

AVEKA

**TOLL MANUFACTURING
PARTICLE PROCESSING SERVICES**



PRILLING

Prilling, also known as spray congealing, spray chilling, or melt atomization, is the process of atomizing molten liquids or mixtures and cooling the resultant droplets to form prills or beads as the final product. In general, materials that are solid at room temperature, stable in the molten state with a relatively low viscosity, and have a low melt temperature can be used in this process.

Examples of materials that have been successfully prilled include low molecular weight polymers, phytosterols, waxes, fats, hydrogenated vegetable oils, and hydrated salts such as alum. Materials that are easy to prill generally have a melting points below 200 °C and melt viscosities lower than 200 cP.

Prilling allows for a wide range of possible matrix materials and additives making it ideal for applications in many markets. For example, prilling has found uses in the food industry as a delivery system and for taste masking, in the cosmetic industry for emollients and exfoliates, and in the chemical industry for lubricant and fragrance delivery.

BENEFITS

- ENCAPSULATION OF ADDITIVES
- WIDE RANGE OF PARTICLE SIZES
- UNIQUE ENGINEERED PARTICLES
- FREE FLOWING POWDERS
- UNIFORM SPHERICAL PARTICLES
- COST EFFECTIVE PROCESS
- DUST FREE POWDERS



PRILLING

PRILLING OFFERS UNIQUE BENEFITS

- Process for converting solid materials into free flowing powders
- Creates spherical, uniformly sized particles (10 to 1,000 microns)
- High process efficiencies with throughputs 1-2,000 lbs/hour
- Capability of processing blended materials
- Design of customized engineered particles: encapsulation of additives such as pigments, oils, polymers, flavors and fragrances to create unique beads

PRILLING EQUIPMENT

The AVEKA Group is equipped to design, scale-up, and manufacture prilled products.

- AVEKA Inc provides development of food-grade prills and production of customized industrial prills. Industrial prill sizes can range from 10-200 microns.
- Cresco Food Technologies is equipped to produce food grade prills at production scale. Food grade prills can range from 50-1000 microns Kosher & Organic certification available.



QUALITY PLEDGE

- COMMITMENT TO SAFETY
- PRIORITIZE CUSTOMER SATISFACTION
- CONSISTENT, EXCEPTIONAL PRODUCT
- STRONG BUSINESS PARTNERSHIPS
- IP MODEL THAT WORKS FOR EVERYONE
- USDA, FSIS INSPECTED, CERTIFIED
- KOSHER CERTIFIED
- CERTIFIED ORGANIC
- FSSC 22000
- ISO 9001:2015
- HACCP PROGRAM