

Streetscape® Silo Mixing Station

The SMET Streetscape® Silo Mixing Station is capable of storing 22 m³ of dry pre-mix material on site. The continuous mixer is fitted with highly modern PU and steel components which guarantee an economically effective and efficient operation. It is designed to process dry mortar products with a granularity of up to 6mm. The use of PU components makes cleaning easier and means less caking than with similar metal components. The result: quick, residue-free cleaning.

- Standard conveying volume approx. 100 l/min
- Max. Filled Gross Weight 42 Tonnes
- Drive Motor: 5.5 kW, 400 V, 50 Hz
- Designed for use with fine concretes
- 22 m³ capacity

Placing The Silo On Site

When placing the SMET silo, the following must be taken into consideration:

- Silo will only be placed on sites with suitable foundations and at locations that meet the working space criteria.
- Design and construction of any foundations is the responsibility of the customer.
- A flat and level top surface of any foundation must be provided to ensure even bearing of silo feet.
- No blocking or raising of the silo must be carried out unless agreed in writing with SMET.
- Silos must not be placed in areas accessible to the general public and delivery can only be made to areas controlled by the customer.
- Leave the silo placement area free of overhead wires or other impediments to the loading/unloading of the silo. A minimum height of 7.5 metres is required. Where possible, space should be left beside the silo for a second silo (to facilitate a changeover).
- The customer is responsible for safety and access for delivery/collection of the silo and refill.

Electrical Requirements

The preferred electrical supply is 3 phase mains supply (400-415V neutral and earth). The total maximum load is 5kW. A 16A 5 pin industrial socket must be provided from a 16A 3 phase motor rated RCD type C or D. The electrical supply to the silo must be backed up by a 30mA RCD which is exclusively for silo use. The socket must be located within 5m of the silo.



Alternative Power Requirements

In the event of no power being available on site, a 3 phase generator with a minimum capacity of 40kVA (fitted with a 16A 5 pin industrial socket plus 30mA RCD type C or D) is also sufficient to run the silo mixing station.

Important Note

All silo installations must be installed to current IEE Regulation Requirements for Electrical Installations (BS 7671:2001) with attention being paid to the special location section relating to construction sites - section 604.

Water Requirements

UK

In the UK a standard 3/4" tap located within 5 metres of the silo is required. Where a water storage tank is required, this should be mounted not less than 2 metres above ground level within 5 metres of the silo. Each mixer must be piped directly from the tank, using an outlet not less than 3/4" internal bore fitted with a gate valve. Contact the SMET Technical team for further advice.

Ireland

In Ireland a water tank with a minimum capacity of 500 litres is required; this should be mounted not less than 2 metres above ground level and within 5 metres of the silo. A standard 3/4" tap should also be located within 5 metres of the silo. Each mixer must be piped directly from the tank, using an outlet not less than 3/4" internal bore fitted with a gate valve. Contact the SMET Technical team for further advice.

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Site Survey

All sites should be subject to a survey by SMET Technical personnel prior to silo delivery. SMET regrets that silos cannot be provided to the customers unable to comply with the site requirements stipulated.

Start-Up Procedure

On delivery and every morning, the following start-up procedure should be followed:

1. Place mortar tub under discharge chute.
2. Connect power leads.
3. Connect water pipes.
4. Run mixer momentarily and always check motor direction.
5. Run mixer. NB. Always run mixer before opening butterfly valve.
6. Open butterfly valve on the silo.
7. Adjust water as necessary using the water flow control valve.

Timed Run

To run using the timer, set the desired running time and press the green button on the panel. The mixer will stop automatically when the set time has elapsed.

Daily Cleaning

At the end of each day and before an empty silo is collected, the following shut down and cleaning procedure must be followed:

1. Close butterfly valve on the silo.
2. Run out all the remaining material in the mixer.
3. After approximately five minutes, clean water should be running out of the mixer. This means that the mixer is partially clean.
4. Remove mixer from mixing chamber and clean both mixer and chamber thoroughly.
5. Re-assemble.

Hot Weather

In hot weather, if the mixer is left unused for more than approx thirty minutes, the mix in the wet compartment will set. This will overload the mixer motor the next time it is run. To avoid this, close the butterfly valve on the silo and run all the material out of the mixer each time the mixer is run.

Winter Weather

In cold weather, freezing water will seriously damage the control panel and the water fittings. Make sure, in instances of long interruptions and after cleaning of the mixer, the water fittings of the control panel are always completely drained.

Procedure:

1. Turn off the water supply.
2. Uncouple the water supply pipe.
3. Uncouple the pipe off the mixing tube.
4. Open the water drain taps.
5. Flick switch to brush position.
6. Let the water drain off completely.

Care Of Equipment

Any damage to instrumentation or switches on the mixer or control panel could interfere with the normal operation of the system. Therefore it is important that the Silo Mixing Station is treated with care at all times and particularly when site vehicles are used to load and transport the mortar.

Please Note The Following

- Any damage or alterations made to the silo or associated equipment must be reported to SMET immediately.
- The hirer of the silo will be held liable for all damage which results from the mis-use of the silo.
- SMET will provide training sessions for customers and staff using silos. Customers are responsible for ensuring that only trained operators use SMET Silo Mixing Stations and that the correct procedures covered in the training sessions are followed by operators.

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