



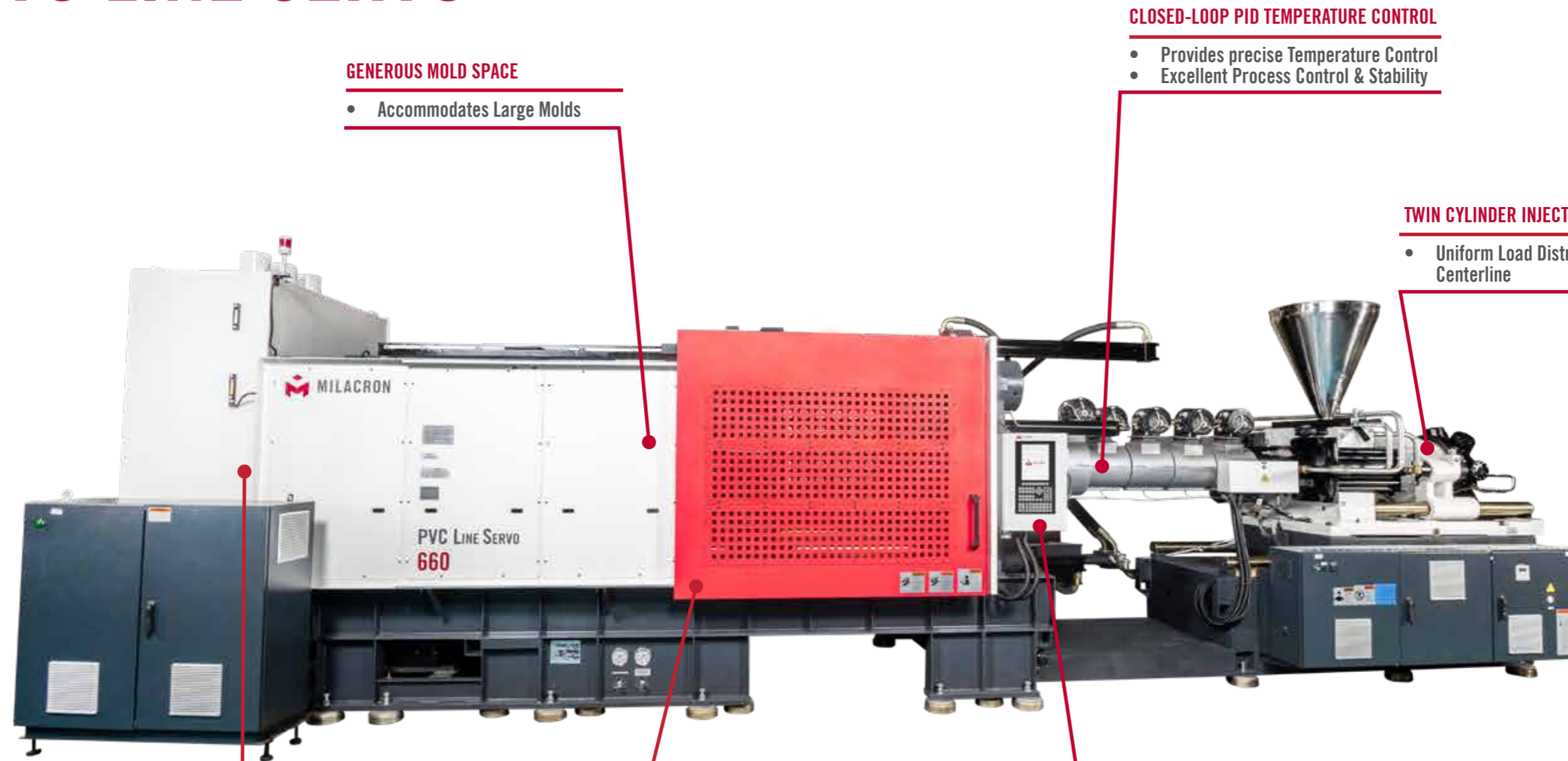
**MILACRON®**

## **THE PVC LINE SERVO**



**550-910 TON**

# THE PVC LINE SERVO



## GENEROUS MOLD SPACE

- Accommodates Large Molds

## CLOSED-LOOP PID TEMPERATURE CONTROL

- Provides precise Temperature Control
- Excellent Process Control & Stability

## TWIN CYLINDER INJECTION UNIT

- Uniform Load Distribution across Screw Centerline

2

## LARGE RAM DIAMETER & UNIQUE PREFILL CYLINDER DESIGN

- Provides Uniform Force Distribution across Platen
- Provides Excellent Mold Squareness & Parallelism
- Reduces Mold Wear
- Fast Tonnage Build-up Time

## WIDE SKATES FOR PLATEN SUPPORTS

- Reduced Platen Deflection
- Enhanced Life of Tie-bars
- Higher Mold Carrying Capacity
- No Need for Frequent Adjustment. Hence Faster Mold Change

## ADVANCED USER-FRIENDLY CONTROL

- Ergonomic Layout
- High Speed Microprocessor
- Direct Access Menu Keys
- Graphical Presentation of Machine Features
- Self-Diagnostic & Fault-Finding Capability
- Parameter Entry in Absolute Value

3

# THE PVC LINE SERVO

## Injection Unit Specifications

IU	90	100	110	13500	125
PVC LINE SERVO 550					
PVC LINE SERVO 660					
PVC LINE SERVO 775					
PVC LINE SERVO 910					

## Clamp Specifications

MODEL	TONNAGE	PLATEN SIZE (H X V)	TIE BAR SPACING (H X V)	MAX DAYLIGHT
	tons	mm	mm	mm
PVC LINE SERVO 550	550	1245 X 1245	870 X 870	1676
PVC LINE SERVO 660	660	1400 X 1400	950 X 950	1780
PVC LINE SERVO 775	775	1680 X 1475	1150 X 950	1920
PVC LINE SERVO 910	910	2000 X 1600	1530 X 1120	2350

