



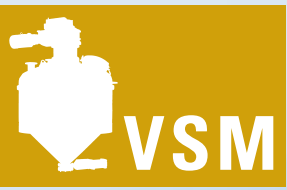
EKATO VSM

**EKATO VSM  
Vertical Mixer  
for Solids**



**EKATO SYSTEMS**

920-01-396/500/05.09



# VSM Vertical Mixer for Solids



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## Design features:

- 1 Positive displacement mixer for free-flowing solids
- 2 Cantilevered shaft with no product contact at bearings
- 3 Close clearances between agitator and vessel wall prevent product build-up there
- 4 Standardized agitator drives ensure reliable operation and low maintenance costs
- 5 Appropriate shaft seal systems for every application. Installing the shaft seal away from the product enables the tried-and-tested EKATO standard agitator seals to be used
- 6 GMP-compliant design of equipment featuring special O-ring geometries, high quality surface finishes and the absence of dead spaces
- 7 CIP concepts thought out to the last detail guarantee validatable cleaning procedures
- 8 The vessel can be heated or cooled by means of an optional external jacket
- 9 Chopper tools prevent lumps forming
- 10 VSM 20000



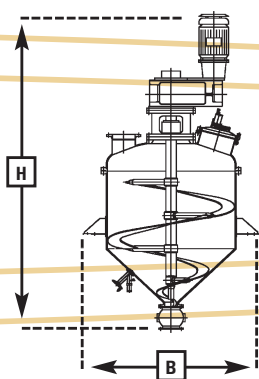
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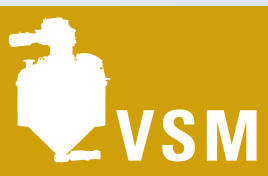
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TYPE	EFF. VOLUME (l)	HEIGHT H (mm)	WIDTH B (mm)	WEIGHT (kg)
VSM 100	106	1900	1000	800
VSM 250	256	2300	1100	1000
VSM 400	432	2500	1300	1500
VSM 630	674	2900	1500	2000
VSM 1000	1107	3200	1700	3000
VSM 1600	1711	3500	2000	3500
VSM 2500	2500	4000	2200	4000
VSM 4000	4088	4400	2600	5000
VSM 5000	5454	4500	2600	5500
VSM 6300	7093	5100	3000	6500
VSM 10000	10 077	6200	3400	10 000
VSM 16000	16 836	6900	3900	13 000
VSM 20000	20 216	7400	4600	16 000
VSM 25000	26 091	8000	5000	18 000
VSM 32000	33 007	8500	5400	20 000

All dimensions approximate



### Function:

Intensive mixing action

The product is displaced upward near to the wall and flows downward again at the center

Gentle but thorough mixing of free-flowing bulk materials, large volumes are blended in a short time

High degree of homogeneity achieved

Almost complete discharge of contents, only minimum amounts of product left behind

### Application:

Mixing of free-flowing solids, such as fine chemicals, pigments, fertilizers and metal powders

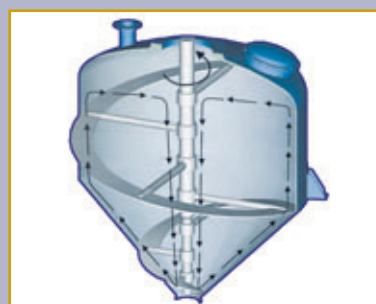
Mixing of crystalline powders sensitive to shear

Blending of batches

Mixing liquids into solids

The equipment design (agitated vessel) lends itself well to the typical layout concept in chemical plants

At low circumferential speeds also suitable for hazardous zones





EKATO SOLIDMIX Research and Development facility

- Application-oriented testing
- Development of special agitator impellers
- Engineering studies

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