

## Multiple Spindle Heads

### Fixed Center Multiple Spindle Heads Now With Class 10 Gearing

- Precision construction to maintain accuracy  $\pm .001$  C/L to C/L
  - Uncompromised machine tool standards for maximum service
  - Custom Designed to your specifications
  - Hole patterns from .750" C/L to C/L
  - Class 10 gears
  - Aluminum, Steel or Cast Iron Housings
- The Hause reputation for quality, precision and long life is the foundation for Hause Multiple Spindle Fixed Center Heads. Only the highest machine tool standards are maintained for every unit designed and constructed. Standard features include machined steel or aluminum housings, steel liners for bearing mounting areas when required, guide bar bosses with long wearing bearings to maintain accurate alignment.

Gears - Now Class 10 quality - and Idlers are precision machined by Hause from heat treated alloy steel for strength and wear resistance.

Spindles are ground to close tolerances from hardened alloy materials and rotate on precision ball and needle bearings.

All Multiple Spindle Heads are furnished with grease or oil lubrication, and coolant passages are provided when necessary to maintain controlled operating temperatures.

When precision, repeatability and dependability are necessary, specify Hause Multiple Spindle Heads. We'll make and keep you competitive.

### DESIGNED & BUILT FOR THE REAL WORLD!

Two spindle fixed center tapping head, tapping two different pitches at the same time. Mounted to a Model 2497 Air-Hydraulic unit with booster cylinders. Steel housing and internal parts for a three spindle right angle multiple spindle head.

Three spindle, right angle, multiple spindle heads fully assembled. Used for a "back feed" drilling application.

Model 2497 with four spindle, fixed center head, traveling bushing carrier and booster cylinders for additional advance and retract thrust. Model 3496 Lead Screw unit with a two spindle head for tapping 3/8-16 in steel. Four spindle, two position indexable head with shot pin locator and bolt secured.