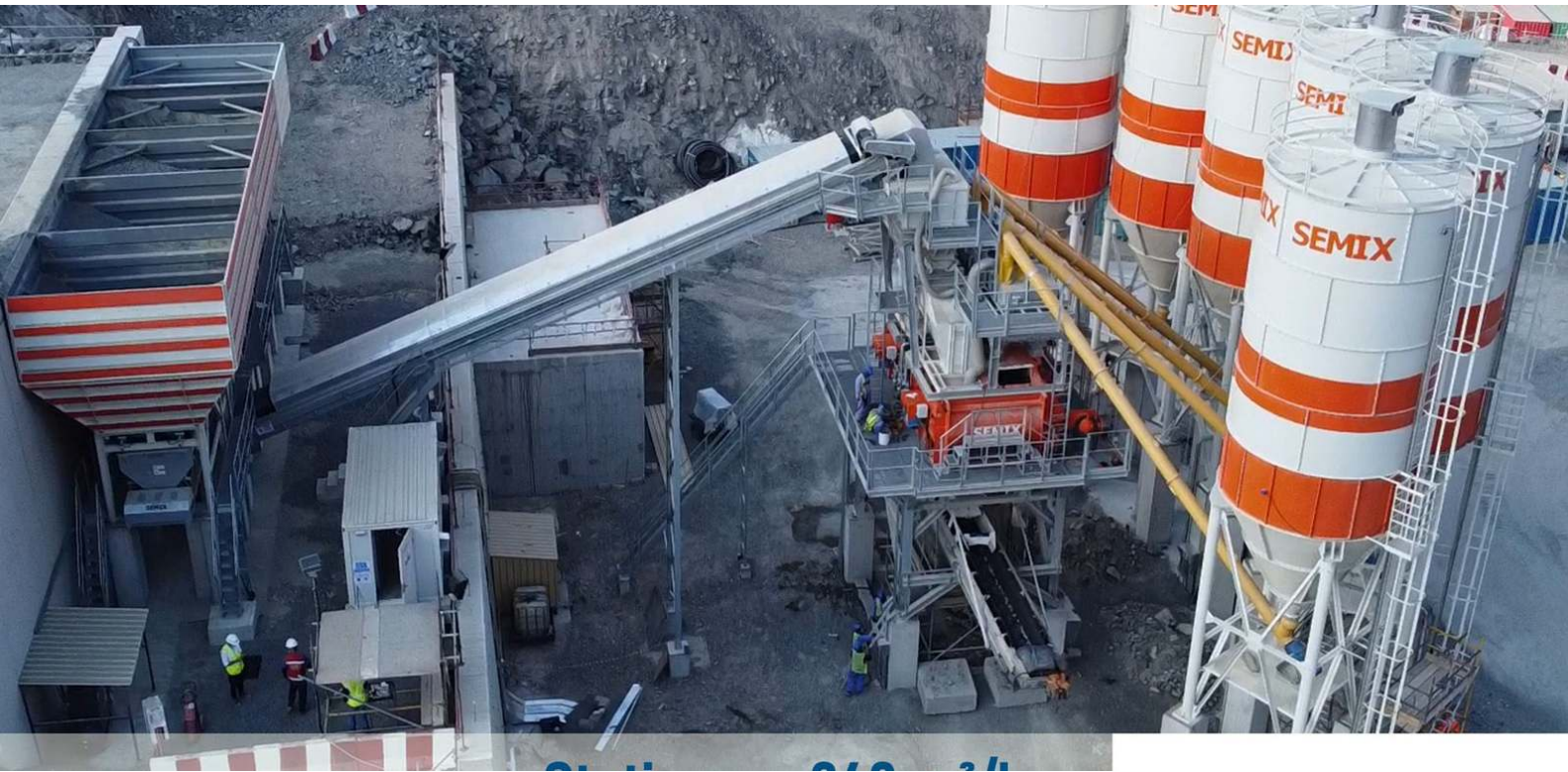


# SEMIX STATIONARY 240

## STATIONARY CONCRETE BATCHING PLANTS



SMX-T-2302271504-2

### PROPOSAL

#### MASCO GROUP

Abdulqader Hammad  
abdulqader.hammad@masco.com.sa  
+966 0 50 411 08 95  
Saudi Arabia

