

SEMIX MOBILE 60 S4

MOBILE CONCRETE BATCHING PLANTS



SMX-G-2311211034-11

PROPOSAL

HYL QUARRY OPERATIONS

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Delivery

8-10 weeks

Validity Of Offer

25-12-2023

Terms Of Payment

%50 Advance, %50 Before Shipment



MOBILE 60 S4

DESCRIPTION	AMOUNT	UNIT PRICE	TOTAL PRICE
1) MOBILE 60 S4	1	€137,500.00	€137,500.00
1.1) 60S4 MOBILE CONCRETE BATCHING PLANT'S TOTAL CAPACITY : 60 M ³ /H	1	-	-
1.2) MIXER TYPE & CAPACITY: 1875/1250 (1.25 M ³) SEMIX SINGLE SHAFT MIXER	1	-	-
1.3) MIXER MOTOR POWER: 37 KW	1	-	-
1.4) CEMENT WEIGHING HOPPER: 600 KG	1	-	-
1.5) WATER WEIGHING HOPPER: 300 KG	1	-	-
1.6) ADDITIVE WEIGHING HOPPER: 20 LITRES	1	-	-
1.7) ADDITIVE PUMPS: 1	1	-	-
1.8) AGGREGATE BIN CAPACITY: 4 X 10 = 40 M ³ INLINE BINS	1	-	-
1.9) AGGREGATE WEIGHING SYSTEM: WEIGHING CONVEYOR BELT	1	-	-
1.10) AGGREGATE TRANSFER MECHANISM: CONVEYOR BELT	1	-	-
1.11) COMPRESSOR: 700 LT/MIN	1	-	-
1.12) ELECTRICAL PANEL COMPONENTS: SCHNEIDER (INCLUDING PLC)	1	-	-
1.13) CONTROL CABINE: PRESENT	1	-	-
1.14) SOFTWARE: SEMIX (SQL BASED)	1	-	-
		Subtotal:	€137,500.00
		Discount:	-€12,500.00
		Total:	€125,000.00
TRANSPORTATION			
		Mobile 60 S4 - (EXW Ankara)	€0.00
		General Total:	€125,000.00



SEMIX Mobile 60 S4 is equipped with 1875/1250 liters capacity Concrete mixers which can be a single shaft or 1500/1000 planetary type mixers. In SEMIX Concrete Mixers NiHard4 or Hardox 450 wearings are used according to the Concrete recipe's silicium ratio.

Aggregate storage hoppers can be fed by wheeled loaders with a single ramp. Aggregates are weighed in the weighing conveyor which transfers aggregates to the transfer conveyor. Having two separate conveyors providing accuracy in weighing and performance for reaching higher Concrete outputs.

All SEMIX Concrete Batching Plants are being controlled by a SCADA system with a Schneider PLC integrated. Users can follow all used materials and integrate it their CRM system. SEMIX's engineering team can intervene in the Automation system online to provide service.



Patented Aggregate Bin Design

In SEMIX Mobile 60S4 batching plants, only one ramp needed for feeding aggregate bins thanks to its' patented design.

Inline aggregate bin structure eliminates the need of installing a pre-feeding conveyor

High Mobility

Semix Mobile 60S4 can be rapidly assembled in 2 days with its' compact design. It can be relocated to another project easily because of its' high mobility.



Customized Options

SEMIX is able to design special projects for your requirements with a strong engineering team.

SEMIX Concrete Mixers

In SEMIX **Mobile** 60 Concrete Batching Plants, 1,25 m³ of compacted concrete output capacity **mixers** are preferred. Depending on requirements, **single shaft**, **twin shaft** or **planetary mixers** can be adapted to the Mobile 60S4 batching plant. The mixing process is controlled electronically by a mixer-control unit software, which performs as a full automatic unit.



