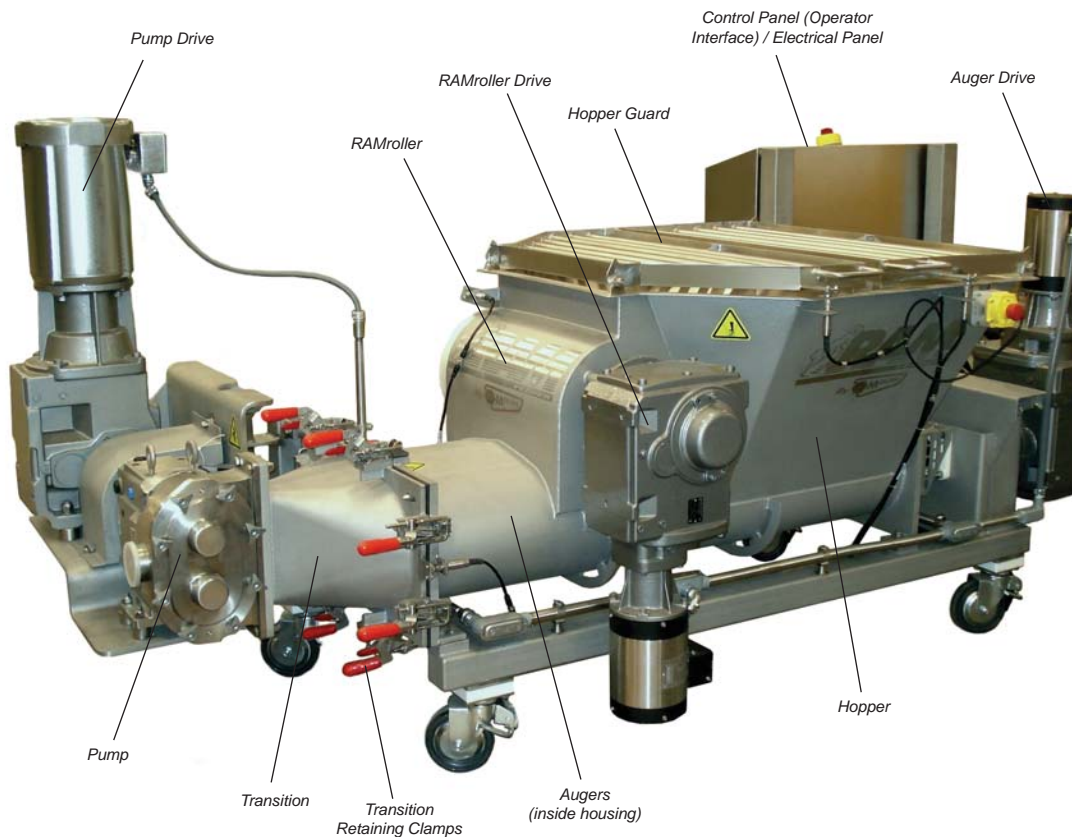


# High Viscosity RAM™ Pump Feeder



**Designed to consistently pump high viscosity ingredients such as butter, shortening, heavy fillings or thick dough formulations.**



- **Simple, portable design provides powerful delivery and easy sanitation.**
- **Used for thick, viscous ingredients that can be difficult to pump and transfer.**
- **Batch transporting from mixer to processing equipment.**
- **Auger and pump speeds are easily adjusted through the operator interface.**
- **Perfect for low temperature applications.**

The Moline high viscosity RAM™ pump feeder is used to pump thick, viscous products such as butter, shortening, heavy fillings and difficult-to-pump products that can pose unique processing challenges in sanitary and industrial applications. This unit can significantly increase production by providing an efficient and ergonomic method of automating the material handling process.

Product is loaded into the hopper where the auger system force-feeds it into the pump and extrudes it through a sheeting horn, piping or noodle plate (perforated die). The counter-rotating RAMroller™ maintains full auger flights for positive and continuous extrusion without air entrapment. Auger and pump speeds are easily adjusted for precise delivery through the operator interface.

Product can be extruded in various shapes, sheeted, continuously fed or pumped to other processing equipment.

These high viscosity pump feeders are custom-built to provide smooth processing for specific applications and can be easily integrated into existing equipment systems. The portable, simple design provides efficiency and durability along with easy disassembly for sanitation and preventive maintenance without tools.



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# High Viscosity RAM™ Pump Feeder

## Machine Features

- **Construction:**

Stainless steel product zones with sanitary removable seals. Incorporates USDA, FDA, BISSC, UL, and CSA specifications.

Mounted on casters for portability.

Hopper guards and covers are custom-made to prevent access to the hopper during operation.

- **Sanitation and Maintenance:**

Easily disassembled in minutes without tools, including the roller and auger. The transition disconnects quickly with retaining clamps and swings away on the pump frame assembly which provides complete accessibility for cleaning and preventive maintenance.



**Augers and RAMroller Processing Product**

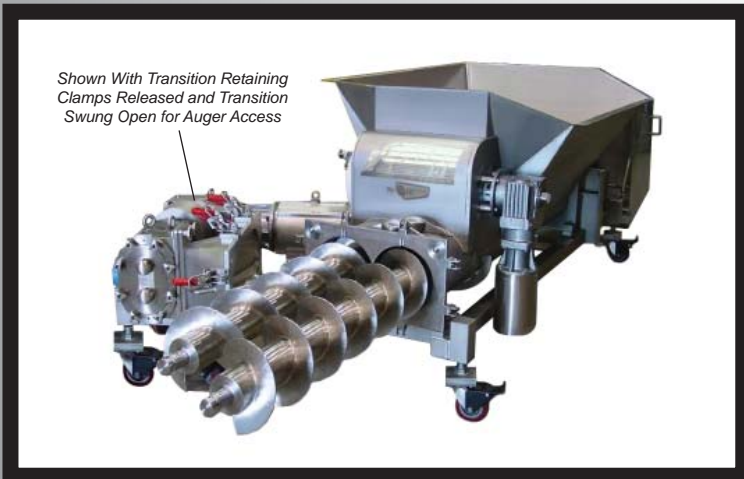
from 200 to 75,000 pounds of product per hour and viscosities from 500,000 to greater than 1,000,000 centipoise.

- **Equipment Options:**

- High and low profile machines.
- Transition jackets for cooling and heating.
- Hopper modifications for additional capacity or to fit existing equipment lines.
- Augers are available in sizes from 3" to 12" in diameter.

## Pump Attachments

Volumetric metering is possible with these units due to the positive, uniform and repeatable pumping of high viscosity products. A variety of shapes, including noodles, disks, sheets, stars, kibbles, cylinders and many others, can be achieved through various attachments such as templates, manifolds, sheeting horns and cutoff knives.



**Augers During Removal**

- **Control Functions:**

Controls are easily adjusted through the operator interface.

- **Pump and Drive System:**

Waukesha rectangular flange pump (other brands available). Heavy duty drive motors and gear reducers control moving components.

- **Capacities / Viscosities:**

From small lab units to large production systems, high viscosity RAM™ pump feeders can handle