#### Delivery

10-12 weeks

#### Validity Of Offer

14-03-2023

#### Terms Of Payment

%50 Advance, %50 Before Shipment



**STATIONARY 240**

DESCRIPTION	AMOUNT	UNIT PRICE	TOTAL PRICE
1) STATIONARY 240	1	€400,000.00	€400,000.00
1.1) S240 STATIONARY CONCRETE BATCHING PLANT'S TOTAL CAPACITY: 240 M <sup>3</sup> /H	1	-	-
1.2) MIXER TYPE & CAPACITY: 9000/6000 (6.00 M <sup>3</sup> ) SEMIX TWIN SHAFT MIXER	1	-	-
1.3) MIXER MOTOR POWER : 2 X 110 KW	1	-	-
1.4) AGGREGATE BIN CAPACITY : 4 X 40 = 160 M <sup>3</sup>	1	-	-
1.5) AGGREGATE WEIGHING HOPPER: WEIGHING CONVEYOR BELT	1	-	-
1.6) COMPRESSOR: 2400 LT	1	-	-
1.7) AGGREGATE HOLDING HOPPER: 8 M <sup>3</sup>	1	-	-
1.8) CEMENT WEIGHING HOPPER: 3000 KG	1	-	-
1.9) WATER WEIGHING HOPPER : 1800 KG	1	-	-
1.10) ADDITIVE WEIGHING HOPPER : 50 LITRES	1	-	-
1.11) ADDITIVE PUMPS: 1	1	-	-
1.12) AGGREGATE TRANSFER MECHANISM : BELT CONVEYOR	1	-	-
1.13) AUTOMATION SYSTEM : SCHNEIDER (PC & PLC)	1	-	-
1.14) CONTROL CABINE: PRESENT	1	-	-
		Subtotal:	€400,000.00
		Total:	€400,000.00
<b>TRANSPORTATION</b>			
		Stationary 240 - (EXW Ankara)	€0.00
		General Total:	€400,000.00

**OPTION 1**

DESCRIPTION	AMOUNT	UNIT PRICE	TOTAL PRICE
1) CEMENT SILO BOLTED TYPE 250 TONS	4	€47,000.00	€188,000.00
1.1) CEMENT SILO EQUIPMENTS SET: WAM BRAND	4	-	-
1.2) SCREW CONVEYOR: Ø323 MM WAM BRAND	4	-	-
1.3) CEMENT SILO FILTER: WAM BRAND	4	-	-
		Subtotal:	€188,000.00
		Total:	€188,000.00
<b>TRANSPORTATION</b>			
		General Total:	€188,000.00



SEMIX Stationary 240 is equipped with 9000/6000 liters capacity Twin Shaft Concrete mixers. In SEMIX Concrete Mixers NiHard4 or Hardox 450 wearings are used according to the Concrete recipe's silicium ratio.

All SEMIX Aggregate Storage hoppers are bent trapezoidal shape for having an extra strength. The robust steel structure maintains long-life performance. 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.

In SEMIX Stationary Concrete Batching Plants, above the mixer, the aggregate waiting hopper is located. This hopper holds the aggregate ready for the next batch and this provides time efficiency for the batching processes.

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





## Major Projects

**SEMIX S240** Stationary Concrete Batching Plants are designed for major projects. **S240** will push the highest limits without facing any problems.

## High Volumes of Concrete Production

**SEMIX S240** Stationary Concrete Batching Plants are designed for high volumes of concrete production capacities. For concrete mixer wearings **SEMIX** grants you the most durable material which has been formed from a special alloy.



## Powerful Structure

**SEMIX S240** Stationary Concrete Batching Plants offers a robust steel form for high durability. **S240** is able to serve in long lasting massive projects without any failure.



## 6.00 m<sup>3</sup> SEMIX Twin Shaft Concrete Mixer

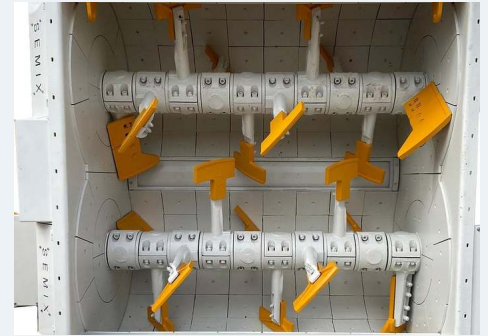
Brand & Model	: Semix TSM 9000/6000 It – Twin Shaft Mixer
Loading Capacity	: 9000 It
Compacted Concrete Capacity	: 6000 It
Electric Motor	: 2 x 110 kW

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 impactation conditions.



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

Lubrication : **8 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.





