

R&B RBS Series All-Electric Shuttle Machines at a Glance

R&B Plastics Machinery RBS Series All-Electric Shuttle Machines are designed and manufactured to the stringent requirements of North American and Global blow molding operations and utilize the below noted designs and/or componentry within all of our All-Electric Shuttle Machines. Although not all inclusive, some of the major highlights of the RBS Series All-Electric Shuttle Machines include the following:



RBS Series All-Electric Shuttle Machines at a Glance

Assembly/Function

Design Feature

Benefits

Machine Frame Construction	Heavy-Walled Steel Tubing and Steel Plate Construction	Rigid construction provides a long lasting machine lifecycle
Extruder Bore Type	Grooved or Smooth Bore (resin dependent)	Allows for positive feeding of many different types of resins
Extruder Screw Design	General Purpose or R&B MAX Impact™ designed for specific resins	Designs maximize mixing properties, process stability, and output rates
Extruder Bobbing Motion	Servo Motor with Heavy-Duty Gearbox	System is easily balanced for smooth, vibration-free movement
Extruder Platform Adjustment	Height (up/down) via Electric Motor Front to Back via Electric Motor Side to Side via Manually Operated Threaded Shaft and Pillow Block	Electrical movements are controlled via the Operator Interface
Extrusion Die Heads	Standard RBS Series or Optional W. Müller	Various Parison Configurations with CoEx Layering Options up to 6-Layers
Parison Knife Motion	Pneumatically Actuated	Optional Servo Motor for Heavy-Wall and/or Pre-Pinch Applications
Parison Pre-Blow	Manual Pneumatic Valves with Digital Feedback Display	Individual Valves for independent Parison Pre-Blow Control
Product Blow Air	Proportional Pneumatic Valves	Individual Proportional Valves for independent Product Blow Air Control
Carriage Motion	Rotating Crank Arm or Ball Screw (Stroke Dependent) w/Rails & Bearings	Long lasting and well proven designs with minimal maintenance requirements
Clamping Arms	Machined from Billet Steel	Removes any reliance on weld quality
Mold Platens	Machined from Billet Aluminum	Lower weight/inertia and removes any reliance on weld quality
Blow Pin Adjustment	Individual, with three (3) Outward Facing Adjustment Screws with Auto Balancing Height Compensation (achieved via special grease manifold)	Allows for simplified adjustment of each individual blow pin
Blow Pin Type	Water-Cooled Blow Pins with "Flushing" Blow Air	Allows for additional cooling of the container which aids in reduced cycle times
Bottle Take-Away Conveyor	Center of Machine with all Containers exiting the same side of the Machine	Keeps the conveyor footprint to the smallest possible configuration
Scrap Removal Conveyor	Center of Machine with all Scrap exiting the same side of the Machine	Configuration keeps all conveyors behind the clamping stations allowing for easier access to molding areas of the machine
Electrical Controls System	Siemens IPC477E Industrial PC with 15.0" TFT Touchscreen	Intuitive Controls System with easy to navigate interface screens
Servo Controls System	Yaskawa Σ -X (Sigma-10) Series	Integrated High-Performance Servo System providing the fastest and smoothest machine motions possible
Incoming Air Preparations	ANSI Compliant Dump Valve with Air Filtration System	Filtered air supply allows for easier processing of Containers
Incoming Water Preparations	Central Water Manifold System with "Blow Back" Feature	"Blow back" feature returns majority of water from molds and piping to the Chiller system