VERTICAL INSERT INJECTION MOLDING MACHINES

Rotary, Shuttle & Stationary Table Designs
VERSATILITY. SPEED. PRECISION. VERTICAL TIE-BARLESS CLAMPING.

**Magna V** series vertical clamp machines bring you every advantage for insert molding from encapsulation of delicate electronic parts to over molding of plastic on metal for diverse automotive applications.

**Magna V** machines can be configured for every possible insert molding application by combining a wide range of clamp, table and injection unit configurations. Vertical clamps with horizontal tables let gravity gently and easily do the work of holding single or multiple inserts. Open clamp designs with rotary and shuttle tables give the advantage of working with multiple molds and simultaneous operations including pre molding, injection and post molding operation. Simultaneous operations are easily automated for consistent quality, high productivity and high profitability.

**WHY INSERT MOLD?**

Insert molding is the process in which one or more plastic materials are injection molded around one or more inserts. The inserts may consist of a variety of materials including metal stampings, wire, mesh screens, or another plastic part.

- Easily combine two materials
- Encapsulate delicate parts
- Reduce assembly costs
- Reduce post-molding operations
- Impart damping & insulating properties
- For molding aesthetics, design features & feel

**Magna V** high speed, high-volume vertical insert injection molding productivity is ideal for:

- Automotive
- Medical
- Electronic
- Consumer
- Construction

**Rotary Table**

- Multi-station flexibility for multiple operations to maximize productivity
- Standard configurations available for 2 or 4 stations (mold bottoms) & custom for 3, 6 & other required numbers of stations
- All-around light curtain allows for multiple operations around the table without guarding
- Easy to automate several stations
- Easy access for mold setup & operation

**Stationary Table**

- Best for dedicated applications
- Flexible to run a wide range of parts from simple to complex & for low volume applications or where multiple molds are not required
MAGNA V’s vertical clamp design is open for easy production or automation. The clamp design is a robust vertical C-frame that is open in the front and on the sides.

- No tie bars to interfere with inserts that extend beyond platens
- Can use large rotary & shuttle tables for increased mold capacity with less floor space
- Easy access for mold changing & plumbing
- Easy access to molds for automation

SHUTTLE TABLE

- Simultaneously load/unload parts during molding using two mold bottoms
- Ability to run long insert applications that are too long for rotary tables
- Flexibility to run a single mold
- Shuttle table is moved side-to-side by hydraulic cylinder with precise positioning through use of position sensors & mechanical stops

PRECISION PROCESSING FEATURES

- Closed-loop process control
- Sled control set through the operator interface
- Single-point parting line adjustment
- Optional hydraulic driven parting line adjustment

VERTICAL CLAMP/VERTICAL INJECTION MODELS AVAILABLE

Existing tooling
- Run on conventional horizontal
Hot runner molds
- Concern with sprue break each cycle
Part design
- Ability to inject into center of part
- Use standard (horizontal) mold bases
No sprue break
- Faster cycle times
- Hot runner applications
A COMPREHENSIVE LINE OF PLASTICS TECHNOLOGY SOLUTIONS

**All-Electric**
- Roboshot S2000i-B
  - High Speed, High-Precision
  - 17 to 385 ton
- PowerPAK
  - High Value, Energy Efficient
  - 440 to 1125 ton

**High Performance**
- Vitesse
  - High Performance
  - 200 to 500 metric ton
- F-Series
  - High Performance Hybrid
  - 50 to 650 ton

**Hydraulic**
- K-Tec
  - 40 to 450 metric ton
- Magna Vertical Insert
  - Stationary, Shuttle & Rotary
  - 30 to 280 ton
- Maxima Mid-Size 2-Platen
  - 310 to 950 ton
- Maxima Large 2-Platen
  - 1100 to 6600 ton

**Servo Hybrid**
- Maxima Servo
  - Energy Efficient 2-Platen
  - 310 to 4400 ton
- Magna T Servo
  - Energy Efficient Toggle
  - 55 to 500 ton

**Auxiliary Equipment**
- Full line of auxiliaries from pellet & part handling, including dryers, robots, hot runners & much more

**Rebuild & Retrofit Services**

**Extrusion Systems**
- Twin Counter Rotating Conical, Twin Counter Rotating Parallel, Single Screw Grooved Feed GPAK Series, & Single Screw PAK Extruders

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All specifications reflect average values based upon typical machine layouts. Actual figures will vary depending on final machine configuration. If you require more specific data, consult a certified installation print for your particular machine. Performance specifications are based upon theoretical data. Due to continual improvements, specifications are subject to change without notice.

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