## STANDARD FEATURES

CLAMP	
Hollow Headless Ram with Mono Seal & No Piston Rings	●
Large Prefill Designed for Fast Tonnage Build-up	●
Rapid Traverse Cylinders	●
Conical Strain Rod Nuts & Controlled Stress on Tie Rods	●
Adjustable moving Platen Skates	●
Rigid Cast Platens with FEA	●
Adjustable Pressure Setting of Closing & Opening Stage	●
Proportional Speed Control with 5 Closing & 5 Opening Speed	●
Adjustable 2 Stage Mold Safety Pressure & 2 Stage Speed	●
Position-Based Ramping for Accurate Position Switching - Precise Speed & Pressure Control	●
Linear Position Transducer for Accurate Clamp Position Control	●
Sensitive Mold Protection with Try Again Circuit	●
Phase-Wise Actual Time Display	●
Insert Molding Program	●
Part Drop Detect for Single Cavity	○
Extended Daylight with Ram Spacer	○

INJECTION	
6 Stage Injection Velocity & 15 Stage Injection Pressure Profile	●
5 Stage Screw Speed & 5 Stage Back Pressure Control (Setting) through Screen	●
Digital setting of Extruder RPM & Digital readout of Actual RPM	●
Wide Choice of Injection Units with A-B-C Screw/Barrel Combinations	●
Easy Injection Unit Swiveling	●
Switch Over from Fill to Pack based on Position or Time or Pressure	●
Linear Position Transducer for Accurate Injection Position Control	●
Injection Decompression Before/ After Refilling or Both	●
Semi-Auto Purge, Cold Slug removal & Intrusion Molding Programs	●
Chequered Plate below Purge Area	●
Sprue Break with Timer	●
Injection start, Suck-back & Melt Decompression -Delay Timer	●
Nozzle Contact Force by Pressure Switch	●

TEMPERATURE CONTROL	
Actual Current Display of Barrel Heating Zones	●
Heater Failure & Thermocouple Open Detection	●
Accurate PID Temperature Control	●
Feed Throat Temperature Indication	●
Auto Heat Startup & Shutdown	●
Heat Standby after set number of Cycles	●
Soak Timer for Cold Start Protection	●
High / Low Temperature Alarm	●
Set & Actual Temperature Data with Bar Graph	●
Feed Throat Temperature Control	○
Oil Temperature Control	○
Extra Heating Zone	○

ADDITIONAL FEATURES	
Water Manifolds	○
Water Battery with Temperature Indicator	○
Robot Interface (SPI / EUROMAP)	○

● - Standard Feature ○ - Optional Feature

HYDRAULICS	
Servo Motor Driven Pump	●
Ergonomic Hydraulic Layout for Easy Approach	●
Valves Placed near Actuators for Rapid Response	●
Pre-Heating Circuit for Hydraulic Oil	●
Low Oil Level Audible Alarm & Motor Shut Down	●
Continuous Oil Filtration with 10 Micron Filter	●
Audible Alarm for Filter Clogging	●

EJECTOR	
Knock-Out Bar	●
2 Stage Programmable Ejector Forward Profile with Soft Eject	●
Ejector Speed & Pressure adjustable on Screen	●
Linear Transducer for Ejector Position	●
Pulsating Ejector Strokes up to 9 Pulses	●
Intermediate Retract Set Point	●
Ejector Stay Forward & Forward Dwell Timer	●
Ejector on Fly	●
Air Ejection	○

CONTROLS	
18 freely process parameter selection out of 67 Parameters for last 1000 cycles with graphics	●
10 freely process monitoring parameter selection out of 67 for alarm tolerance monitoring	●
10.4" TFT Color Display with Alpha-Numeric Keypad	●
Actual Injection Speed & Pressure Graph Display	●
80 Mold Data Storage	●
Configurable Multilevel Password with Operator's Name	●
Graphical Presentation of Last 48 Hours Production	●
Customized Setup Menu	●
High / Low Limit Display for Each Adjustable Parameter	●
I / O diagnosis - Analog & Digital	●
Timer Precision in 0.01 seconds	●
Change Log Menu: logs last 100 Set Points Changes with Time & Date	●
Process Mode: Functions with its Co-functions on a Single Key Press	●
Note Pad & Maintenance Scheduling	●
Freely Programmable Smart Outputs & Inputs	●
Overview Screen with Graphical Display of Machine Functions	●
Soft Keys for Fast Access to Select Menus	●
Auto shut down	●
Visual & Audible Alarm	●
1000 Alarm History with Date & Time Log	●
Axis-wise Graphical Cycle time Analysis	●
Batch Counter with option to turn off the motor	●
Mold data / Process data / Change log saving to External USB device	●
Mold Spray Counter	●
Statistical Process Control (SPC) with Graphics	○

PVC LINE SERVO SALIENT FEATURES	
Rear & Front Gate Extension	●
Blowers on Barrel Zones	●
Nozzle Tip with Taper Profile	●
Specially Designed Screw for PVC Processing	●
'V' Shape Stainless Steel Hopper	●
Interface for Ejector Retract Verification	●
Hydraulic Core Pull - 2 Stage	●
Nitrided Screw & Barrel	●
Chrome Plated Ram & Tie Rods	●
Seal at Screw End	●