1.25 m³ Single Shaft Concrete Mixer

Brand & Model : Semix SM 1875 / 1250 lt – Horizontal **Single Shaft Mixer**

Loading Capacity : 1875 lt

Compacted Concrete Capacity : 1250 lt

Electric Motor : 37 kW GAMAK/VOLT-1 Unit, with thermic overload switch protection

Mixing Blades & Wearing Plates

Mixing Blade : Ni-Hard 4 (**Chrome, Nickel special alloy cast iron**)

Stripping Blade : Ni-Hard 4 (**Chrome, Nickel special alloy cast iron**)

Internal Wearing : **HARDOX 450**

Ni-Hard 4 : In all **SEMIX Concrete Mixers**, Ni-Hard 4 alloys are being used in mixer blades. NiHard 4 is a high-strength cast iron alloy that contains 4% nickel and has a tensile strength of up to 1,200 MPa. The nickel in NiHard 4 creates a tough surface that resists abrasion, while the hardening agents make the alloy harder and more resistant to deformation. This structure is ideal for products under conditions of high abrasiveness and high impaction conditions. It is commonly used in applications that require high strength. NiHard 4 has a very low coefficient of thermal expansion, which makes it ideal for use in high-temperature applications. NiHard 4 is a type of steel that is very strong and resistant to wear and tear. It is commonly used in industrial applications where durability is key.





Lubrication : 4 Points Automatic Lubrication System **SKF - LINCOLN (German)**

Automatic lubrication system is integrated with the PLC and SCADA, the system periodically lubricates the necessary points and preventing from major problems. These systems use sensors to detect the level of lubricant present and dispense the appropriate amount automatically.

Discharge Door : 1 Unit / **Hydraulic**

Discharging in Emergency Situations : Present - Manual Pump

Water Dispenser : Present - 1 Unit

Emergency Stop Button : Present - 1 Unit

Maintenance Door Safety Switch : Present - 1 Unit



Main Mixing Chassis



General view : The main chassis was built in compliance with international requirements with a transition height of 4,100 mm to 4,250 mm with high-quality steel components and outstanding workmanship. For maneuvering and filling the truck mixer with an average width of 5,000 mm, the main chassis offers great ease. A platform, handrails, and stairs are built into the main chassis.

Supports of the chassis : UNP & INP profiles with extra cross braces.

Concrete discharge funnel : 1 Unit for quick cleaning with inlaid, galvanized bar construction. Highly wear-resistant coating.

Walkways, stairs & railings : At the mixer and at the upper weighing frame, walkways, and platform. 60 ° staircase with grating steps and railings to the mixer floor, with top landing and 60 ° grade tilt.

Weighing Hoppers

Cement Weighing Capacity : 600 kg

Cement Weighing Load-cells : 3 units 500 kg

Water Weighing Capacity : 300 kg

Water Weighing Load-cells : 2 units 500 kg

Additive Weighing Capacity : 1 x 20 lt

Additive Weighing Load-cells : 1 unit 100 kg



Weighing Hopper Equipments

Cement Discharge Valve : Ø 200 mm Butterfly Type - **WAM (Italy)**

Cement Hopper Vibrator : 1 unit - **OLI (Italy)**

Water Discharge Valve : Ø 150 Butterfly Type mm - **WAM (Italy)**

Additive Discharge Valve : 1 Unit - 1 ½" ball valve with actuator

Aggregate Storage Bin

Aggregate Bins Capacity&Quantity : 40 m³ – 10 m³ capacity each one – 4 bins (Linear)

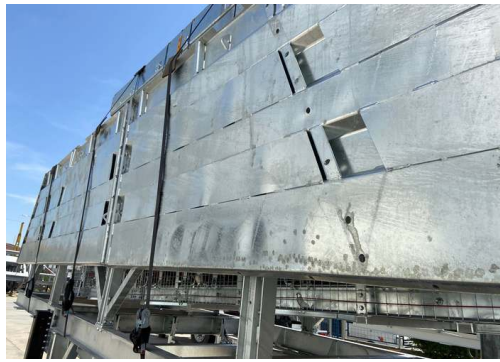
Bunker Discharging Gate(s) : 1 Gates in each bin – Totally 4 Discharging Gates

Vibrator Brand & Capacity : 350/3 – 2 Units **WAM-OLI (Italy)**

Pneumatic Piston Brand & Capacity : DSBC 80-250 Piston 4 Units – **Festo (Germany)**

Pneumatic Valve : 4 Units – **Festo (Germany)**





With trapezoidal bending for aggregate bin covers a high strength can be reached. In SEMIX's aggregate storage hoppers, extra reinforcement steels are welded to the empty spaces in the trapezoid. Thanks to this method, aggregate storage bins can serve long years.