## Aggregate Holding Hopper

**Volume:** 8 m<sup>3</sup>

**Discharge:** Pneumatic Discharge Flap

**Aggregate holding hoppers are keeping the sand, gravel and big aggregates ready for the next concrete mix design. It increases the hourly concrete production capacity and provides continuous concrete batching.**

## Weighing Hoppers

Cement Weighing Capacity : 3000 kg

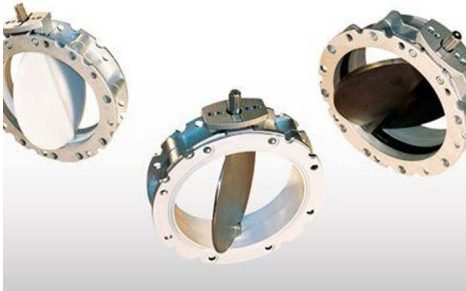
Cement Weighing Load-cells : 3 units ZEMIX

Water Weighing Capacity : 1500 kg

Water Weighing Load-cells : 2 units ZEMIX

Additive Weighing Capacity : 1 x 50 lt

Additive Weighing Load-cells : 1 unit 100 kg – ZEMIX



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

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

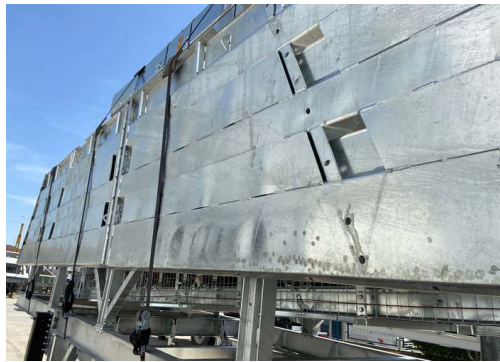
Water Discharge Valve : Butterfly Type mm - **WAM (Italy)**

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



## Aggregate Storage Bins

Aggregate Bins Capacity&Quantity	: 160 m <sup>3</sup> (40 m <sup>3</sup> capacity each one – 4 bins (Linear))
Bunker Discharging Gate(s)	: 2 Gates in each bin – Totally 8 Discharging Gates
Vibrator Brand & Capacity	: 700/3 – 2 Units <b>WAM-OLI (Italy)</b>
Pneumatic Piston Brand & Capacity	: 8 Units – <b>Festo (Germany)</b>
Pneumatic Valve	: 8 Units – <b>Festo (Germany)</b>



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  
 Vibrator : 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





## Transfer Conveyor

Belt Quality : EP 125 / 4 coats

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

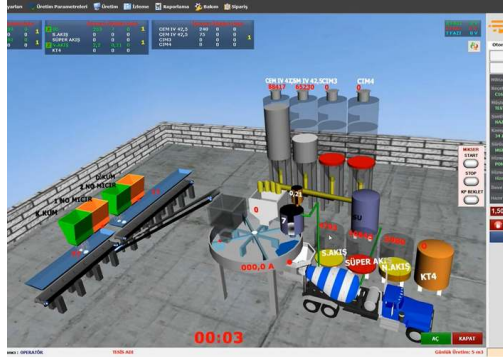
## Grid Blasting Before Painting



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.

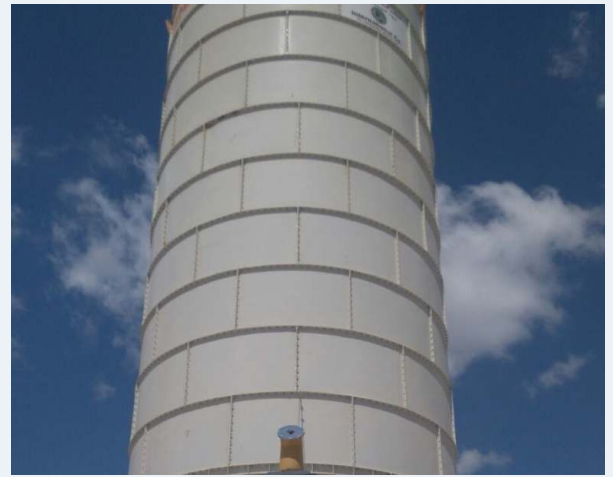
**Planned Manufacture;** Before manufacturing is completed, you can enter the next production to program. If you save the next production record to program, after the last production finish, the next production will start automatically.

**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.

## Bolted Type 250 Tons Cement Silo - 4 Units

Bolted silos are preferred due to its' compactness for transportation. It can be transported with containers for avoiding freight costs. Because of its modularity, Semix is able to manufacture welded silos in a range between 100 to 2000 tons. Semix provides a mechanical supervisor for assembling the bolted silo correctly. Semix has succeeded to install bolted silos (which's capacities of more than 500 tons) in Peru, Israel, Germany, Dubai, and United Kingdom.



