



Cantillana Silomix®

Silo user's guide



SILOMIX
cantillana

Z 118-01H

ALTRAD



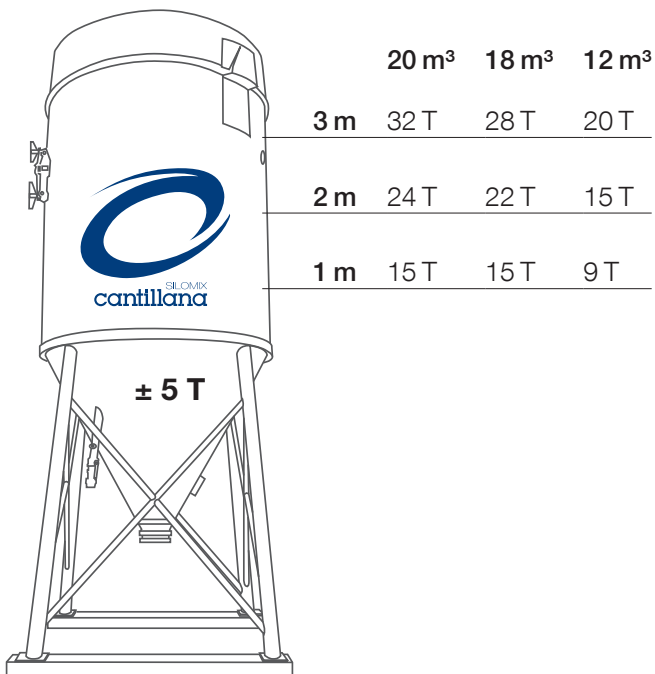
Table of contents

1. Silo description	4
2. Silo refill	4
3. Silo installation	5
3.1 General info	5
3.2 Step-by-step plan silo installation	6
4. Accessories for Silomix®	7
5. Silo maintenance	8
5.1 Mixer D20-D40	8
5.2 Mixer D20-D50	9
6. Silo dysfunctions checklist	10

1. Silo description

2. Silo refill

Silo capacity



Cantillana installs the silo directly on site. To check how much mortar is left in the silo, tap the 4 sides of the silo with a rubber mallet.

When the mortar has sunk into the hopper all around, you have approximately 5 tonnes of mortar left.

The silo can then be refilled to ± 26 tonnes. If you place your order before 12 noon, the silo will be refilled the next working day. Refilling is done by pulsing the product into the silo. Towards the end of the construction work, we can, on request, provide a one-off closing load of around 15 tonnes. Maximum hose length for silo filling is 15 metres.

Basic characteristics of the silo

	20 m ³	18 m ³	12 m ³
Total weight	35 T	32 T	22 T
Height	6,59 m	6,43 m	6,55 m
Width	2,5 x 2,5 m	2,5 x 2,5 m	2,4 x 2,4 m

Base platform: 3 x 3 m concrete platform

Height of truck: 4,10 m

Support dimensions: 2.5 x 2.5 m

Contact Silomix® service:

Belgium

Customer service: +32 (0)56 23 48 72 /
siloservice@cantillana.com

Technical service: +32 (0)56 23 48 78

France

Customer service: +33 (0)3 20 17 73 80 /
sales.france@cantillana.com

Technical service: +33 (0)3 20 17 73 80

Netherlands

Customer service: +31 (0)183 44 78 00 /
sales.netherlands@cantillana.com

Technical service: +31 (0)183 44 78 03

3. Silo installation

3.1 General info

Important measurements

- The required space for the silo drop-off truck to manoeuvre is 15 m x 6 m with a height of 9 m.
- The bulk truck in charge of refilling the silo should be at maximum 10 m away from the silo.
- Consult us for longer distances.
- The silo should be placed on a stable, flat and free area of at least 3 x 3 m with a minimum height of 9 m.
- Check the amount of mortar in the silo by tapping 4 different sides with a rubber hammer hitting (caution: all damage is for the customer's account).

Length of silo placing truck approx. 15 m
Width of silo placing truck approx. 2,65 m
Height of silo placing truck approx. 4,10 m

Connection supplies

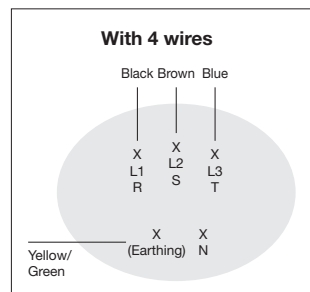
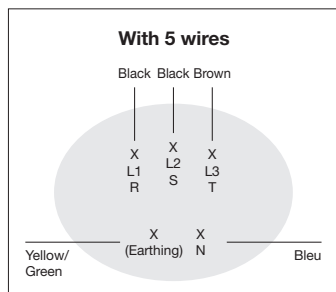
Water

- Mount the water connections via a GEKA coupling and tighten firmly with the latch rings provided.
- Then open the water connection in such a way that on the pressure gauge displays a minimum water pressure of 3 bar.
- The maximum hose length with ¾" application is 50 m.