Weighing Conveyor

Belt Quality : EP 125 / 4 coats

Load-cell : Capacity of 2000kg - 4 Units

Motor Power/Gearbox : 7,5 kW

Vibrator : 350/3 – 1 Unit - **WAM-OLI (Italy)**

Drums : 10 mm Rubber Coated

Bearings : Lubrication Grease Nipple over SNH series

Scraper : V type with its weights -1 Unit

Emergency Stop Button : 1 Unit

Pull-rope Switch : 1 Unit



Aggregate Transfer Conveyor

Belt Quality : EP 125 / 4 coats

Motor Power : 11 kW - 1 Unit

Drums : 10 mm Rubber Coated

Bearings : Lubrication Grease Nipple over SNH series

Scraper : V type with its weights -1 Unit

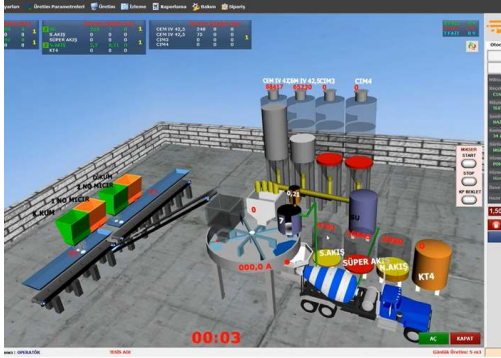
Emergency Stop Button : 1 Unit

Pull-rope Switch : 1 Unit

Covering over the Belt : Semi-closed with steel sheet



CONTROL CABIN & AUTOMATION SYSTEM



Air conditioner, electrical connections and lightening - present at control cabin. Power board with manual control system provides production options completely at automatic - mode as well as manual mode. Power board includes safety system protection switches for motors (phase protection relay), circuite breaker in case of overload. All electrical components are SCHNEIDER brand. Full set of computer for automation system with printer/UPS - present.

AUTOMATION SYSTEM:

Production Screen; You can monitor process of the operation on the animation screen, which is infrastructure by Microsoft DirectX. During the producing, required values, measurement values and differences of values will be shown. Following of the measured will be checked by the system during the process and it will be shown on automation screen with error sound if there is a problem. It can add or discharge water automatically without changing value of cement, during the process.

Entering; You can change the value of production to add or discharge while you are producing your order. You can portray unlimited customer, target, transfer with different drivers. Definition of silo and material can be changed and checked by the operator easily on the computer.

Settings; The automation system uses lots of parameters, that was designed to be understandable easily for any user; to get most efficient performance. Also, the settings can be locked not to be changed by workers.

History; When user want, he can checked old production records or details. And if there is need, the old production records or details can be printed any time.

Reporting; The program saves unlimited production record in database, so you can get report (production, receipt, customer, field work, etc.) with different time periods as daily, weekly, monthly, yearly when it is needed. Reports can be printed or forward them to excel or PDF files. Also, Stock reports can be get at the same way.

Delivery Note; You can print delivery note after or before the manufacture. If you don't want to print at that time, you can print them from the database when it is needed. Also you can split or merge manufactures' delivery note when it is needed them. After manufacturing, if customer changes, You can change the new customer and reprint a new delivery note.

User Permissions; You can limit operators or any user permissions when it is needed.

