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**For Immediate Release**

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## **Brown Machine Awarded U.S. Patent For Single Roller Screw Design**

Brown Machine LLC has been awarded a patent for its single roller screw design for actuation of independent third platen plug assist motion. This advanced technology provides higher stiffness, greater load capacity, and longer, more dependable operation for Brown continuous thermoformers requiring 3rd motion applications. This design has been incorporated in all Brown CS and SRS Series thermoformers with third motion capabilities.

Advantages of this roller screw design also include:

- Rollers are manufactured with the same thread angle as the nut, which is ideal for high-load, high-speed applications.
- Fixed screws allow the roller screw to work at higher RPMs than ball screws that tend to be speed limited.
- With higher load capacity and multiple contact points, roller screws can provide a service life up to 15 times greater than comparably sized ball screws.

The plug platen system is actuated by this single roller screw driven by a servo motor. The platen is guided by eight (8) linear bearings and incorporates quick change cylinder locks for attachment to the tooling plug plate. An independent oil lubrication system is included to effectively lubricate the roller screw system.

Brown Machine LLC, Beaverton, MI, is a global leader of thermoforming technologies, and engineers and manufactures a complete line of continuous and cut-sheet thermoforming equipment and related tooling/peripheral equipment. Brown has designed and developed numerous thermoforming innovations over the last 55 years and has machines operating in over 65 countries worldwide.