

# SEMIX MOBILE 90 S5

## MOBILE CONCRETE BATCHING PLANTS



SMX-R-2310021628-2

### PROPOSAL

#### EL-BAYRAK CONSTRUCTION

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#### Delivery

8-12 Weeks

#### Validity Of Offer

18-10-2023

#### Terms Of Payment

%50 Advance, %50 Before Shipment



## MOBILE 90 S5

| DESCRIPTION   | AMOUNT | UNIT PRICE                  | TOTAL PRICE |
|---|--------|-----------------------------|-------------|
| 1) MOBILE 90 S5   | 1      | €240,000.00                 | €240,000.00 |
| 1.1) 90S5 MOBILE CONCRETE BATCHING PLANT'S TOTAL CAPACITY: 80-90 M <sup>3</sup> /H            | 1      | -                           | -           |
| 1.2) MIXER TYPE & CAPACITY: 2250/1500 (1.5 M <sup>3</sup> ) SEMIX SINGLE SHAFT CONCRETE MIXER | 1      | -                           | -           |
| 1.3) MIXER MOTOR POWER : 1 X 45 KW  | 1      | -                           | -           |
| 1.4) CEMENT WEIGHING HOPPER: 1100 KG  | 1      | -                           | -           |
| 1.5) WATER WEIGHING HOPPER: 600 KG  | 1      | -                           | -           |
| 1.6) ADDITIVE WEIGHING HOPPER: 30 LITRES  | 1      | -                           | -           |
| 1.7) ADDITIVE PUMPS: 1  | 1      | -                           | -           |
| 1.8) AGGREGATE BIN CAPACITY : 5 X 15 = 75 M <sup>3</sup>                                      | 1      | -                           | -           |
| 1.9) AGGREGATE WEIGHING SYSTEM: WEIGHING CONVEYOR BELT  | 1      | -                           | -           |
| 1.10) AGGREGATE TRANSFER MECHANISM : BELT CONVEYOR  | 1      | -                           | -           |
| 1.11) COMPRESSOR : 1800 LT/MIN  | 1      | -                           | -           |
| 1.12) AUTOMATION SYSTEM : SCHNEIDER (PC & PLC)  | 1      | -                           | -           |
| 1.13) CONTROL CABINE: PRESENT   | 1      | -                           | -           |
|   |        | Subtotal:                   | €240,000.00 |
|   |        | Discount:                   | -€35,000.00 |
|   |        | Total:                      | €205,000.00 |
| <b>TRANSPORTATION</b>   |        |                             |             |
|   |        | Mobile 90 S4 - (EXW Ankara) | €0.00       |
|   |        | General Total:              | €205,000.00 |



SEMIX Mobile 90S5 is equipped with 2250/1500 liters capacity Concrete mixers which can be a single shaft, twin shaft, or planetary type mixers. In SEMIX Concrete Mixers NiHard4 or Hardox 450 wearings are used according to the Concrete recipe's sillicium ratio.

All SEMIX Aggregate Storage hoppers are bent trapezoidal shape for having an extra strength. 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 Design

In SEMIX Mobile 90S5 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

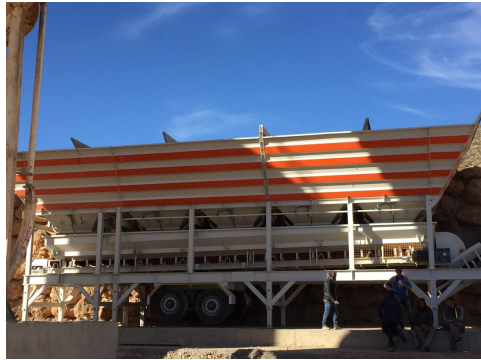
Semix Mobile 90S5 can be rapidly assembled in 3-4 days with its' compact design. It can be relocated to another project easily because of its' high mobility.



## Fast Installation

SEMIX Mobile 90S5 can be rapidly installed into determined area in 3 days both mechanically and electrically. Experienced SEMIX assembly staff will be your guide during installation at all times.

Product Gallery





## SEMIX Single Shaft Concrete Mixer 1.5 m<sup>3</sup>

Brand & Model : Semix SSM 2250/2500 It – Single Shaft Mixer

Loading Capacity : 2250 It

Compacted Concrete Capacity : 1500 It

Electric Motor : 1 x 45 kW

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

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

Internal Wearing : Ni-Hard 4 (**Chrome, Nickel special alloy cast iron**)

Ni-Hard 4 : In all SEMIX Concrete Mixers, Ni-Hard 4 alloys are being used in mixer blades. NiHard4 is a white cast iron product with nickel and chromium alloying, to give a hard chromium carbide in a martensitic matrix. This structure is ideal for products under conditions of high abrasiveness and high impaction conditions.



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.

