

# EXAMPLE OF MATERIALS THAT HAVE BEEN TESTED BY SOLID

Acetylsalicylic acid Aerosil Aluminium oxide Aluminium stearate Baron acid Brewer's yeast Calcium cloride Calcium stearate Calcium nitrate Carbon, active Carrots, dried Caustic soda Cellulose powder

Citric acid

Coffee
Coffee beans
Colour powder
Detergents
Dextrose
Dicalite
Fat substance
powder
Filter material
Fish food
Fish food pellets
Gelatin powder
Graphite powder





PVC powder Resin powder Rice Rubber granules Rye flour Salt Sand Senegal potash Soap flakes Sodium perborate Sodium sulphate Soya flour Spices **Sprinkles** Starch Sugar caster Sugar, granulated Talc Tea **Tensides** Titanium dioxide

Gun powder Gypsum Iron oxide Kieselguhr Lactose Lime Magnesium oxide Maize flour Maize, grains Maize starch Malt Manganese dioxide Melt glue granules Micromaya Milk powder Muesli Mustard seeds Nib sugar Nickel powder Zinc white Nuts

Peas





# What it's Vacuum Conveyor?

Vacuum is used with great advantage in conveying dry powder products through dedicated pipe systems solid vacuum conveying systems are built of high quality material.

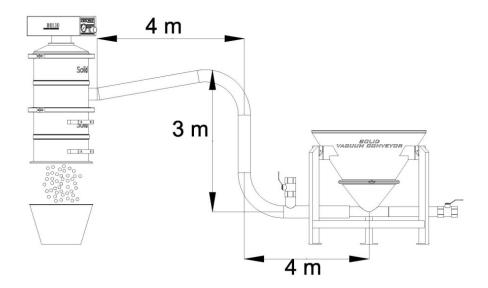
When producing food, pharmaceuticals and chemical products there are demands on the highest possible degree of safety as to hygiene and operation. SOLID vacuum conveyors have been developed as an answer to the severe requirements of operational safety and hygiene in the food, pharmaceutical and chemical industries.



### Main Advantages

- > Automatic filter cleaning
- ➤ Low noise level
- Quick deliver (stock)
- > System
- Minimal maintenance
- Low energy consumption
- Simple to install
- Polished steel
- Compact size
- Dustless conveying
- Made of acid-proof
- > Easy to maintenance
- > Light weight
- > Easy to installation
- Easy to clean





### How to select a standard conveyor

# EXAMPLE ...

The Sugar Company needs to convey 0.8 tons of granulate Sugar per hour up to a mixer where the sugar is mixed with cacao powder. The mixer is located 11 meters from the Feed station

The power requirement (Pr) of the applications is the same as the customer's capacity requirement. Hear the Pr figure, which is the product of capacity and conveying distance, is calculated.







- Material: granulated sugar
- ► Capacity : C= 1.2 ton/hour
- Vertical conveying distance : Lv = 3meters
- Horizontal conveying distance : L = 4 + 4 = 8 meters
- Total conveying distance : L = Lv + L = 3 + 8 = 11 meters
- Characteristics of granulated coffee
  - Bulk density B = 0.8 ton/m3
  - Particle size P = 0.2mm
  - The coffee is a free flowing product

Pr=CXL=0.8X11=8.8

Pr : Power requirement

#### **SOLID**

vacuum conveyor "SOLID 200" will be the best choice when the Pr = 10 ~ 20 in this Example,

#### To check;

- ► Bulk density, B = 0.8 ton/m3 (0.5 < B < 18) OK!
- ► Total conveying distance, L = 11m, (4 < L < 30) OK!</p>
- ▶ Particle size, P = 0.2mm (P < 5 mm) OK!</p>

#### Note;

The above is only a suggestion in order to facilitate the choice of

There are many applications in the market, some with higher and some with lower values than the values mentioned here.

Therefore, please contact our VTEC for more detailed product information.





### "Type SOLID 100 ..."

Supply air pressure : 4 ~ 6 bar, (Max 7 bar)

(58 ~ 87 psi, Max. 101.5 psi)

Air consumption : 300 ~ 420 NI/m

(10.59 ~ 14.83 scfm)

Power Requirement : 3 -6

Noise level : 68 ~ 76 dBA

Steel Material : SUS 304 / SUS 316L

Sealing Materia : Silicone

Filter Material : •TFE coated antistatic needle felt

of polyester / carbon fibers

Washable 2 to 4 times in 40°C

Food quality

Working temp. :  $-20^{\circ}\text{C} \sim +80^{\circ}\text{C}$ 











# Ordering Information

### 1. Vacuum pump

Vacuum Pump with Free flow silencer 100 (Standard)

#### 2. Filtration Area

No mark - Standard (14 dm<sup>2</sup>)

- Extra large (26 dm²)

#### 3. Control Unit

Electric control. Adjustable running time / discharge time. EC Available level

### 4. Bag filter (Blowing)

No mark - Standard (11 dm²) 0.5m - Extra large

### Specification

Model	Max.Converying Capacity (ton)	Capacity ton/h at different conveying distance				Rec. Material Pipe	Rec. Material	Weight (kg)
		5m	10m	20m	30m	dimensio n	Volume	. 3/
SOLID 100	0.9	0.9	0.45	0.22	-	22 / 32	1	15





