

Batchcrete Mobile Backfill Paste Plant for Underground Mining

Mobile Backfill Paste Plant with 2 x Horizontal and 2 x Vertical Silos (500T)

1 x Batchcrete Mobile Paste Multimix 3-200 LT System

MM3200LT – Semi-mobile plant with mixer for the production of Backfill Paste

MAIN FEATURES

- Theoretical max. Output/flow rate: 60 to **180 m³/h**;
- Total storage capacity: **45 m³**;
- Number of storage compartments: **n.3**;
- Storage capacity of each compartment: **~15 m³/each**;
- loading width of each compartment: **~3.30 m/each**;
- loading width of each compartment: **~3.30 m/each**;
- Discharge height: **~4.10 m**;
- **Upper extra boards** hinged on three sides;
- **Longitudinal ambidextrous board** (to allow full freedom when positioning it);
- **(ambidextrous) galvanised padding** on one side in order to carry out the loading ramp;
- **Adjustable galvanised bolted leg extensions**.

EXTRACTION OF AGGREGATE MATERIALS

- **3 inverter-controlled extractor belts** with smooth belt applied to the unloading doors;
- **3 detection systems of material** applied to the unloading doors;
- **3 level rotary gauge (n.1 on each bin)** to indicate that the minimum level of material has been reached;
- **3 electric vibrator kits (n.2 on each bin)** to favour material flow;
- **1 elevator belt (primary)** with rubber mat with **200 m³/h max. Flow rate**;
- **1 unloading conveyor** (at the upper end of the primary belt) in Hardox anti-wear plate;
- Unloading conveyor with **connections for cement auger, water pipe, additives pipe**.

MIXING UNIT

- **1 horizontal twin shaft mixer** with **continuous mixing**;
- Covering of the mixer bottom surface: **Fe (iron) plates**;
- Covering of the mixer sides: **Fe (iron) plates**;
- mixing blades: in **Ni-Hard cast iron**;
- scraping blades: in **Ni-Hard cast iron**;
- **1 mixer support framework**;
- **1 mixer inspection platform**;

EXTRACTION OF PRODUCT

- **1 secondary elevator belt** with rubber mat with **200 m³/h max. Flow rate**;
- **1 unloading conveyor** (at the upper end of the secondary belt) in Hardox anti-wear plate;
- **1 rotary level indicator** for discharged materials.

SAFETY AND MAINTENANCE SYSTEMS

- **(ambidextrous)** square metal mesh **perimeter protections**;
- **Emergency pushbuttons** for plant stop;
- **1 siren** for the signalling of the plant starting up
- **Gates for plant inspection and maintenance**.
- RAL colour: **7038 – SAMI standard**;
- Power supply: 80kw **three-phase 400 V - 50 Hz**;

3 x Extractor belt with dynamic weighing system

ACC0467 – Electronic weighing kit fitted to n.1 standard extractor belt; the price includes the difference from the volumetric belt. It allows the continuous dosage of the extracted materials. Each kit includes the following items:

- **1 weighing system on load cells**;
- **1 electronic instrument** for dynamic weighing;
- **1 electrical wiring**;
- Power supply: **400V – 50 Hz**.

OVERALL DIMENSIONS AND WEIGHT FOR TRANSPORT

1st package: length 11.00 m – width 2.44 m - height 2.80 m — weight 15,000 kg.

2nd package: length 11.00 m – width 2.44 m - height 2.80 m — weight 10,000 kg.

Management System –

HAS REMOTE ACCESS ABILITY SO THAT WE CAN ASSIST YOU 24/7

1 x Touchscreen PC management system (Multimix)

For management of 1 x aggregate plant with mixer and 2 x cement silo by means of a single control panel. The supply includes:

- 1 x fixed control panel on board of the machine
- 1 x metal cabinet for control panel protection
- 1 x LCD colour touchscreen display
- 1 x management software
- 1 x warning siren for the signalling of the plant start and of the end of product inside the tanks
- Power supply: three-phase 400 V - 50 Hz.

