

Plastics Machinery

Plastic Film Production in Food Grade Clean Room Environment

CUSTOMER CHALLENGE

Raise and lower Extrusion Carriages while manufacturing very large rolls of thin plastic film. The lifting screw jacks utilized needed to have the ability to withstand high dynamic shock and vibration when in the extended position while holding a multi-million dollar carriage table in several required positions within tolerances of a thousandths of an inch.

SOLUTION

In order to handle the rigors of this application four custom engineered M10025-XX screw jacks were provided for each corner of the extrusion table. The jacks were supplied with extremely tight tolerance lifting screws and special bottom bushings for handling side loads shock and vibration. Food grade grease was used to meet the requirement of a clean room food grade environment.



Close up of M1005-XXX screw jack which supports the base of the customer's carriage assembly.



System layout of the customer's carriage base support assembly.

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Duff-Norton Products:
M10025 -XX modified 25 Ton
Screw Jacks
Custom Bottom Bushings
Food Grade Grease

DUFF-NORTON ADVANTAGES

- Custom Engineered Mechanical Actuators meeting the stringent shock, vibration and positioning standards required for high quality plastic film production.
- Providing an environmentally safe system meeting "Clean Room" requirements while eliminating the environmental impact posed by typical hydraulic systems.
- Providing robust, reliable operation across a long service life in a dynamic high shock and vibration environment.
- Meeting today's personnel environment requirements for low noise operation.
- Providing a single source of supply for all sub-components needed to complete the Mechanical Actuator system.