### "Type SOLID 200 ..."

Supply air pressure : 4 ~ 6 bar, (Max 7 bar)

(58 ~ 87 psi, Max. 101.5 psi)

Air consumption : 600 ~ 780 NI/m

(2118 ~ 27.54 scfm)

**Power Requirement** : 5 - 10

Noise level : 68 ~ 76 dBA

**Steel Material** : SUS 304 / SUS 316L

**Sealing Materia** : Silicone

Filter Material •TFE coated antistatic needle felt

> of polyester / carbon fibers Washable 2 to 4 times in 40°C

Food quality

Working temp.  $-20^{\circ}\text{C} \sim +80^{\circ}\text{C}$ 









### Ordering Information

#### 1. Vacuum pump

Vacuum Pump with Free flow silencer (Standard)

#### 2. Filtration Area

No mark - Standard (14 dm<sup>2</sup>) - Extra large (26 dm²)

#### 3. Control Unit

Electric control. EC - Adjustable running time / discharge time. Available level

#### 4. Bag filter (Blowing)

No mark - Standard  $_{(11 \text{ dm}^2)}$ 0.5m - Extra large

### Specification

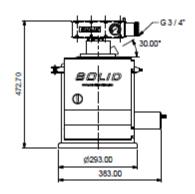
Model	Max.Converying Capacity (ton)		apacity diffe nveying 10m	erent		Rec. Material Pipe dimension	Rec. Material Volume	Weight (kg)
SOLID 200	1.5	1.5	0.8	0.4	0.2	32 / 40 / 50	4	22

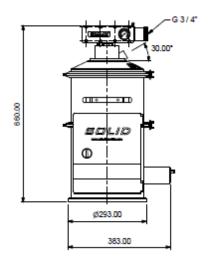


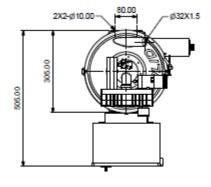


# **Dimension Information**

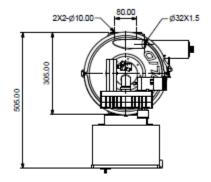
Series SOLID 100... / 100L...







SOLID 100



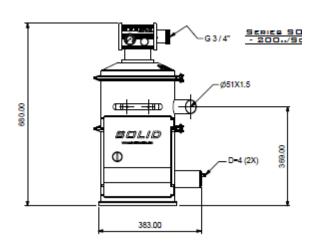
SOLID 100L

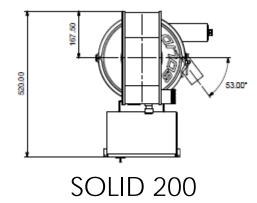


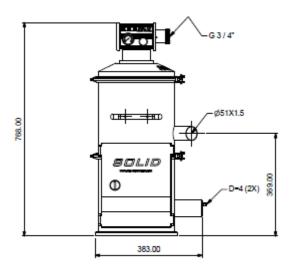


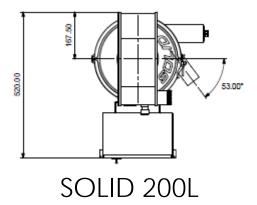
# **Dimension Information**

Series SOLID 200... / 200L...



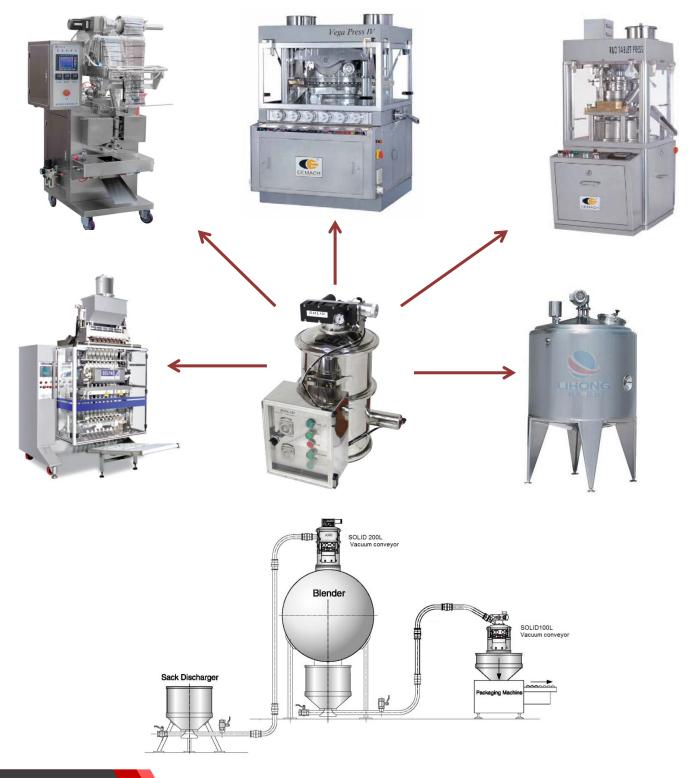








# Application







# Application



Tablet machine



Tank mixer

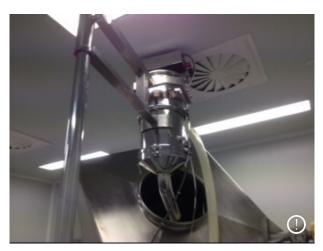






### **VACUUM CONVEYOR**









# Note...



### VACUUM CONVEYOR

Note...