## EQUIPMENTS

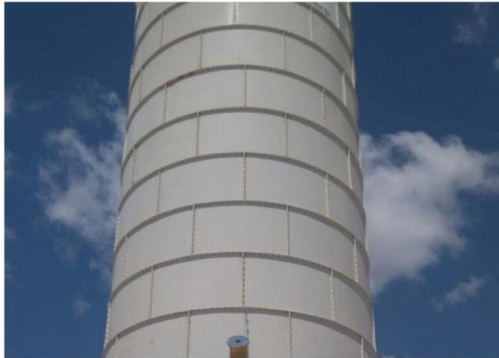
1. PRESSURE RELIEF VALVE: **WAM** VCP3751C
2. BUTTERFLY VALVE: **WAM** V2FS300SN
3. PNEUMATIC ACTUATOR: **WAM** - CP126
4. MICRO SWITCH: **WAM** - MIC23
5. LEVEL INDICATOR: **WAM** ILT TYPE
6. SILO FILTER: **WAM** BRAND

## SCREW CONVEYORS

4 Units of **WAM** Screw Conveyors (Ø323 mm) will be assembled for discharging the cement.

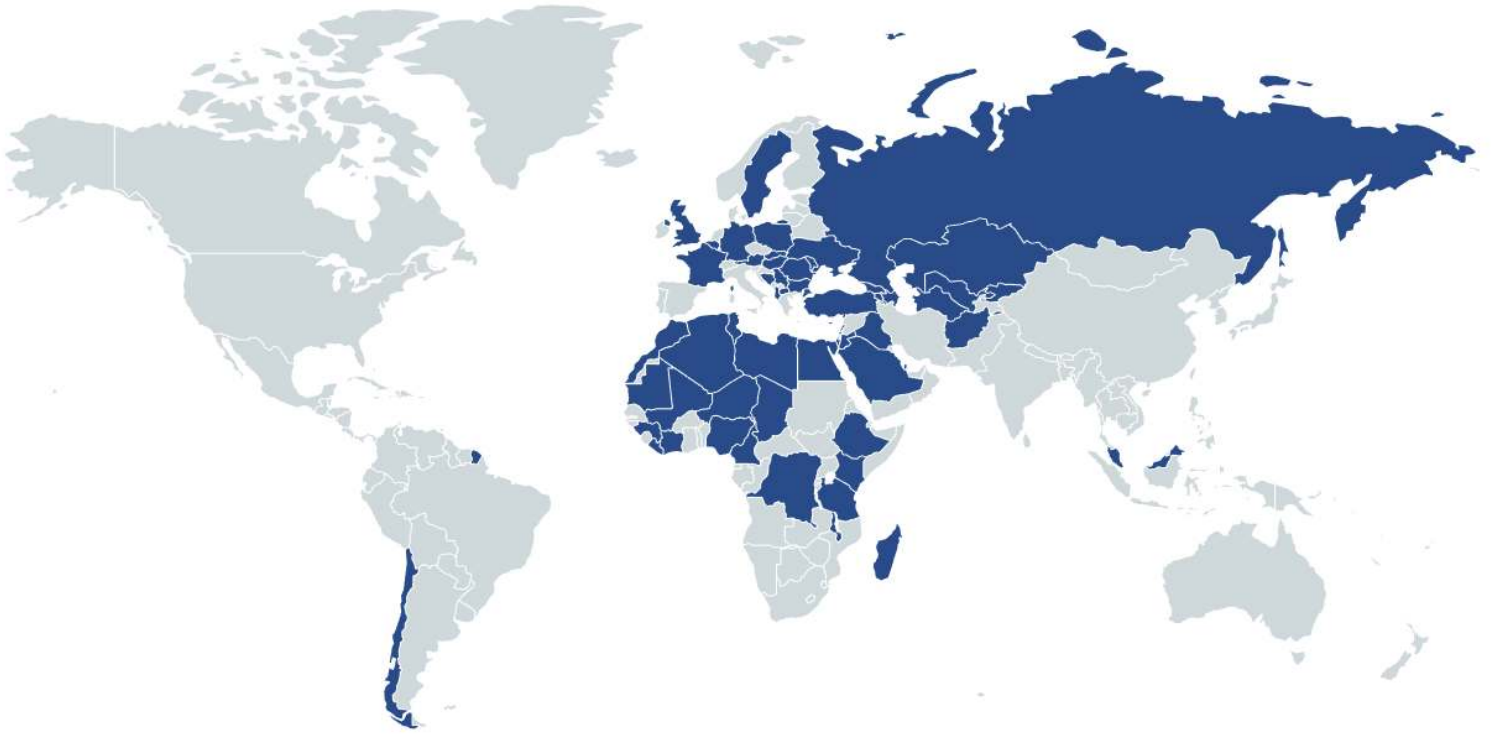


Product Gallery





# 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**  
DİVA İNŞAAT SAN. TİC. A.Ş.

**AKPINAR**

**çiftay**