# **VERTICAL SILOS**

STORAGE AND DOSING OF POWDERED MATERIAL

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### STORAGE AND DOSING **POWDERED MATERIAL**

# **VERTICAL SILOS**

Vertical silos are the basic element for storing and dosing granules and powders such as cement, lime, fillers, fly ash, bentonite, sand and similar products. In addition to the possibility of choosing between **monolithic**, **telescopic and modular panel silos**, a wide range of accessories allows the installer or user complete freedom of configuration according to the material stored and the specific project requirements.

#### **VERTICAL SILOS**





### **QUALITY GUARANTEED SINCE 1975**

Thanks to the experience gained over the years, the use of selected materials, the care taken in construction and an excellent paint treatment, these silos guarantee **excellent preservation** over the years, both in their external appearance and in their durability from the most extreme climatic conditions. All standard models are designed with 3D software in compliance with the **NTC 2018** and **EUROCODE 1/3/8** standards, while the structural production process is guaranteed by UNI EN ISO 3834-2 and UNI EN ISO 1090-1 certification on welds.





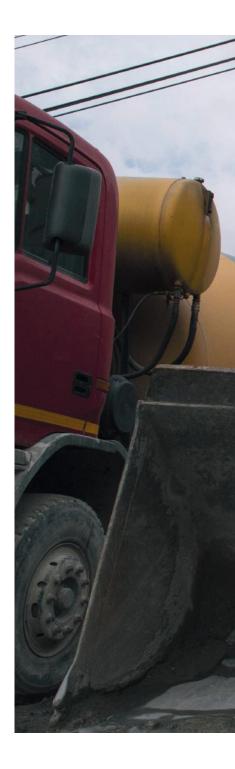


### **ACCESSORIES FOR ANY NECESSITY**

In addition to basic elements, such as the loading pipe, vent pipe and manhole on the roof, **a high degree of customisation** is possible thanks to a wide range of accessories, such as: quick couplings for pneumatic loading, containment valves, level indicators, vibrators and fluidisation systems (to facilitate the descent of materials), unloading augers, telescopic unloaders, ladders and guardrails, dust suppression filters, complete control panels or simple junction boxes (for operating the silo from existing control panels).







#### **VERTICAL SILOS**



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### **ELECTRONIC WEIGHING SYSTEMS**

The **SILMATIC DE** vertical silos with electronic dosing are equipped with load cell weighing systems and electronic terminals that allow (a) the unloading of **weighed quantities** of material, (b) the management of automatic unloading programs, (c) the automatic management of vibrators, (d) the control of purchased quantities as well as (e) the control of inventories.



# **VERTICAL SILOS FOR POWDERED MATERIALS**



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# **MAIN FEATURES**

- Storage capacity: 9 103 m<sup>3</sup>
- *Material loading:* pneumatic filling by tanker truck
- *Material dosing:* timed volumetric / electronic weighing system
- Material lowering: electromechanical vibrators/fluidification system
- *Material extraction:* discharge screw with a capacity of 17, 25, 40 or 60 m<sup>3</sup>/h
- Safety: pressure control valve / valve with pressure switch on loading pipe
- Structural design: NTC 2018 and EUROCODE 1/3/8 standards



### **MONOLITHIC STRUCTURE**

In addition to being extremely easy to assemble on site, the monolithic construction that characterises this type of silo guarantees **maximum protection against humidity** and infiltration. Models with a **diameter of 2450 mm** are easily transportable on normal tractor-trailers or semi-trailers and are suitable for small and medium-sized storage; models with a **diameter of 3000 mm**, on the other hand, can be transported as 'exceptional loads without an escort' and are suitable for medium-high storage.







#### **MONOLITHIC SILOS**



#### **MONOLITHIC SILOS**





# **AVAILABLE MODELS**

\* Silos available in SILMATIC DE electronic dosing version

MODELS	VOLUME M <sup>3</sup>	DIMENSIONS FO DIAMETER (mm)	DR TRANSPORT LENGTH (mm)	MODELS	VOLUME M <sup>3</sup>	DIMENSIONS FO DIAMETER (mm)	DR TRANSPORT LENGTH (mm)
SM 24/09*	9	2450	3100	SM 29/15*	15	2950	3500
SM 24/16*	16	2450	4600	SM 29/24*	24	2950	5000
SM 24/23*	23	2450	6100	SM 29/34*	34	2950	6500
SM 24/29*	29	2450	7600	SM 29/44*	44	2950	8100
SM 24/36*	36	2450	9100	SM 29/54*	54	2950	9600
SM 24/43*	43	2450	10600	SM 29/64*	64	2950	11200
SM 24/49*	49	2450	12300	SM 29/74*	74	2950	12600
SM 24/52	52	2450	13000	SM 29/84	84	2950	14200
SM 24/61	61	2450	14600	SM 29/94	94	2950	15700
				SM 29/103	103	2950	17200

