

# SEMIX MOBILE 140DC

## MOBILE CONCRETE BATCHING PLANTS



SMX-A-2302111831-24

### PROPOSAL

#### ARC COMMERCIAL AGENCIES

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Egypt

#### Delivery

14-18 weeks

#### Validity Of Offer

18-08-2023

#### Terms Of Payment

%50 Advance, %50 Before Shipment



## MOBILE 140 DOUBLE CHASSIS

DESCRIPTION	AMOUNT	UNIT PRICE	TOTAL PRICE
1) MOBILE 140 DOUBLE CHASSIS	1	€378,000.00	€378,000.00
1.1) 140DS MOBILE CONCRETE BATCHING PLANT'S TOTAL CAPACITY: 120-140 M <sup>3</sup> /H	1	-	-
1.2) MIXER TYPE & CAPACITY: 5000/3330 (333 M <sup>3</sup> ) SEMIX TWIN SHAFT CONCRETE MIXER	1	-	-
1.3) MIXER MOTOR POWER : 2 X 55 KW	1	-	-
1.4) COMPRESSOR : PRESENT	1	-	-
1.5) AGGREGATE WEIGHING SYSTEM: WEIGHING CONVEYOR BELT	1	-	-
1.6) CEMENT WEIGHING HOPPER: 2000 KG	1	-	-
1.7) WATER WEIGHING HOPPER: 1100 KG	1	-	-
1.8) ADDITIVE WEIGHING HOPPER: 40 LITRES	2	-	-
1.9) LIQUID ADDITIVE PUMPS: 2	1	-	-
1.10) CONTROL CABINE: PRESENT	1	-	-
1.11) AUTOMATION SYSTEM: FULLY AUTOMATIC CONTROL SYSTEM	1	-	-
1.12) AGGREGATE BIN CAPACITY : 4 X 25 = 100 M <sup>3</sup>	1	-	-
1.13) AGGREGATE TRANSFER MECHANISM : TRANSFER CONVEYOR BELT	1	-	-
1.14) ELECTRICAL PANEL COMPONENTS: SCHNEIDER (INCLUDING PLC)	1	-	-
1.15) ADDITIVES TANKS (5 M3)	2	€4,300.00	€8,600.00
1.16) CEMENT SILO SCREW CONVEYOR 273 & SILO EQUIPMENTS SET	3	€6,700.00	€20,100.00
1.17) MOISTURE SENSOR WITH INTEGRATION TO AUTOMATION SYSTEM (MICROWAVE TYPE)	2	€5,750.00	€11,500.00
		Subtotal:	€418,200.00
		Total:	€418,200.00

## TRANSPORTATION

Mobile 140DS - (CIF Alexandria) €27,500.00

General Total: €445,700.00

## OPTION 1

DESCRIPTION	AMOUNT	UNIT PRICE	TOTAL PRICE
1.1) HIGH PRESSURE CLEANING SYSTEM FOR MIXERNG	1	€12,150.00	€12,150.00
1.2) MIXER UPPER FILTER 6 M3 WAM BRAND	1	€2,500.00	€2,500.00
1.3) ICE WEIGHING SYSTEM	1	€4,280.00	€4,280.00
1.4) ICE SCREW CONVEYOR	1	€7,890.00	€7,890.00
1.5) DOSING SYSTEM FOR SILICA POWDER	1	€7,880.00	€7,880.00
1.6) DOSING SYSTEM FOR SILICA SLURRY WITH PUMP	1	€12,900.00	€12,900.00
1.7) AGGREGATE PRE-FEEDING SYSTEM RADIAL TYPE	1	€74,000.00	€74,000.00
1.8) CEMENT WEIGHING HOPPERS FILTER	1	€750.00	€750.00
		Subtotal:	€122,350.00
		Total:	€122,350.00
TRANSPORTATION		Optional Equipments - (CIF Alexandria)	€4,200.00
		General Total:	€126,550.00



SEMIX MOBILE 140DC provides the highest capacity amongst mobile concrete batching plants in the world.

SEMIX MOBILE 140DC equipped with 5000/3330 capacity twin shaft concrete mixers. In SEMIX Concrete Mixers NiHard4 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 provides accuracy in weighing and performance for reaching higher Concrete outputs.

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

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 them into their CRM system. SEMIX's engineering team can intervene in the Automation system online to provide service.

