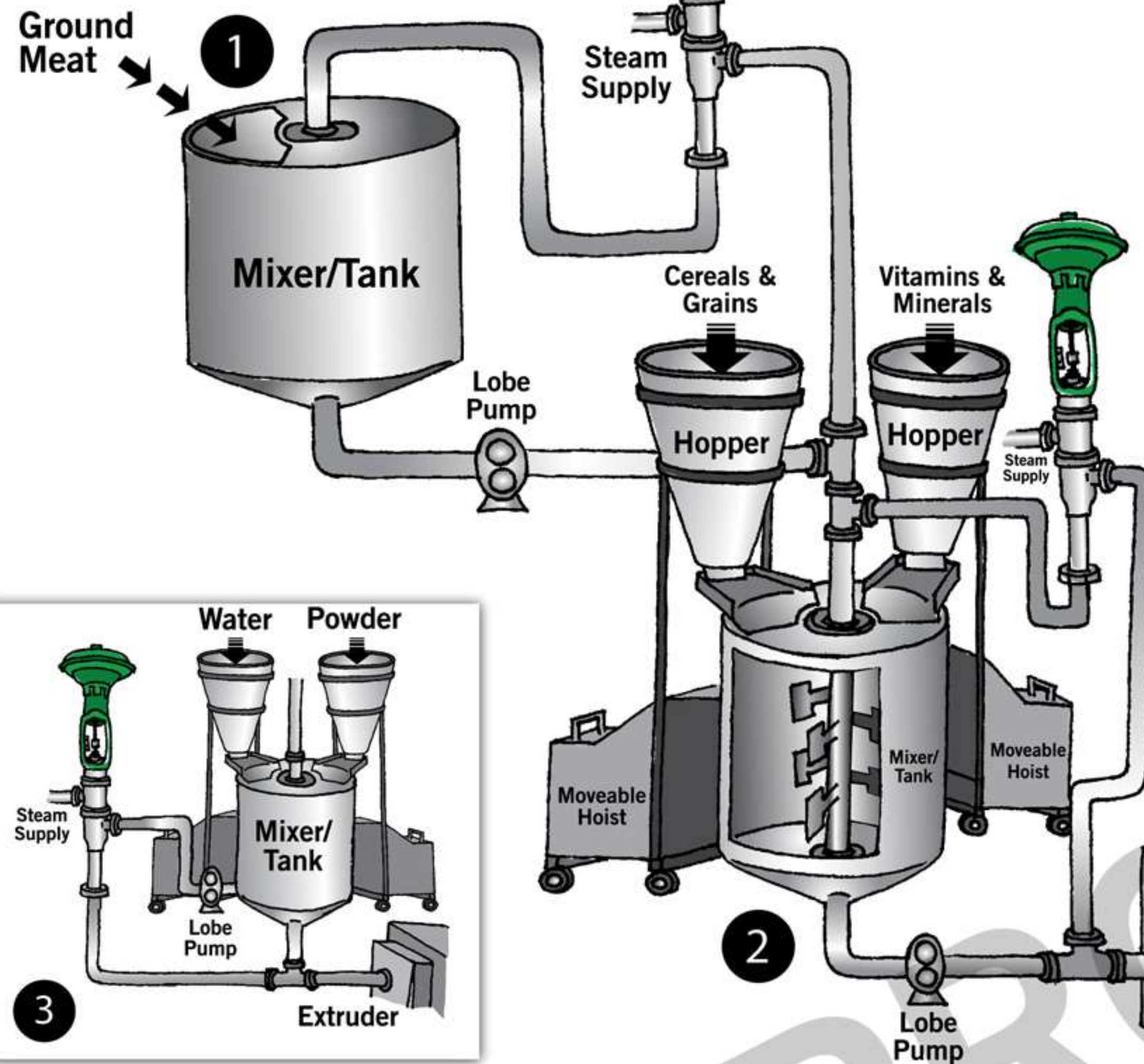