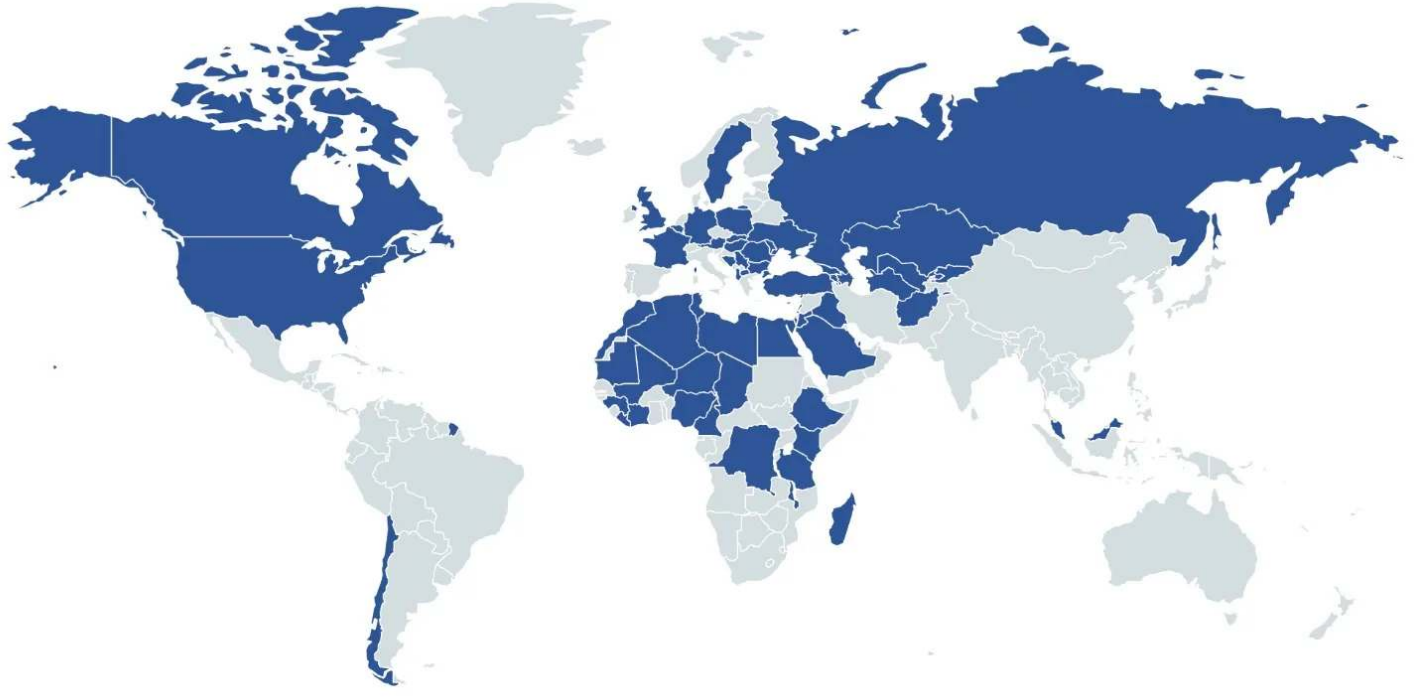
Manufacturing from Orders; You can define daily order list to the program and ordered lists can be produced through the program. You can monitor orders produced and remaining time by time.

Planned Manufacture; Before manufacturing is completed, you can enter the next production to program. If you save the next production record to program, after the last production finish, the next production will start automatically.

Internet; The program is designed to be controlled via the internet. By via internet, you can do reporting, editing, deleting or viewing (receipts, field work, customers, production details, etc.). Also, you can create, remove or edit order records for defined user rights. Reports may print or save on PDF, Excel by using via internet. For using via internet, you should get a static ip. Infrastructure for internet (staticip, internet line, etc.) will be provided by yourself. P.S.: Internet features are optional and requires additional charge.

Remote Support; If you have an internet connection in cabin, we can help and solve problems quickly and you will have technical support about automation program.

References



HEIDELBERG
CEMENT

STRABAG

LAFARGE




HYUNDAI

 **ASTALDI**

clinotech

 **Limak**

 **kalyon**

 **CENGİZ**
İNŞAAT

 **KOLIN**

 **KİPAŞ HOLDİNG**

 **ONUR**
TAHHÜT TAHHÜTLÜK İNŞAAT TİC. VE SAN. A.Ş.

 **DANIŞ BETON**
SİVİL İNŞAAT SAN. TİC. A.Ş.

 **AKPINAR**

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