

TSL MARKETS BY MACHINE TYPE

MARKETS BY RESIN TYPE



PP



PET



HIPS



EPS



PLA

Former & Trim Press

Form Trim-in-Place

Rotary

MARKETS BY PRODUCTS

MARKET PRODUCT TRENDS

- Specialty Beverages
- Green movement, conversion of materials
- PP Drink Lids
- Conversion from PS & Paper
- Product visibility & protection
- Rolled rimmed tray for over wrap
- reclosable containers
- Tamper evident
- EPP - Expanded polypropylene
- XPET - Expanded PET



Drink Cups



Clams/Trays/Containers



Portion/Dairy



Lids

TSL APPLICATIONS

Extruder/In-line

Roll fed

Third Motion



Technology - Low Flex Technology Features



Sash

- +/- 0.100" vertical adjustment of the top platen for shut height sheet thickness, and/or seal compression adjustments via the HMI
- Eliminate risk of exceeding machine tonnage
- Can be adjusted while machine is running



Doubler Plates

- Patented frame reinforcing or doubler plates - enhanced strength and deflection resistance of the frame
- Independent set of frame bearings - reduce the flex or deflection in the shaft
- Process any sheet type without air leakage



Servo Plug Drives

- Servo plug drive provides uniform wall thickness in product development
- Available in a variety of configurations
- Available with one or two motors and two types of screws
- The 4th motion is located on the top platen for formed down products



Heat Tunnel and Chain Rail

- Energy efficient quartz panel heaters
- Easy to clean aluminum pan-faced heaters on bottom
- Up to 170 degrees opening for ease of access to all heaters and safe clearing of sagging plastic
- Available in lengths up to 335"
- The chain rail has motorized adjust option for sheet sag control
- Size 50 and 60 chain, single and double roller are options



Technology - Low Flex (Thermoforming versions LF3.0, LF4.0, LF5.0, LF5.0DD, & LF6.0)

The Low Flex® thermoforming system is a durable and reliable machine for deep and shallow draw applications. The Low Flex® Series comes in four models with forming areas ranging from 33.5" x 52" to 65" x 67". The Low Flex Series can readily process a number of plastic resins: HIPS, PP, TFPF, PET, CPET, PLA, PVC, HDPE, and ABS. The machine can be roll fed or run inline with the extrusion process. The Low Flex thermoformer includes many innovative and advanced features that enable it to outperform the competition.

The patented Low Flex frame technology is key to reducing the frame flex, allowing the 190 ton LF5.0 machine to handle 100psi of air pressure and coining of full size molds. Its side frame and doubled plate straddle the platen toggle assemblies on both side and yoked design transfer load to reduce deflection.