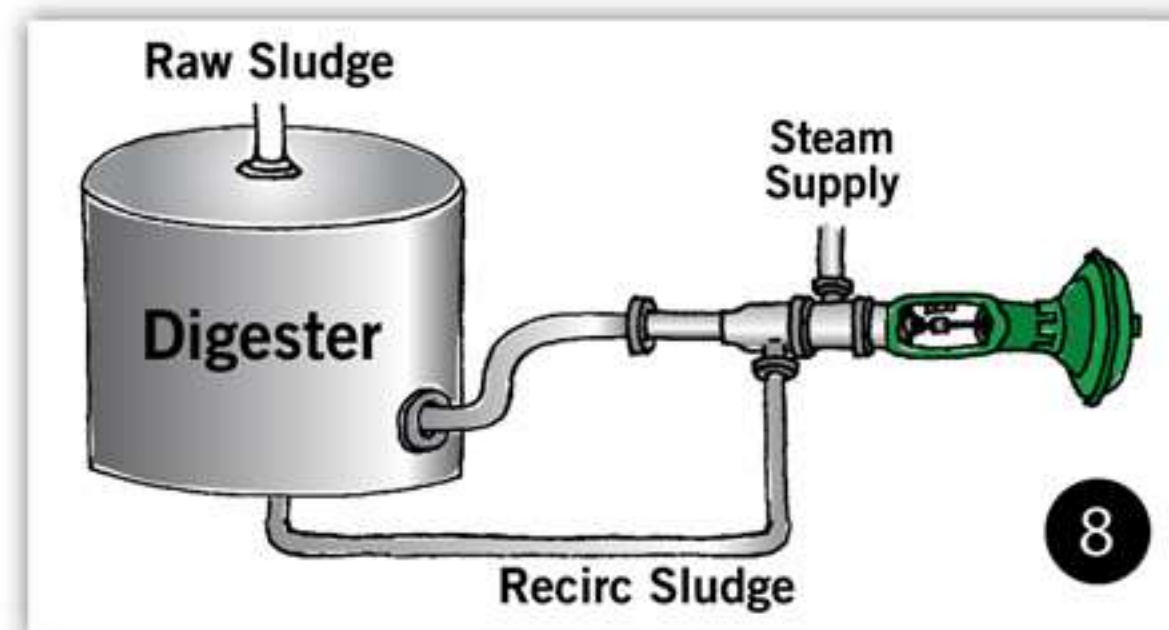
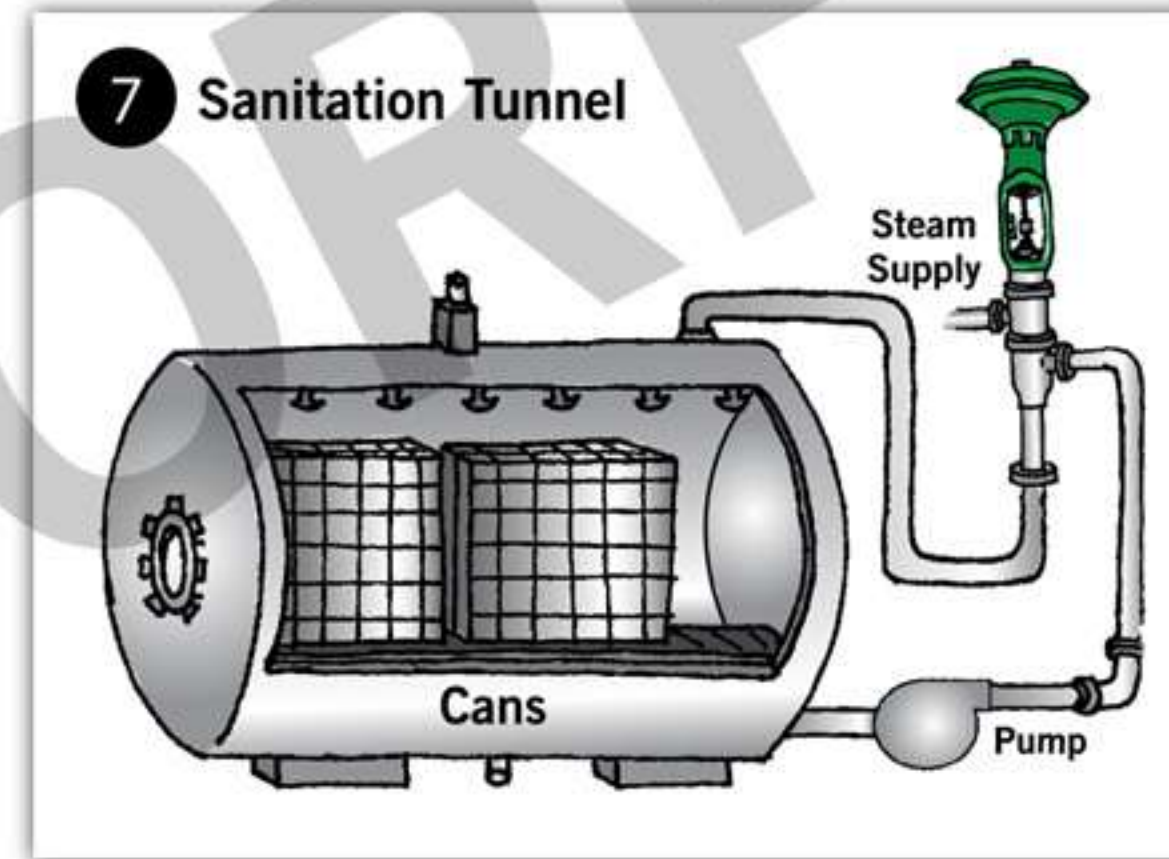
