SOLUTION: SERVO-FEED VARIMEC™ SELFEEDERS ANSWER DEMANDING QUESTIONS TO HOLEMAKING PROBLEMS

Programmable, Single-Servo Z-Axis Machining Center
Lower Burden rate than CNCs
Simultaneous Multi-Perimeter Drilling & Milling
Machining Center Accuracy
Reduced Cycle Time
Deep Hole Accuracy

Automotive Valve Body

Single-Spindle
21mm Ø • 800 RPM
0.1mm/Rev

Twin-Spindle
2 x 13mm Ø • 1,500 RPM
0.1mm/Rev

Varimec™ Selfeed
3.25 HP • 0.0002" TIR
11.81" stroke with linear slide & ballscrew

Itasca, IL 60143 • 1 (888) Sugino 1 • www.suginocorp.com

HIGH TECH

Machining Application of the Month
SOLUTION: SUGINO MULTI-SPINDLE SELFEEDERS INCREASE JOB PRODUCTIVITY, EFFICIENCY AND ECONOMY

Designed for more than 175 Electric Selffeeder drill units ranging to 7½ HP
Spindle center distances down to 8mm; speeds to 9000 rpm
Protective air purge spindles; ball and needle bearing design
Guide bars hold accuracy during severe production conditions
100% gear-driven with collet, chuck and ASA spindles
Heads built to accommodate up to 64 drill bits

CAST IRON HYDRAULIC VALVE BODY
Drills six & four holes simultaneously
1:1.38 gear ratio delivers 1100 rpm spindle speed on six holes
1:1 @ 2000 rpm on four holes
Completes three parts per minute
ALL PNEUMATIC SELFEEDER® DRILL UNITS ADD VERSATILITY, EFFICIENCY AND ECONOMY

Less costly, 25% more efficient than competitive models
.35 & .60 hp, more than 3" stroke, up to 17,000 rpm drill speed
Capable of standard, dwell and peck-feed drill modes
Self-controlled rotation, rpm, travel, fast forward feed and reverse
Precision tolerances for cutting speed and hole depth

SPECIAL MACHINING APPLICATION
Designed and constructed by Sugino, three pneumatic Selffeeders drill 7 holes into small automotive part.
Precision TIR
Tight repeatability tolerance

Sugino Corp.
Itasca, IL 60143 • (888) Sugino 1 • www.suginocorp.com
“CATCH-CLIP” QUICKLY CHANGES DRILL AND TAP HEADS IN SECONDS; INCREASES JOB VERSATILITY AND PRODUCTIVITY

100% gear-driven, multi-spindle drill and tap heads

Produces family of parts with single station

Many multi-head patterns available

Machinist can install and operate

Adds flexibility to production

Multi-spindle heads and Selffeeder with “Catch-Clip”
Quick Change Adapter

4-HOLE FLANGE HUB

2, 3 and 4-hole bolt circle pattern
0.257” drill diameter through
5/16”-18 tap through
Uses common fixture location
SUPERROLL® BURNISHES METAL SURFACE IDs AND ODs TO HARDENED, MIRROR-LIKE FINISH IN ONE PASS

Plastic deformation cold works metal into smooth, hard surface
Reduces machining time and equipment costs up to 90%
Process IDs 3mm and up. Adjustable by 0.0001”
Available for tapered and stepped surfaces, contours, flat-faces
Special sizes and applications

FORGED DIFFERENTIAL PINION
O.D. radial surface finished to 0.6µm.
I.D. bore hardened 10% to 0.20” below 0.6µm burnished surface.
Process time: 8 seconds.