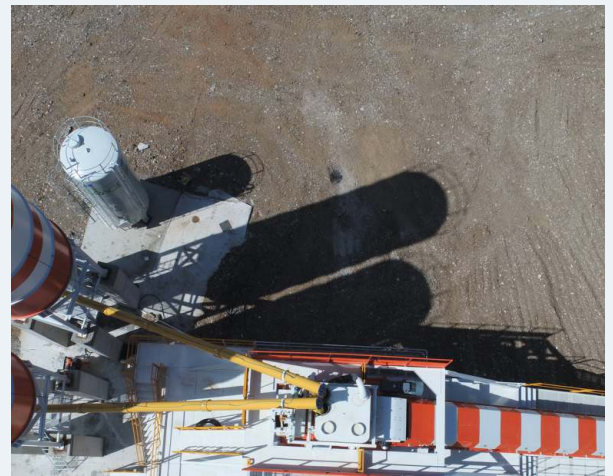


## Proud Engineering

Our qualified engineering team designed a unique mobile concrete batching plant with a capacity of 120-140 m<sup>3</sup>/h. 4 axled design provides the highest mobility with the highest capacity. Towing pin diameter is 3.5", height is 145 cm from ground, brand of pin is Jost or G.F. Transportation of plant without additional equipments can be done by 2 trailers and 1 40" OT Container

## Inline Aggregate Bins

SEMIX always provides inline aggregate storage bins regardless in every mobile concrete batching plants.



## Twin Shaft Mixing Technology

Durable SEMIX Twin Shaft Concrete Mixers will smoothly work in the hardest conditions. User friendly design is providing long life mixing performance.

# Product Gallery



## 3.33 m<sup>3</sup> Twin Shaft Concrete Mixer

Compacted Concrete Per Batch: **3.33 m<sup>3</sup>**  
Dry Volume: **5.0 m<sup>3</sup>**  
Motor Power: **2 x 55 kW**  
Maximum Grain Size : **150 mm**

## 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 : 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. 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.



## Automatic Lubrication System

Lubrication : 8 Points Automatic Lubrication System **SKF - LINCOLN (German)**

The automatic lubrication system in **concrete mixers** works by using a pump to send oil to the different parts of the mixer that need it. The system is designed to keep the mixer functioning smoothly, and it also helps to protect the equipment from wear and tear.

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 : 2000 kg

Cement Weighing Load-cells : 3 units x 1000 kg

Water Weighing Capacity : 1100 kg

Water Weighing Load-cells : 2 units x 1000 kg

Additive Weighing Capacity : 2 x 40 lt

Additive Weighing Load-cells : 1 unit x 100 kg

Additive Pumps: 2 Units 0.75 kW

## Aggregate Storage Bins

**Aggregate Bins Capacity&Quantity** : 100 m<sup>3</sup> (25 m<sup>3</sup> capacity each one – 4 bins (Linear) )

**Bunker Discharging Gate(s)** : 2 Gates in each bin – Totally 8 Discharging Gates

**Vibrators** : 2 Units 300/3 WAM-OLI (Italy)

**Pneumatic Piston** : 8 Units – Festo (Germany)

**Pneumatic Valve** : 8 Units – Festo (Germany)

**Width of each section** : 3.4 m



## Extra Strong Covers

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. The longevity of this storage bin method is due to the sturdy construction of the bins themselves and the protective layer of sheet metal that coats them.

## Weighing Conveyors

Belt Quality : EP 125 / 4 coats

Load-cell : 4 Units x 5000 kg

Motor Power/Gearbox : 22 kW, Gear-motor is directly coupled

Vibrator : 1 Unit 300/3 - **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 : 30 kW - 1 Unit, gear-motor is directly coupled**

**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.



## RADIAL AGGREGATE FEEDING SYSTEM

Radial type aggregate pre-feeding system suitable for feeding inline (linear) type aggregate bins.

Feeding bunker capacity: **5 m<sup>3</sup>**

Feeding conveyor belt with rails



## MOISTURE SENSOR

**HYDRONIX** BRAND MOISTURE SENSOR WITH INTEGRATION TO AUTOMATION SYSTEM (MICROWAVE TYPE)



## Filter of Cement Weighing Bunker

Filter : 1 m<sup>3</sup> **WAM** Brand (*Italy*)

## MIXER UPPER FILTER

Filter: 6 m<sup>3</sup> **WAM** Brand (*Italy*)

## DOSING SYSTEM FOR SILICA SLURRY

Dosing system fully integrated to automation system.

Silica slurry weighing hopper capacity : 1 m<sup>3</sup>

Weighing Load-cells : 2 units x 1000 kg

Single side flap : Ø 200 mm

Silica slurry pump: 1 unit

## DOSING SYSTEM FOR SILICA POWDER

Dosing system fully integrated to automation system.

Weighing hopper for silica powder : 0,5 m<sup>3</sup>

Weighing loadcells : 3 units x 1000 kg

Vibrator : 100/3 - 1 Unit

Butterfly valve : 1 unit Ø300 mm

## SCREW CONVEYOR FOR SILICA POWDER

Type & Brand : Type ES **WAM** Brand (*Italy*)

Sizes : Ø 273 x 11.500 mm

Motor power : 11 kW

## ICE WEIGHING SYSTEM & ICE SCREW CONVEYOR

Dosing system fully integrated to automation system.