Electricity connection

Single-phase 220V

- Connect the small cable to the water system (black block).
- Provide a power generator 9 kVA and an electric cable 3G2.5 mm² with maximum length of 30 m.



Three-phase 220V / 380V

- Connect the small cable to the water system (black block).
- Provide a 16A fuse 20A and a power generator of minimum 15 kVA and an electric cable of 5G2.5 mm² with a maximum length of 10 m.
- Connect the coupling plug to the extension cable as shown on the drawings opposite.
- Determine the voltage's choice (see step 4 "Step-by-step silo installation plan"), i.e. ask what voltage is present on site and switch on the 16-pin plug to the correct voltage in the cabinet.
- Then determine the correct direction of rotation with the selector switch 1 or 2 (see steps 5 and 6 "Step-by-step plan for silo installation").

High-efficiency mixer

- Monophase D20
- Three-phase D40
- Three-phase D50

Important information

Electrical box and water fixture should at all times be stored in an enclosed space. During the winter period, the water fixture should be stored in a frost-free place.

Timer relay

The Electrical box has a timer. This allows the the running time of the mixer.

Interruption of work

- Interruptions to work should not be too long! During interruptions, the curing time of the used mortar must be taken into account.
- Hardened mortar in the mixing tube causes starting difficulties and can cause damage to motor and screws.
- The margin between the end of the mixing screw and the head bearing must not exceed 2 mm. A correct margin prevents the mixer from seizing, which could cause thermal failure of the electric motor. Using 2 spanners no. 17, the head bearing can be loosened to move it to a margin of max. 2 mm.

3.2 Step-by-step plan silo installation



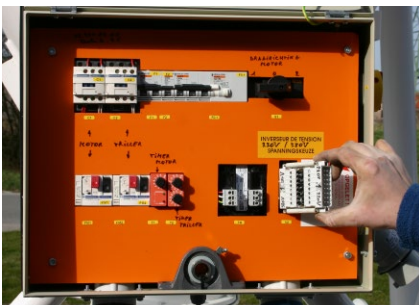
1 When delivering the silo, provide a passage for the truck of 15 x 6 m and clear height of 9 m.



2 When installing the silo, provide a stable foundation measuring 3 x 3 m and a free height of 9 m.



3 Connect the water fixture with the supplied GEKA coupling.



4 Adjusting the voltage switch to the supplied voltage. (3x 380V - 3x 220V)



5 Start up the mixing screw and check the direction of rotation. (see arrow on the mixing tube)



6 If necessary, change the direction of rotation change. (see button 1-0-2 in the switch box)



7 Only use a rubber hammer when sounding the silo.



8 Provide an adequate access to the silo for interventions (filling, repairs, etc.).

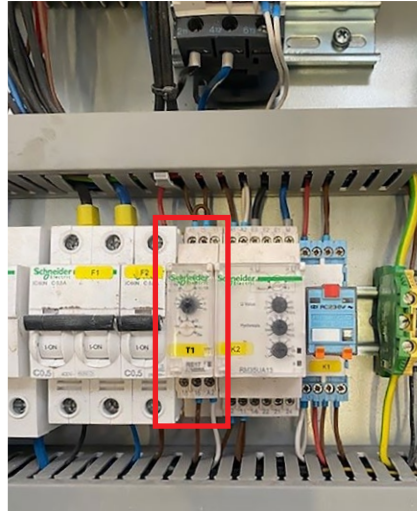


4. Accessoires for Silomix®



SMP (Silo Mixing Pump)

SMP is a concrete or mortar pump, fixed under the silo and connected with a hose of up to 100 m. The SMP pump can be used to fill various concrete cast, precast concrete or concrete blocks over long distances with higher efficiency and less effort. The SMP is also used for sites with liquid screeds to facilitate the execution of works. The flow rate of the pump has high productivity with an average 130 L/min for wet mortar or concrete.



Timer electric control box

The timer, located in the silos' switch box, automatically pauses the silo mixer after a preset time. This allows constant mixture preparations to be prepared for filling, e.g. wheelbarrows and masonry tubs.



Product detection sensor

The detection sensor detects the presence of mortar or concrete in the tub or in the spraying equipment. This allows the supply of the spraying equipment to be automatically be started or stopped.



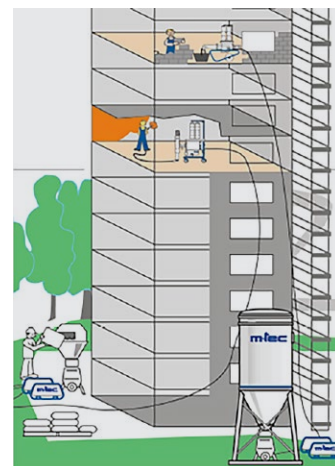
Pump for liquid admixtures

The pump for liquid admixtures offers the possibility to add an admixture be added to dry mortar or concrete before it is mixed. This allows for example, Air'Plus or Betolatex can be added in a simple and controlled way be dosed.



Pneumatic Transport System

As an alternative to the ordinary mixer, Cantillana also rents out the PTS system from now on. This system allows the dry product to be transported over a longer distance (50 m pump) to a mobile mixer, e.g. for work at the top of an apartment building. The system comes with supply block, compressor and mobile mixer D30.