MAIN FUNCTIONAL FEATURES

- Storage of recipes storage of recipes on a cubic meter basis (up to the maximum storage capacity of available memory)
- Insertion of all identification data into the recipe in compliance with EN 206 standards
- Storage of simplified recipes by indicating the component within the raw materials archive and entering of the amount onto a numerical keypad appearing within a display window
- Possibility to recall and copy a recipe for the storage of an analogous one with minimum required changes only
- Automatic calculation of the particle size range to correct the mix water in order to take into account the moisture withheld by aggregate materials depending on concrete requested performances (RCK, workability, environmental class exposure, etc...)
- Compatible format with EXCEL® electronic calculation spreadsheet, in order to make it possible to export, change and store new recipes
- Batching management program with 0.5 to 12 m³ extraction launch
- Simplified batching launch program (choice of a recipe with automatic access to the archive through the visualisation of an automatically opened window on the display, indication of the amount to be produced, data confirmation and batching launch)

- Automatic correction of the moisture quantity withheld by aggregate materials, which is measured by means of probes or manual entering of plant parameters

- Possibility of interrupting automatic batching, passage to manual mode with integration of products, return to automatic batching
- Automatic archiving of performed batching with progressive number, date, batching launch time
- Archiving capacity up to the maximum capacity of the available memory and possibility to recall batching processes by number, day of production or used recipe
- Possibility to download batching reports via USB pen drive or network cable for display on PC
- PLC software program.

Integrated VSD to all pumps and flowmeters.

1 x batching unit for water

- Single-door cabinet for the housing of components
- 1 x 2" flow meter with impulse emitting device with 1 impulse / 1 litre ratio
- 1 x 2" electro-pneumatic ball valve for batching closure
- 1 x centrifugal batching pump with 400 litre/min flow rate
- Pre-arranged for the communication with the automatic control system of the batching unit
- Absorbed power 1.5 kW
- Power supply: three-phase 400 V - 50 Hz

1 x batching unit for additives (for 2 x additives)

This device is configured for the batching of n.2 additives (optional management up to max 4 additives) and of washing water.

- Single-door cabinet for the housing of components
- 1 x magnetic induction flow meter with 1 impulse 1 deciliter ratio
- 1 x gear pump
- 3 x electro-pneumatic valves for the closing of tanks pipes
- Absorbed power 0.75 kW
- Power supply: three-phase 400 V - 50 Hz

2 x EUROSILLO 45/DE

E45DE - Mobile horizontal silo for cement storage and batching. It can be transported on trucks or flat rack. Containers and it is realised for quick positioning and handling.

MAIN FEATURES

- Total storage capacity: **45 m³** (~59 ton - calculated with specific theoretical weight 1400 kg/m³);
- Support frame with **n.6 telescopic legs** (for loading, unloading and parking of the silo)

MATERIALS LOADING AND VENT PIPES

- **1 x inner loading pipe;**
- 210-ø114mm loading pipe flange - n. 4 ø20mm holes, centre to centre distance 165mm;
- **1 x inner vent pipe.**

EXTRACTION AND BATCHING OF MATERIALS

- **1 x vibration system** to facilitate material flow;
- **1 x horizontal extraction screw conveyor** (for the extraction of material from the silo);
- **1 x butterfly valve with manual control** on the horizontal screw conveyor unloading side;
- **1 x cement weighing/batching system with load cells** by deduction.

SAFETY AND MAINTENANCE SYSTEMS

- **1 x (pressure control) safety valve** on the roof;

- **1 x hatch bolted** on the roof;
- **1 x lateral hatch** to inspect the intermediate support of the horizontal screw feeder;
- **2 x header hinged hatches** for internal inspection and maintenance;
- **1 x toolbox.**

OTHER FEATURES

- External finishing: **epoxy primer and polyurethane glaze finishing**;
- RAL colour: **7038 – SAMI standard**;
- Power supply: **three-phase 400 V - 50 Hz**;
- **Use and maintenance manual**;
- **EC Declaration of Conformity.**

OVERALL DIMENSIONS FOR TRANSPORT

- Package n.1: length 9.70 m - width 2.45 m - height 3.00 m.

