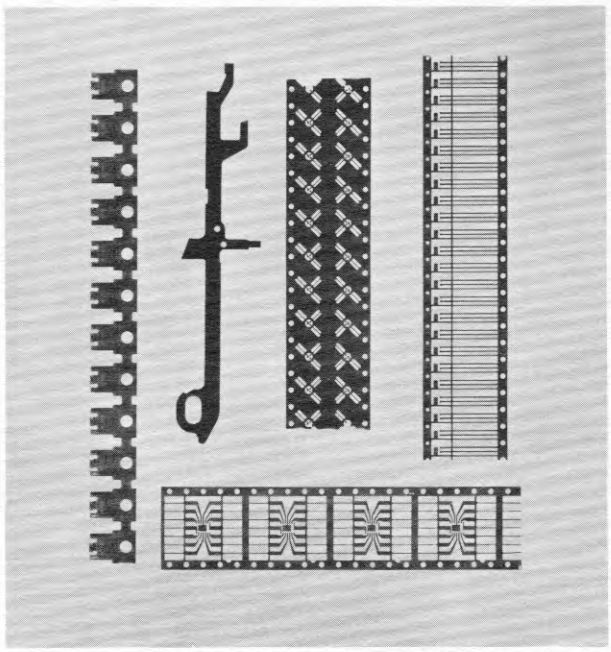
CARBIDEX
CORPORATION

Carbidex creates precise micro-miniature parts by the millions

New Carbidex plant

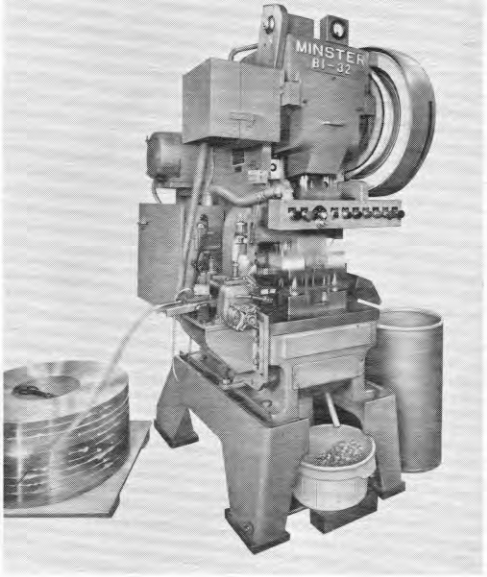
Precision-ground carbide dies held in ball-bearing guided die sets, mounted in high speed Minster automatic presses, stamp out over 1 billion parts a year at Carbidex Corporation, Southgate, Michigan.

This ten year old firm, founded by President Arthur E. Chambers, is a highly regarded specialist in "micro-electronic stampings" for the aerospace, optical, electronics, business machines and other such industries. Carbidex "does it all . . ." designs and builds the dies and produces the tiny jewel-like parts . . . in a spacious 44,000 sq. ft., 3 year old facility on the edge of Detroit, near the Metropolitan Airport. Their customers are located all over the world. Creating carbide tooling is about 16% of the business . . . the balance being long-run production stamping. Being an integrated shop with their own engineering and die-building departments, Carbidex can control the exceptionally close tolerance quality they put into their products.

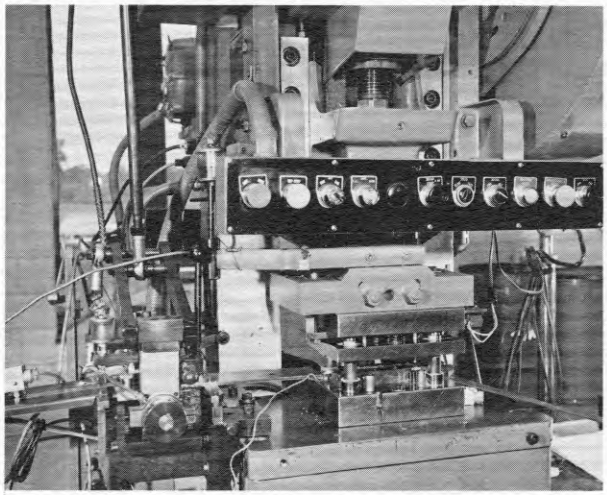


Dual, in-line lead frame for integrated circuits, typewriter parts and other electrical components are typical of Carbidex-created parts produced by Minster presses. Stock used is as narrow as .0035 and as thin as .002".

Micro-electronic parts: eyelets, eyelet cans and lens retainer rings.



Arthur E. Chambers, president



Close-up of carbide progressive die in Minster B1-32 press.

Minster Presses Dominate the Press Room

Art Chambers had his first experience with Minster presses in the late '40's and he has been buying them ever since. The press room at Carbidex looks like the Minster shipping department. There are 26 B1-32 high speed gap presses lined up in two neat rows, followed by two P2-30's, a P2-60 and two P2-100 Piece-Maker presses. The B1's run at speeds ranging up to 900 spm and the P2's to 500 spm.

Precision, of course, is the underlying reason for using Minster presses for this type of micro-miniature high volume part production. However, other factors come into play too. Says Mr. Chambers, "Minster presses have the rugged dependability with the precision needed for high speed stamping of ultra-sophisticated parts such as we make. We have one B1 press here for example that we bought in October 1963. With only minor repair work (it has run through several pairs of feed rolls) that press has run continuously at 565 spm, 24 hours per day, seven days a week, week in and week out."

The Minster presses are all highly automated at Carbidex. They have many buckle and mis-feed detectors. Carbidex designs and builds some of its own detection and coil handling equipment to assure proper handling of its thin, delicate materials at high speeds.

One operator can handle about four B1 presses, doing his own set-up and inspection. They practically run themselves.

Tough Material

Carbidex parts are made of pure nickel, copper, alloys, cobalt alloys, spring-tempered steel and glass-to-metal sealing alloys. On the Minster presses they run materials as thin as .005".

Part Runs in the Millions

It is normal for Carbidex to run a million parts between die service. Their record is 5 million without a die change. One month this year they turned out 47,000,000 TO 18 eyelets, a basic semi-conductor part. Average total production is about 23,000,000 parts a week.

Carbidex employs 110 skilled engineers, die designers, toolmakers and press room technicians. They "think small" and work in microscopic detail, but Carbidex is "big" in ability.

Minster B1's dominate press room.

Minster Piece-Maker presses