Galvanized Weighing hopper : 1 m<sup>3</sup>

Weighing loadcells : 3 units x 1000 kg

Pneumatic piston for discharging cover : 1 units

Ice screw conveyor: Type U Ø273 x 15.000 mm **WAM** Brand (*Italy*)

Motor power : 22 kW IE3, gear S4710180ES4 (145 rpm)

Water discharging flap

**HIGH PRESSURE CLEANING SYSTEM FOR MIXER**



Water tank capacity : 1 ton  
Pressure tank : 10 Bar, 2Lt  
Water pump : SMT10, 1HP, 0,75kW  
Pressurizing pump : 200 Bar 22kW

## 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.

**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.



## EQUIPMENTS

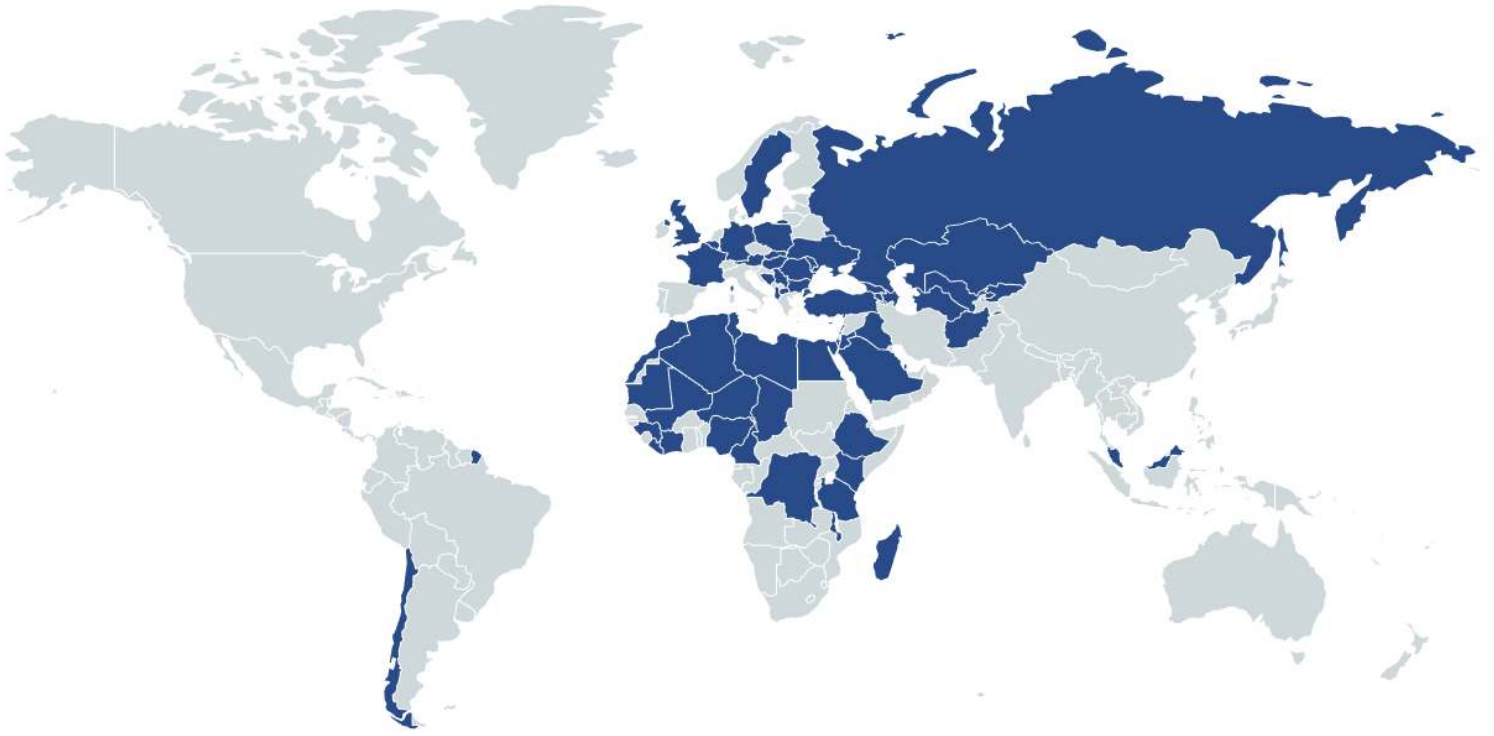
1. PRESSURE RELIEF VALVE: **WAM**
2. BUTTERFLY VALVE: **WAM**
3. PNEUMATIC ACTUATOR: **WAM**
4. MICRO SWITCH: **WAM**
5. LEVEL INDICATOR: **WAM**
6. SILO TOP FILTER: **WAM**
7. SAFETY VALVE: **WAM**
8. AIR JETS: **WAM**
9. FLAP: **WAM**



## SCREW CONVEYORS

3 Units of **WAM** Screw Conveyors ( $\varnothing 273$  mm) will be assembled for discharging the cement.

# References



**HEIDELBERG**  
CEMENT

**STRABAG**

**LAFARGE**



**HYUNDAI**

**ASTALDI**

**clinotech**

**Limak**

**kalyon**

**CENGİZ**  
İNŞAAT

**KOLİN**

**KİPAŞ HOLDİNG**

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

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

**AKPINAR**

**çiftay**