	FOR TRANSPORT LENGTH (mm)	DIMENSIONS DIAMETER (mm)	OLUME M <sup>3</sup>	MODELS	
•	3100	2200	7	SMC 22/07*	
	4500	2200	13	SMC 22/13*	
Tra	6000	2200	19	SMC 22/19*	
••••	7500	2200	24	SMC 22/24*	
	9000	2200	30	SMC 22/30*	
	10500	2200	35	SMC 22/35*	
-	12000	2200	41	SMC 22/41*	

Transport in container

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# **TELESCOPIC** VERTICAL SILOS FOR POWDERED MATERIALS

# **MAIN FEATURES**

- Storage capacity: 23 120 m<sup>3</sup>
- *Material loading:* pneumatic filling by tanker truck
- *Material dosaging:* timed volumetric / electronic weighing system
- *Material lowering:* electromechanical vibrators / fluidification system
- *Material extraction:* discharge screw with a capacity of 17, 25, 40 or 60 m³/h
- Safety: pressure control valve / valve with pressure switch on loading pipe
- Transport: silo divided into 2 telescopic parts to reduce overall dimensions
- Structural design: NTC 2018 and EUROCODE 1/3/8 standards



### **TELESCOPIC STRUCTURE**

Telescopic vertical silos are **divided into two parts** that **fit inside each** other during transport, reducing space requirements and shipping costs considerably. The models with a diameter of 2450 mm are easily transportable on normal tractor-trailers or lorries and are suitable for small and medium storage. Models with a diameter of 3000 mm can be transported as 'exceptional loads without an escort' and are suitable for medium to high storage.



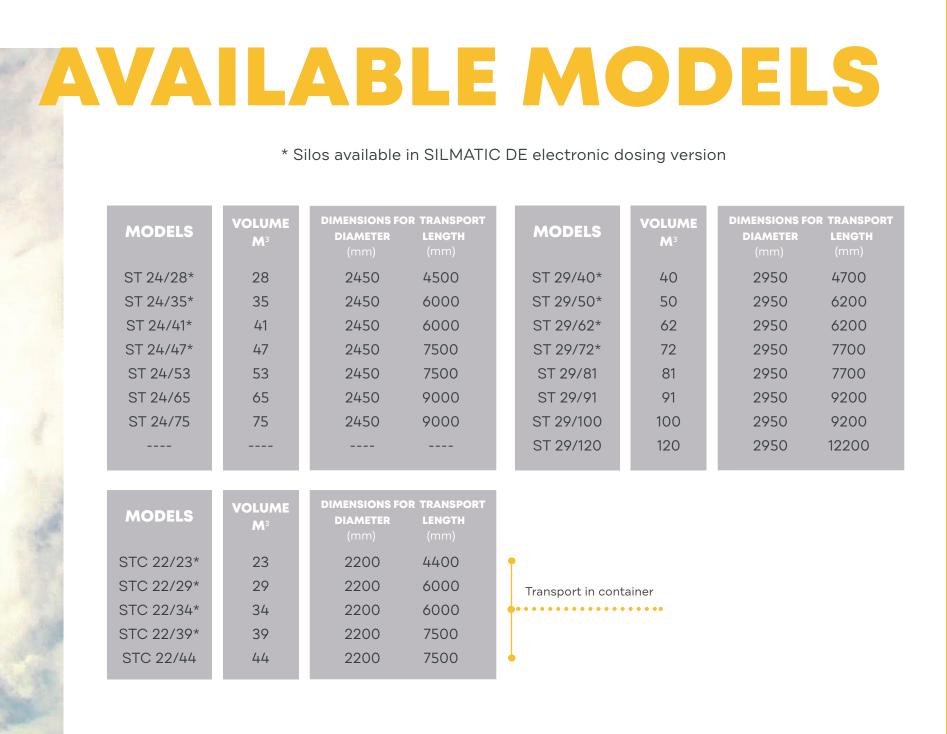


#### **TELESCOPIC SILOS**



#### **TELESCOPIC SILOS**









# **MAIN FEATURES**

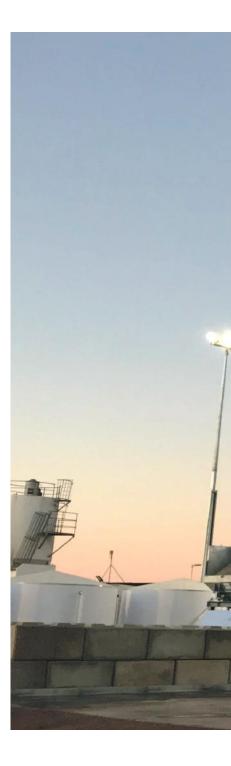
- Storage capacity: 50 250 m<sup>3</sup>
- *Material loading:* pneumatic filling by tanker truck
- Material dosing: timed volumetric
- Material lowering: electromechanical vibrators / fluidisation plants
- *Material extraction:* discharge screw with a capacity of 17, 25, 40 or 60 m<sup>3</sup>/h
- Safety: pressure control valve / valve with pressure switch on loading pipe
- *Transport:* maximum space optimisation
- Structural design: NTC 2018 and EUROCODE 1/3/8 standards



### **PANELLED STRUCTURE**

All elements that make up the vertical panel silos (discharge cone, roof and cylindrical virole) are designed and manufactured to be **bolted and assembled directly on site**. Special seals and the tarring of the joints during assembly ensure insulation from the outside. The structure in flanged elements, as well as allowing the largest storage capacities available, is the best solution for **optimising space and costs during transport**.





