Standard troughs

All Syntron® Light Industry Electromagnetic Vibrating Feeders are furnished with mild steel or stainless steel troughs. Mild steel troughs are painted or powder coated inside and outside with a high-quality polyurethane.

To meet food and pharmaceutical requirements, troughs are available in a variety of stainless steel finishes. A glass-beaded finish on stainless steel troughs is available for non-food applications.

Special coating can be applied to trough interiors. These include non-stick fluoropolymer, Urethane, rubber and others. Stainless steel and glass trough liners are also available to provide flat conveying surfaces. In addition, covers and/or downspouts are available.

The rule of thumb for trough selection suggests that the maximum dimension of the largest particle to be handled should not exceed one-third to one-half the trough width. Contact your Syntron Material Handling Sales Engineer or Application Specialist for a complete review of your application. Modifications or additions to feeder troughs should not be made without first consulting Syntron Material Handling.

Special trough styles

Tapered Width troughs provide nominal material concentration at discharge.

Diagonal Discharge troughs are used to spread the material discharge over the width of a belt or bucket lift positioned at 90 degrees.

V-Shaped troughs are used to discharge granular materials in a concentrated, narrow stream.

Tubular troughs are used when sealed conveying or feeding is required.
Special trough styles and drive configurations

Syntron Material Handling Solutions offers a wide variety of troughs including custom-designed troughs engineered specifically to meet your application requirements.

Customer applications that require extra-wide or long troughs can be met through the use of multiple drive feeders. Troughs for extra-width feeding can be furnished with glass or stainless steel liners. These liner materials are desirable for a uniform bulk material spread and to meet sanitary handling requirements. Trough sizes for wide multiple-drive feeders vary from 12 to 36 inches in length and from 12 inches to 12 feet in width. The number of drive units required for the trough depends upon its overall size.

With long, tubular troughs, pure clean materials can be conveyed without atmospheric contamination. Poisonous, dusty materials can be conveyed without danger to processing personnel. Hot materials can be conveyed without the danger of burning belts or maintenance concerns.

For moving bulk materials over extended distances, multiple drives for extra-length troughs offer several advantages. The extra drives ensure uniform product movement when the unit is fitted with troughs of any desired length and capacity. They can be equipped with open, flat-pan troughs with or without removable covers, or tubular dust-tight troughs. Troughs can be provided in hot rolled steel or stainless steel.

For difficult applications where product drop is a concern, feeders constructed with the drive units above the trough are available.

The bulk material flow rate of all Syntron® multiple-drive feeders can be easily regulated. Control units for multiple-drive feeders are as easy to operate as the control unit for a single-drive feeder.

All Syntron feeders are low maintenance. There are no bearings, rollers, pulleys and chains to lubricate and replace; no drive belts to stretch and slip; no mechanical wearing parts. Syntron Vibrating Feeders have been selected for hundreds of installations because of their versatility. The low-profile design requires minimum headroom. Base mounting and suspension mounting configurations are available.