1 x **Unloading screw conveyor ø219x5000mm (~25 m³/h)**

Tubular screw conveyor for the unloading of materials stored in silos.

MAIN FEATURES

- dimensioned for **cement** or similar materials;
- Flow rate: **~25 m³/h**;
- Screw conveyor diameter: **ø219 mm**;
- Screw conveyor pipe length: **5000 mm**;
- Nominal screw conveyor inclination: **45°**;
- **Adjustable ball coupling (± 5° in vertical direction, ± 80° in horizontal direction)**
- **1 x intermediate support**;
- **1 x chain tie rod**;
- **1 x Electric control panel**

This article can be combined with EUROSILLO DE in order to control material unloading and it includes:

- **1 x electric switchboard** panel applied to the silo;
- **1 x electronic instrument**;
- **1 x vibrator pushbutton.**
- Power supply: **three-phase 400 V - 50 Hz.**

Dust filter ø600 applied to the rear side

Cartridge filter to collect dust during the filling of the silo; it can be applied to the silo using Brackets, it does not require any assembly/disassembly during the transport phase.

FILTER FEATURES

- Diameter **ø600**;
- Filtering elements: **cartridges**;
- Total filtering surface: **16 m²**;
- Type of cleaning: **electric vibrator**;
- Power supply: **three-phase 400 V - 50 Hz.**

2 x extra weighing/dosing cement cylinder for horizontal silo

Weighing/dosing cement cylinder. Includes:

- **1 x cement weighing/batching system with n.3 load cells**;
- **1 x electronic terminal** with keyboard and display.
- **1 x butterfly valve with pneumatic control** on the unloading side;
- **1 x electric vibrator** to favour material flow.
- Power supply: **400V – 50Hz.**

2 x Distributing screw conveyor on the roof

Distributing screw conveyor installed onto the horizontal silo roof in order to allow a more uniform distribution of the material inside it whenever filling is performed by means of screw conveyor (in case of bag-breaker systems or big-bag unloading systems).

MAIN FEATURES

- dimensioned for **cement** or similar materials;
- Flow rate: **~25 m³/h**;
- Screw conveyor diameter: **ø219 mm**;
- Screw conveyor pipe length: **silo body**.

OTHER FEATURES

- External finishing: **epoxy primer and polyurethane glaze finishing**;
- RAL colour: **7038 – SAMI standard**;
- **Three-phase** power supply **400V - 50 Hz**.

2 x Vertical silo SP 35/145 (203t)

SP35129 - Vertical panel silo for material storage,

MAIN FEATURES

- Total volumetric storage capacity: **145 m³**;
- Cement storage capacity: ~203 ton (indicative value calculated with specific theoretical weight 1400 kg/m³);
- External diameter of the body: **ø3500 mm**;
- **4 fixed legs** with wind bracing device;
- **Cone** inclination **75°**;
- **1 ø114 mm external loading pipe**;
- **1 450x450 mm inspection opening** on the roof;
- **1 ø1000 mm top cover** in the centre of the roof;

OTHER FEATURES

- External finishing: **sandblast + epoxy primer + polyurethane glaze finishing**;
- RAL colour: **7038**

2 x ø350 Butterfly unloading valve – with manual control

- **1 ø350 butterfly valve**;
- **1 opening/closing manual control**.

2 x Safety valve (pressure control)

ACC0026 - applied on the silo roof, that intervenes on reaching a limit pressure or low-pressure established at the moment of the calibration of the valve itself.

- Valve diameter **ø273 mm**;
- Pressure setting 800 mm H₂O;
- Low-pressure setting 20 mm H₂O.

2 x Unloading screw conveyor ø219x5000mm (~25 m³/h)

ACC0158 - Tubular screw conveyor for the unloading of materials stored in silos.