Discharge Door : 1 Unit / **Hydraulic , 3 stage discharging**

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





## Weighing Hoppers

- Cement Weighing Capacity : 1100 kg
- Cement Weighing Load-cells : 3 units 1000 kg
- Water Weighing Capacity : 750 kg
- Water Weighing Load-cells : 2 units 500 kg
- Additive Weighing Capacity : 1 x 20 lt (optional hopper can be added)
- Additive Weighing Load-cells : 1 unit 100 kg

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 Bins

Aggregate Bins Capacity&Quantity : 75 m<sup>3</sup> ( 15 m<sup>3</sup> capacity each one – 5 bins (Linear) )

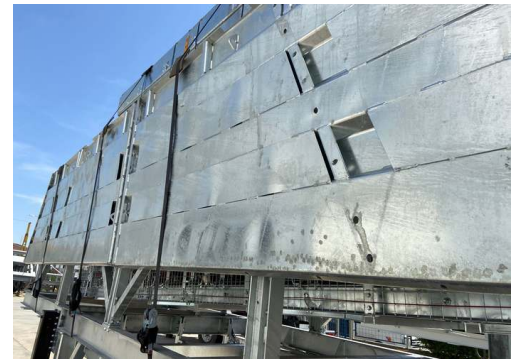
Bunker Discharging Gate(s) : 2 Gates in each bin – Totally 10 Discharging Gates

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

Pneumatic Piston Brand & Capacity : DSBC 80-250 Piston 10 Units – **Festo (Germany)**

Pneumatic Valve : 8 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 : 4 Units
- Motor Power/Gearbox : 15 kW
- Vibrator : 350/3 – 2 Units - **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

### Transfer Conveyor

- Belt Quality : EP 125 / 4 coats
- Motor Power : 22 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



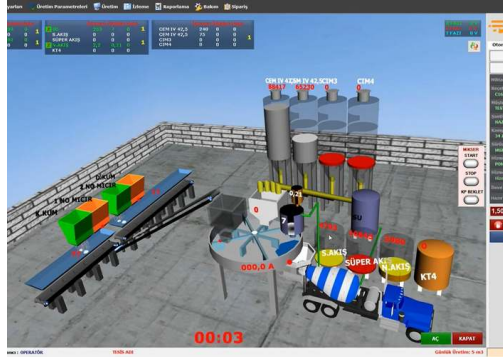
### Grid Blasting Before Painting



All components of the SEMIX's concrete batching plants are treated with Grit Blasting process in SEMIX's certified grit blasting facility before the painting with steel balls. This method provides high surface finish quality after the painting.



# 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.

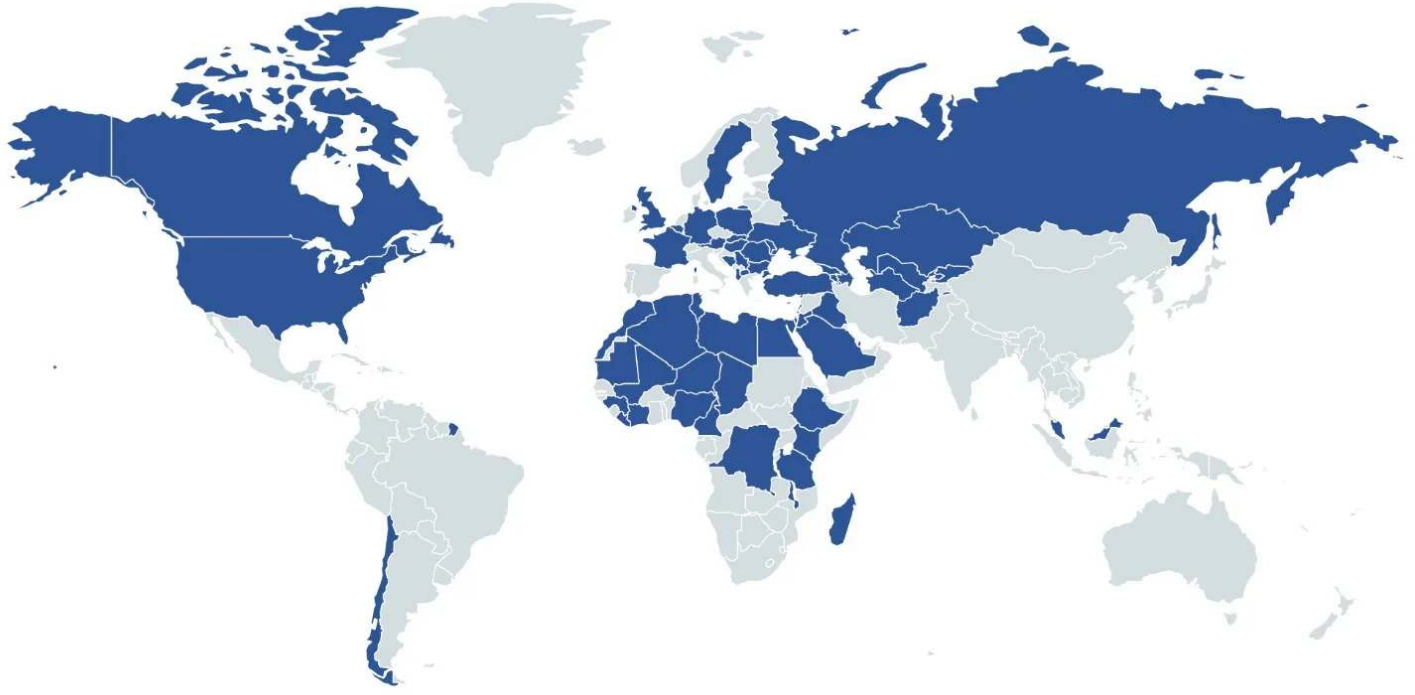
**Manufacturing from Orders;** You can define daily order list to the program and ordered lists can be produced through the program. You can monitor orders produced and remaining time by time.

**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**  
TAHHİT TAHHİMLİK İNŞAAT TİC. VE SAN. A.Ş.

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

**AKPINAR**

**çiftay**