Product specific area and weight

Specific area

The specific area is the surface available for coating of a given quantity of product. It depends of the surface of each particle and number of particles in a volume : basically it depends of the average diameter. In other words, the smaller the particles, the more coating liquid they will require by unit of base product.

The relation between radius and specific area is given by a formule

Specific weight

Product specific weight is a key information in calculating the expected output of a process run on a volumetric coating system such as a drum, a screw.

To get the ouptut, multiply the specific weight by the machine volumetric output ; example : 120 g/L x 1000 L/h = 120 000 g/L = 120 kg/h.

Conversely, to size the machine, divide the required gravimetric output by the product specific weight ; example : (200 gk/H) / (0.4 kg/L) = 500 L/h.

Product	Specific weight or density
Aliminium silicate	0,540
Animal feed	0,210
Biscuit broken	0,720
Breakfast cereals	0,250
Cereal grains	0,650
Cocoa powder	0,500
Coffee grains	0,390
Coffee powder	0,180
Croutons	0,112
Fish feed	0,770
Grass seed	0,160
Maïze Flour	0,740
Nuts	0,410
Oat flakes	0,450
Oat flour	0,390
Onions chips	0,240
Wood chips	0,170
Pepper grains	0,270
Petfood cat	0,270
Petfood dog	0,520
Plastic granules	0,500

Potatoe chips	0,110
Poultry feed	0,640
Rice crisps	0,110
Rice grains	0,940
Rubber grains	0,400
Sand dry	1,400
Seasoning	0,330
Snack balls	0,072
Soap flakes	0,470
Spices	0,750
Starch granules	0,750
Starch powder	0,670
Sucrose	0,810
Sultanas dry	0,620
Talc	0,460
Tea fibers	0,510
Tobacco fibers	0,190
Wheat flour	0,640
Wood saw	0,290