**Designs for a Variety of Applications**

**Rotor Designs**

- **Fixed Clearance**
  For all horizontal designs and most vertical applications for less viscous liquids, generally less than 50,000 cps.

- **Wiped Film/Hinged Blade**
  For materials with very high fouling tendencies or vaporization ratios.

- **Drying**
  For solids-containing streams from which liquid must be evaporated or distilled.

- **Transported Flow**
  This rotor design provides positive transport for viscous materials which do not flow by gravity—usually those of 50,000 cp or more.

**Rotor Orientation**

- **Vertical**
  Used for most applications, the vertical configuration provides reliable, efficient processing of viscous and fouling fluids. Units are available with either an external or internal bottom bearing.

- **Horizontal**
  These designs are ideal for applications where longer residence times are required for mass transfer and reactions, or where headroom is limited. The tapered configuration allows adjustment of the rotor clearance to control residence time, and assumes heat transfer surface wetting at low throughput rates.

**Vapor Flow**

- **Countercurrent**
  Used for most vertical applications since it maximizes both heat and mass transfer efficiencies and accommodates internal vapor/liquid entrainment separation.

- **Co-Current**
  The best choice for application where there is heavy vapor loading, foaming or flashing.