Despite the wide range of services Cantillana offers, existing equipment may not be sufficient. In such cases, Cantillana appeals to its suppliers in order to deliver the necessary equipment to the site and meet the predetermined requirements of the project.

5. Silo maintenance

5.1 Mixer D20-D40

Daily

Opening and cleaning wet room



1 Close gate.



2 Empty the mixer.



3 Disconnect the power cable.



4 Remove the end piece from the mixer tube.



5 Pull out mixing screw completely and clean it.



6 Open and clean the mixing tube (do not wet the dry chamber). Replace the mixing tube and the mixing screw.



7 Connect the transport and the mixing screw to each other. (Keep coupling clean - never lubricate)



8 Replace the end piece of the mixing tube. (Play between bearing and mixing screw should not exceed 2 mm)



9 Store the water fitting for protection against frost and theft. (Caution: if this not observed, the repair will be charged).



10 Store the switch box to protect it against theft.

Weekly

Opening and cleaning dry room



1 Open the closing piece with the motor.



2 Clean the conveyor screw and the dry chamber without using water.



3 Replace the transport screw in the cleaned motor coupling and close the dry chamber.

Note For safety reasons, always disconnect the power cable when working on the mixer. Please follow the instructions and make sure the mixer is ready for collection. If not, you will be charged a minimum of 250 euros.

5.2 Mixer D20-D50

Daily

Opening and cleaning wet room



1 Close gate.



2 Empty the mixer.



3 Disconnect the power cable.



4 Pull out the two pins.



5 Remove the mixing tube.



6 Remove and clean the mixing screw.



7 Clean the mixing tube with water and check the condition of deterioration of the components.



8 Replace the mixing screw.



9 Replace the mixing tube .



10 Replace the two pins.



11 Store the water fixture for protection against frost and theft.*

*Note: If this is not respected, the repair will be charged.

Weekly

Opening and cleaning dry room



1 Open the closing piece with the motor.



2 Clean the conveyor screw and the dry chamber without using water.



3 Replace the transport screw in the cleaned motor coupling and close the dry chamber.

Note For safety reasons, always disconnect the power cable when working on the mixer. Please follow the instructions and make sure the mixer is ready for collection. If not, you will be charged a minimum of 250 euros.

6. Silo dysfunctions checklist

Defects	Causes	To be checked
Engine does not work	No voltage	Check the fuses
	Rotation direction selector is at 0 position	Move button to position 1 or 2
	Power supply cable is defective	Check the power cable for breaks
	Coil magnetic valve is defective	Replace the armature or coil 220V
	Selector voltage is incorrect	Reverse the 16-pole plug in the box
Mixer works for some time and crashes	Mixing and conveying screw are not properly connected	Check and clean the mixing and conveying screw
		Clean the motor coupling
		Check that the ring is fully connected with the mixing screw
Mortar is not correctly mixed	Mixing and/or conveying screw are deteriorated	Contact the technical service to replace the screws
	Water filter is dirty	Remove and clean the plastic filter holder of the water pressure regulator
Mortar remains dry	Water pressure is too low	Check the water flow. The water hose has to be at least Ø16 mm or ¾". A pressure of 3 bar is required on the pressure gauge
	Mixing and/or conveying screw are deteriorated	Contact the technical service to replace the screws
	Water filter is dirty	Clean or replace filter, always use clean water to ensure proper operation
	Magnetic valve does not make contact	Secure plug with tape/binding wire or contact technical service
Water continues to flow when stopped	Solenoid valve does not close properly due to fouling	Possibly open up the underside and remove the 4 screws, then clean the membrane with a cloth and close again
		Contact the technical service to replace the water fixture

Notes

- Always use clean water!
- For fuses: always provide a 20 ampere.
- For single-phase: provide a power generator 9 kVA and electrical cable 3G2.5 mm² with maximum length of 30 m.
- For three-phase: provide a 3x220/380 power generator 15 kVA and electric cable 5G2.5 mm² with maximum length of 50 m. Do not use coiling system.
- Water hose of ¾" to be used to obtain sufficient water flow during mixing.



SILOMIX
cantilana


cantilana

Cantilana NV/SA

Pontstraat 84
9831 Deurle
BELGIUM
Tel. +32 (0)9 280 77 80
Fax +32 (0)9 280 77 89

Cantilana BV

Munnikenlandse Maaskade 2a
5307 TE Poederoyen
THE NETHERLANDS
Tel. +31 (0)183 44 78 00
Fax +31 (0)183 44 78 09

Cantilana SAS

97, Route d'Argenteuil
95240 Cormeilles-en-Parisis
FRANCE
Tel. +33 (0)1 39 78 31 55
Fax +33 (0)1 39 31 44 94

info@cantilana.com

Follow us

-  [CantilanaHQ](#)
-  [Cantilana](#)
-  [Cantillanagroup](#)
-  [Cantillanagroup](#)

Reliable building solutions | www.cantilana.com