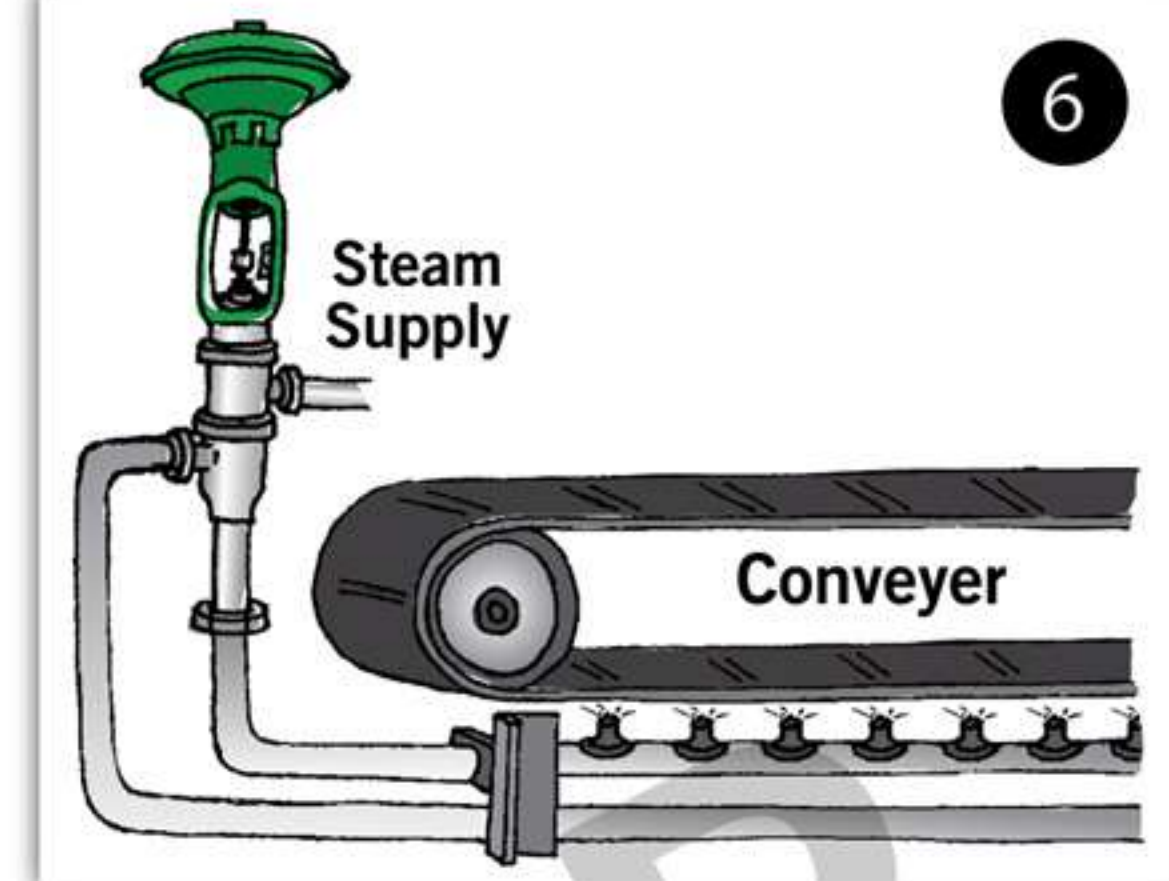