MAIN FEATURES

- dimensioned for **cement** or similar materials;
- Flow rate: **~25 m³/h**;
- Screw conveyor diameter: **ø219 mm**;
- Screw conveyor pipe length: **5000 mm**;
- Nominal screw conveyor inclination: **45°**;
- **Adjustable ball coupling (± 5° in vertical direction, ± 80° in horizontal direction)**;

- **1 chain tie rod;**
- **1 m PVC braiding** at the unloading point with clamp.

OTHER FEATURES

- External finishing: **epoxy primer and polyurethane glaze finishing;**

- RAL colour: **7038**

2 x Cone ø3500mm fluidization (pads and pressure gauge)

ACC0339 – This device facilitates the descent of material; it is most of all advisable in case of storage of materials which are different from cement such as hydrated lime.

The supply includes:

- **Fluidisation plates** applied to the silo cone;
- **1 pressure reducer and electrovalves; pipes and fittings.**

1 x Compressor C200 (200 litre tank)

2 x MAX level rotary gauge (VERTICAL SILOS)

ACC0601 – This device indicates that the maximum level of material inside the silo has been reached. Electrical wiring to panel / junction box.

2 x MIN level rotary gauge (VERTICAL SILOS)

ACC0602 – This device indicates that the minimum level of material inside the silo has been reached. Electrical wiring to panel / junction box.

2 x ø800 Floor-based dust filter (22 m² - vibrated cleaning)

ACC0653 – Filter to collect dust during the filling of the silo; it is positioned on the ground and it allows a direct and constant maintenance of the filter as well as a trouble-free recovery of cement.

FILTER FEATURES:

- Diameter: **ø800;**
- Body of the filter: **stainless steel;**
- filtering element: **hose sleeves;**
- Total filtering surface: **22 m²;**
- cleaning type: **compressed air;**
- **filter connection ring;**

OTHER COMPONENTS:

- Dust collection hopper with support legs (for the positioning onto the ground);
- Spiral pipe for the connection to the silo vent;
- **250mm manually-operated butterfly valve;**
- **Manual activation** of the cleaning process during the loading phase

2 x Access Ladder, rest platform and top railing (SP35/129)

ACC0370 – For safe access to the silo roof in order to carry out maintenance procedures of the safety valve

1 x A4 Printer

This device is used to print the unloaded quantities in A4 format.

1 x Control cabin for operator (1.80x2.40x2.50h)

For the PC with A4 printer (mobile control switchboard Panels) for remote management of the entire system.





