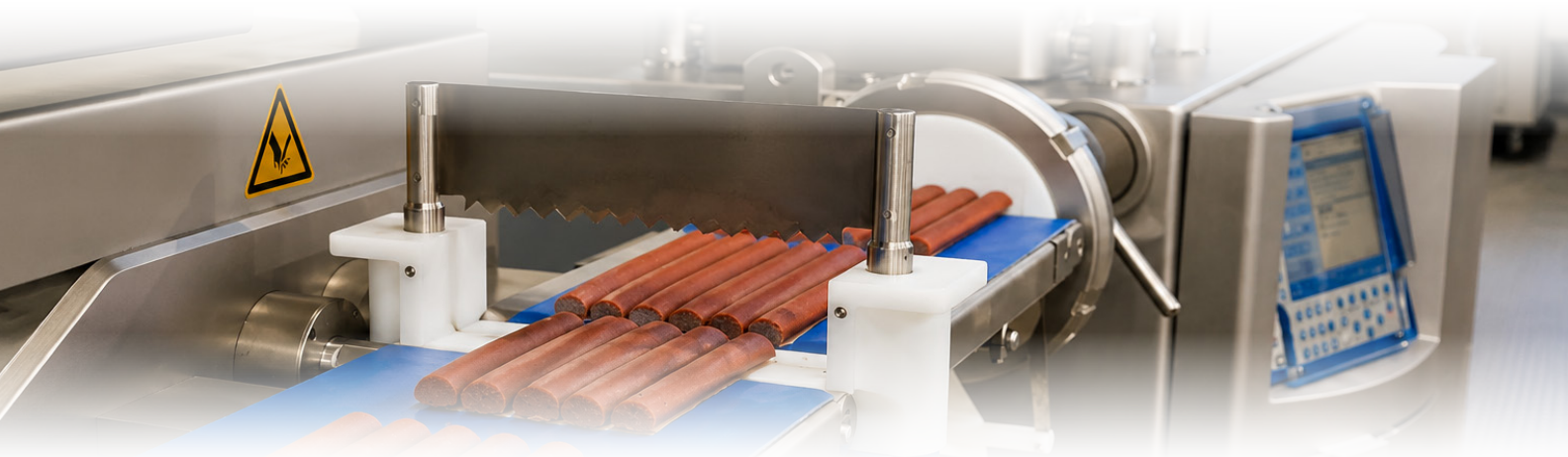




Pumping Challenges in Meat Processing Applications

HEAVY DUTY SOLUTION



Project Overview

Challenging meat packing applications such as in pork, beef, and poultry processing need a rugged pump that can move a variety of materials under tough conditions. These meat packing applications are considered unique because they do not represent the typical standard positive displacement applications as they contain significant solid content with intermittent flow and potentially abrasive characteristics.

Solution

ARO's Heavy Duty (HD) Series is a circumferential piston pump capable of handling a wide range of viscosities and slurries, running dry without damage, and offers a low shear design. Each type of plant, whether pork, beef, or poultry, may consist of a variety of applications including slaughter, processing, and rendering, all of which utilize the HD Series.

SLAUGHTERING

Slaughtering applications consist of animal product at body temperature, such as fat or intestines, and typically utilize an ARO HD Series pump with a hopper inlet port. As the animal product travels from the slaughter floor, innards are pulled from the cavity and transported into a trough with a hopper. The HD Series is capable of running dry without damage with intermittent flow of solid product. The pump impeller's sharp leading edge is capable of shearing these solids in order to allow entry into the pumping cavity, eliminating the need for a grinder.

PROCESSING

Trimming and processing floors typically work with chilled meats and poultry, however, at refrigerated temperatures beef fat cannot be pumped with traditional circumferential piston pumps. Frozen fats can easily be moved with ARO's HD Series due to its sharp leading edge of the single-lobe impeller, providing the strength needed to shear solids.

RENDERING

Rendering applications move products from a meat processing plant to other markets such as pet food processors, cosmetics procedures, and fertilizer producing plants. Positive displacement pumps are required for the loading and unloading of the vehicles used in this transportation process. ARO HD pumps are the ideal solution for rendering applications that contain solids and abrasives such as bone waste, rendered fat, skin, and lard due to their ability to move solid content without damage.