#### **PANELLED SILOS**



#### **PANELLED SILOS**



# **AVAILABLE MODELS**

MODELS	VOLUME M <sup>3</sup>	ASSEMBLED SILO DIMENSIONS DIAMETER HEIGHT (mm) (mm)
SP 35/50	50	3500 8440
SP 35/70	70	3500 10700
SP 35/80	80	3500 12300
SP 35/90	90	3500 13000
SP 35/110	110	3500 15200
SP 35/125	125	3500 16800
SP 35/135	135	3500 17500
MODELS	VOLUME M <sup>3</sup>	ASSEMBLED SILO DIMENSIONS DIAMETER HEIGHT (mm) (mm)
SP 50/140	140	5000 11100
SP 50/170	170	5000 12600
SP 50/200	200	5000 14100
SP 50/220	220	5000 15600
SP 50/250	250	5000 17100





## **CUSTOMIZATIONS**

Thanks to a certified design team, and a fabrication department that fully builds our products, we can offer highly customizable silos based on the client's needs. Silos with a polygonal cross-section, silos with two discharge outlets and with an internal partition, silos with a structural skirt and silos with outlets of all kinds.

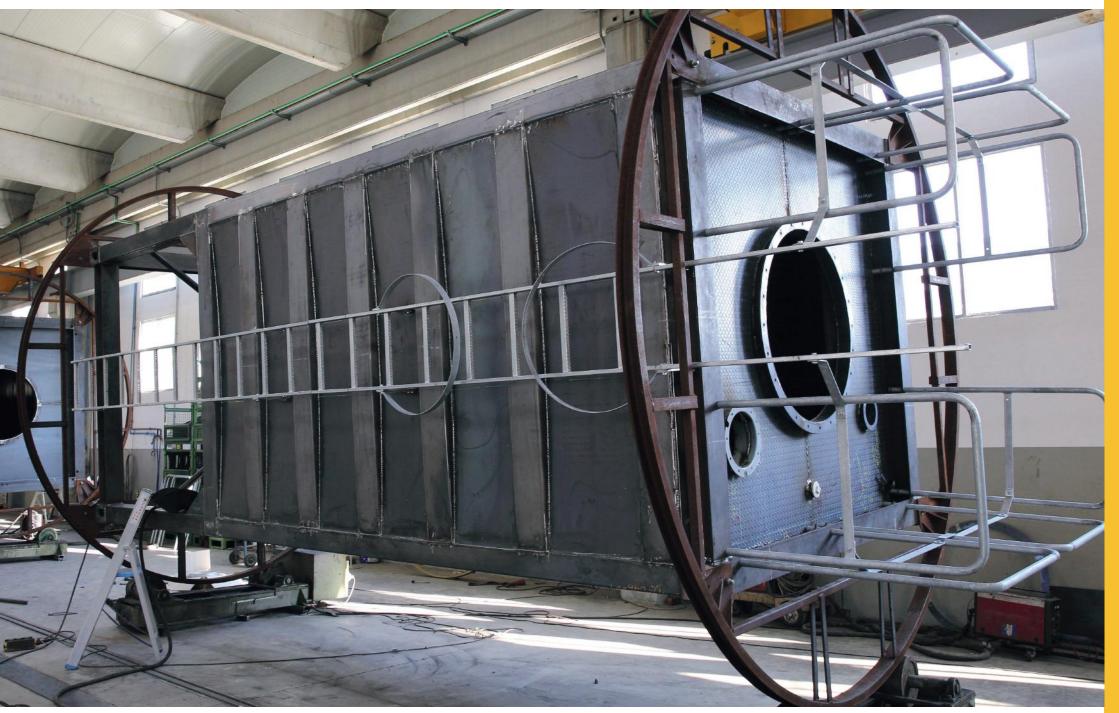








#### **VERTICAL SILOS**



#### **OTHER PRODUCTS**



#### **STORAGE HORIZONTAL SILOS**

Horizontal and hook lift silos for storing and dosing powders and granules, as well as loading concrete mixer trucks.



#### **BAG BREAKING EQUIPMENT**

Systems for emptying bags of powder material or granules and bag-breaking hoppers for feeding silos and batching plants.



#### **DRY MIXING PLANTS**

Plants for the production, storage and distribution of pre-mixed dry mortar.





#### **DISSOLUTION PLANTS**

Plants for the preparation of hydrated lime suspensions (milk of lime).



#### **CONCTRETE PLANTS**

Mobile or static batching plants for the production of concrete and concrete mixes.



#### **SOIL & WASTE TREATMENT**

Plants for the treatment and stabilisation of soil and sludge from various industrial sectors.







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