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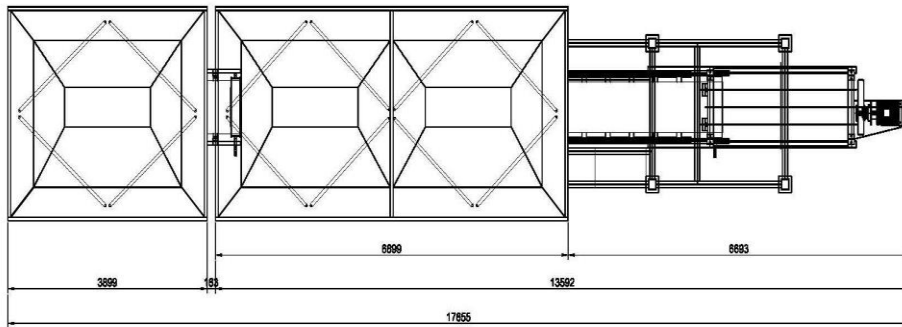
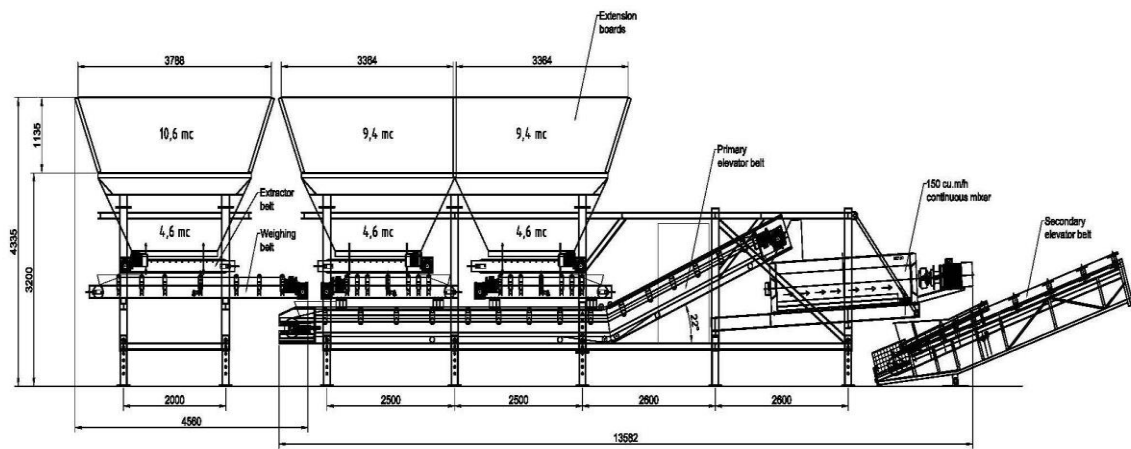
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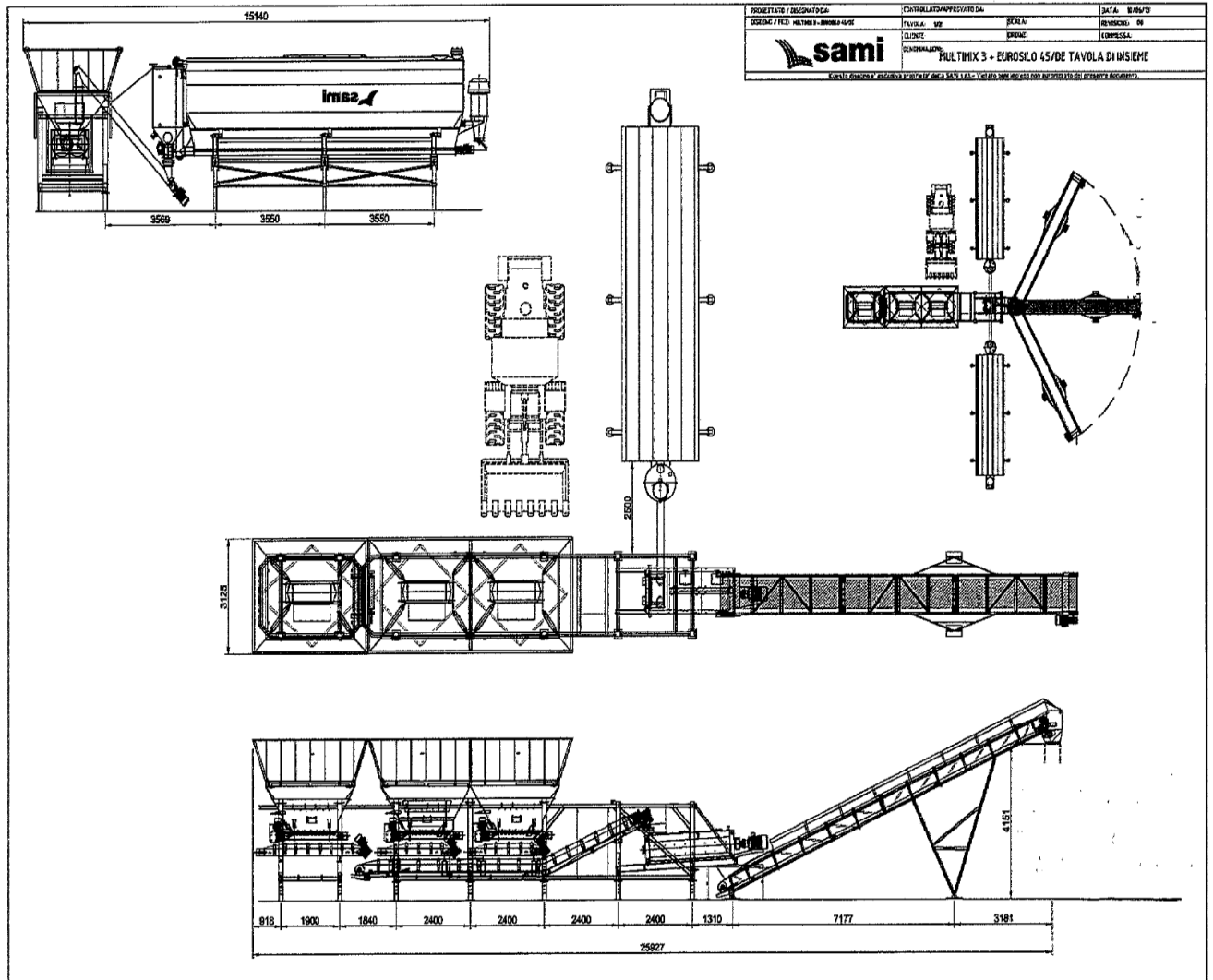
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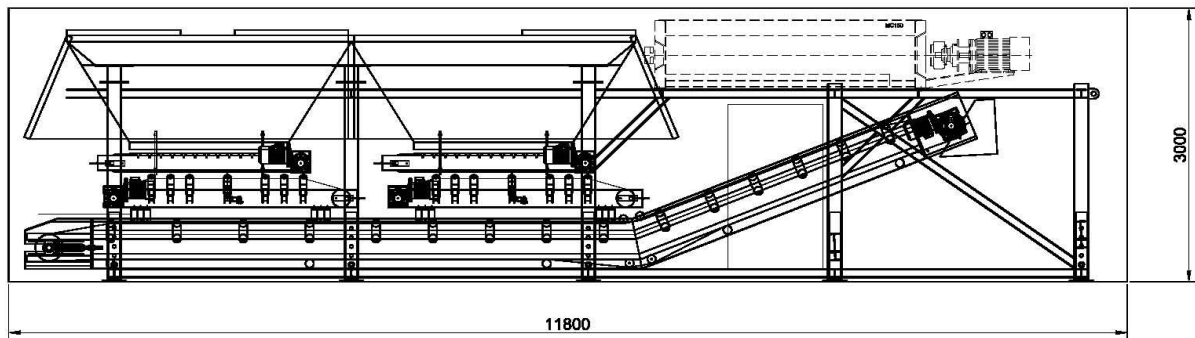