# Direct Steam Injection in PETFOOD PROCESSING APPLICATIONS

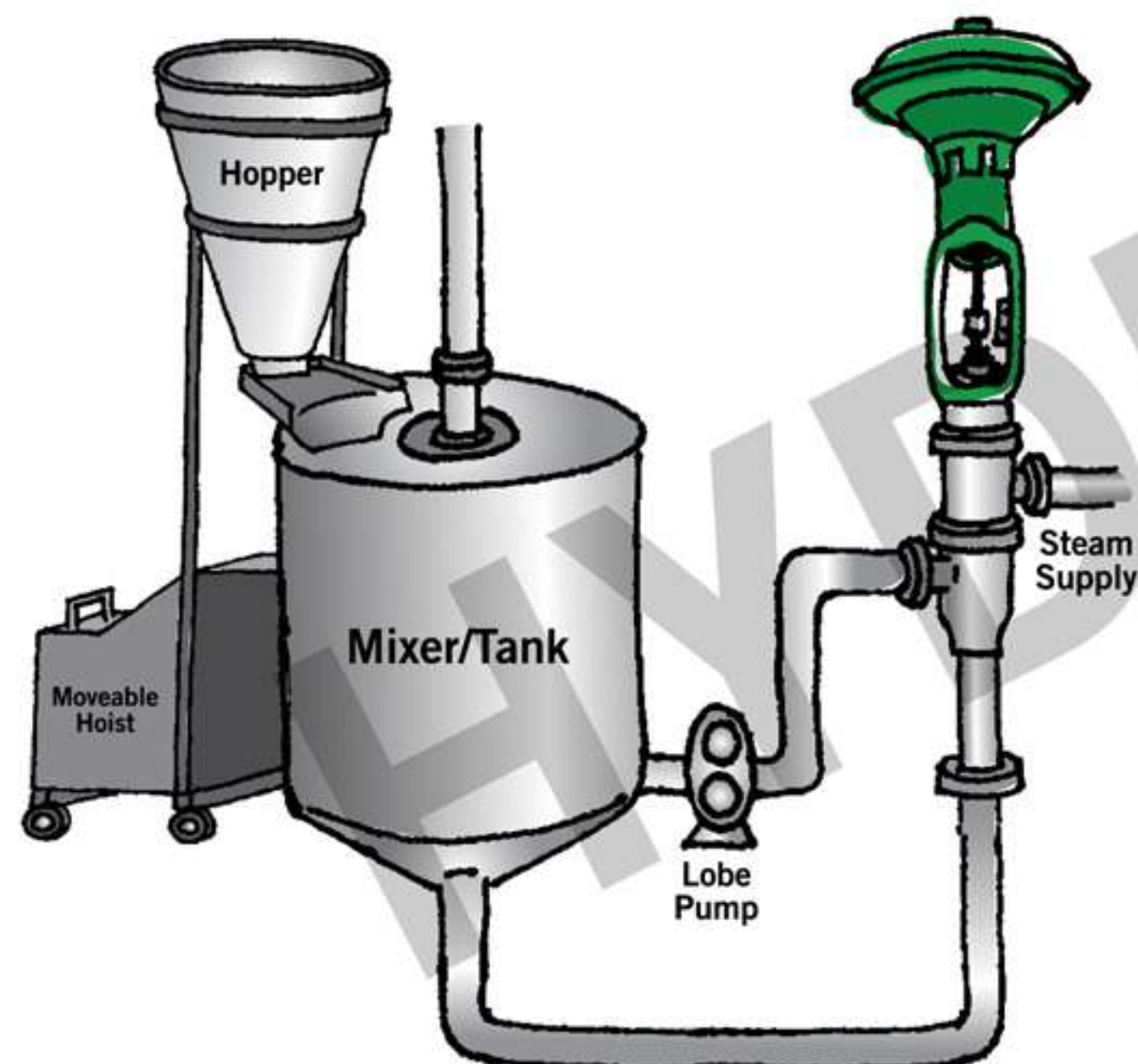


- 1 Ground Meat/By-product Heating and Mixing
- 2 Raw Materials Heating and Mixing (Cereals/Grains, Vitamins/Minerals)
- 3 Dye/Color Injection System
- 4 Extruder
- 5 In-line Flavor Injection System

- 6 Conveyer Cleaning/Spray Bar
- 7 Sanitation/Canning Process
- 8 Digester/Waste Treatment
- 9 Central Hot Water System



→ To Oven/Dryer and Packaging/Canning



## Pre-Process Flavoring Plant:

- 1) LAD (Liquid Animal Digest)  
Slurry is heated to 200°F and held for 90 seconds with Enzymes
- 2) Dryer Slurry  
Heated to 170°F for 90 seconds and then sent to the homogenizer
- 3) FINES Process  
Heated waste particulate which is screened and put back into the mix slurry and heated to 200°F for 90 seconds with Enzymes.

These are all time and temperature applications which eventually turns this into a USDA approved powder used in the coloring and flavoring of dry food at sister plants.