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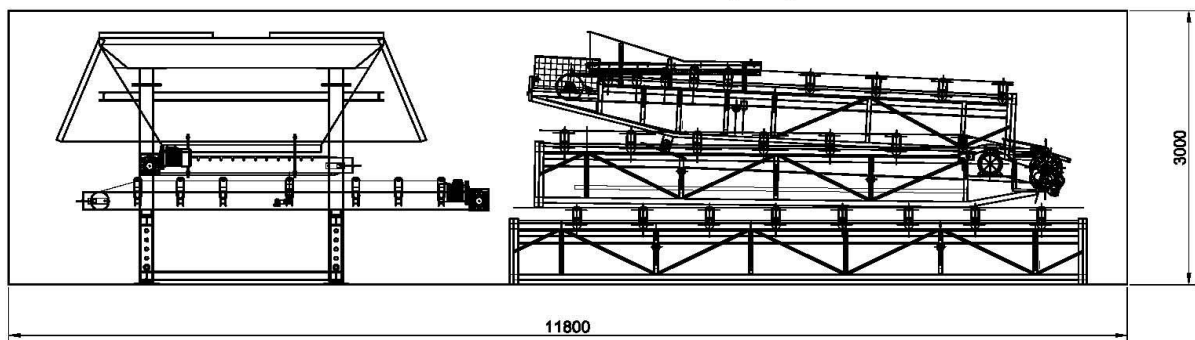


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1° flat rack container (40')



2° flat rack container (40')



3° flat rack container (40')

