# **SEMIX STATIONARY 160**

## STATIONARY CONCRETE BATCHING PLANTS



SMX-D-2303161618-4-**R1** 

#### **PROPOSAL**

**ETE Ready Mix** 

Mr. K Varghese Geroge

Dammam

KSA

Delivery

10-12 weeks

Validity Of Offer

15-04-2023

Terms Of Payment

%50 Advance, %50 Before Shipment





#### **STATIONARY 160**

DESCRIPTION	AMOUNT	UNIT PRICE	TOTAL PRICE
1) STATIONARY 160	1	€328,000.00	€328,000.00
1.1) S160 STATIONARY CONCRETE BATCHING PLANT'S TOTAL CAPACITY: 160 M³/H	1	-	-
1.2) MIXER TYPE & CAPACITY: 6000/4000 (4.00 M³) SEMIX TWIN SHAFT MIXER	1	-	-
1.3) MIXER MOTOR POWER : 2 X 75 KW	1	-	-
1.4) AGGREGATE BIN CAPACITY: 5 X 25 = 125 M <sup>3</sup> T TYPE (2+3 SECTION)	1	-	-
1.5) AGGREGATE WEIGHING HOPPER: WEIGHING CONVEYOR BELT	2	-	-
1.6) CEMENT WEIGHING HOPPER: 2000 KG	1	-	-
1.7) MICRO SILICA WEIGHING HOPPER: 500 KG	1	-	-
1.8) WATER WEIGHING HOPPER : 1200 KG	1	-	-
1.9) ADDITIVE WEIGHING HOPPER: 40 LITRES	1	-	-
1.10) ADDITIVE PUMPS:	4	-	-
1.11) AGGREGATE TRANSFER MECHANISM : BELT CONVEYOR FROM THE MIDDLE OF AGGREGATE BUNKER	1	-	-
1.12) COMPRESSOR : 2400 LT	1	-	-
1.13) AUTOMATION SYSTEM : SCHNEIDER (PC & PLC)	1	-	-
1.14) CONTROL CABINE: PRESENT	1	-	-
1.15) SILO ACCESSORIES (FILTER, SCREW CONVEYOR Ø323 MM, SILO EQUIPMENTS SET)	5	€8,000.00	€40,000.00
1.16) AGGREGATE BINS PRE-FEEDING SYSTEM WITH UPPER MOVABLE CONVEYOR (INCLUDING REMOTE CONTROL UNIT & CONTROL PANEL)	1	€87,000.00	€87,000.00
1.17) ICE WEIGHING SYSTEM	1	€8,500.00	€8,500.00
		Total:	€463,500.00
TRANSPORTATION			
		Stationary 160 - (EXW Ankara)	€0.00
		General Total:	€463,500.00

#### **OPTION 1**

DESCRIPTION	AMOUNT	UNIT PRICE	TOTAL PRICE
1) CEMENT SILO BOLTED TYPE 100 TONS	1	€16,500.00	€16,500.00
2) CEMENT SILO BOLTED TYPE 300 TONS	4	€67,000.00	€268,000.00
		Total:	€284,500.00
TRANSPORTATION			
	Cem	ent Silos - (EXW Ankara):	€0.00
		General Total:	€284,500.00



SEMIX Stationary 160 is equipped with 6750/4000 liters capacity Twin Shaft Concrete 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. 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.



#### **Powerful Structure**

**SEMIX** S160 Stationary Concrete Batching Plants offers a robust steel form for high durability. **S160** is able to serve in long lasting massive projects without any failure.

#### **High Volumes of Concrete Production**

**SEMIX** S160 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.



#### **Product Gallery**













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

Compacted Concrete Per Batch: 4.00 m<sup>3</sup>

Dry Volume : **6.0 m**<sup>3</sup>

Motor Power : 2 x 75 kW





#### **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

#### **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.





#### **Weighing Hoppers**

Cement Weighing Capacity: 2000 kg
Cement Weighing Load-cells: 3 units
Micro Silica Weighing Capacity: 500 kg
Micro Silica Weighing Load-cells: 3 units
Water Weighing Capacity: 1200 kg
Water Weighing Load-cells: 2 units
Additive Weighing Capacity: 1 x 40 lt
Additive Weighing Load-cells: 1 unit
\*Based on 4.00 m³ Twin Shaft Mixer

#### **Weighing Hopper Equipments**

Cement Discharge Valve : Butterfly Type - WAM (Italy)

Cement Hopper Vibrator : 1 unit - OLI (Italy)

Micro Silica Discharge Valve : Butterfly Type - WAM (Italy)

Micro Silica 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 T Type (2+3) x 25 m<sup>3</sup>

Aggregate Bins
Capacity&Quantity

125 m³ - 25 m³ capacity each one - 5 bins (T Type)

Bunker Discharging Gate(s)

2 Gates in each bin - Totally 10 Discharging Gates

Vibrator Brand & Capacity

2 Units WAM-OLI (Italy)

Pneumatic Piston Brand &

DSBC 80-250 Piston 10 Units - Festo

(Germany)

Pneumatic Valve : 10 Units – Festo (Germany)

#### Weighing Conveyor - 2 Units

Belt Quality : EP 125 / 4 coats

Vibrator : 2 Units - WAM-OLI (Italy)

**Drums** : 10 mm Rubber Coated

**Bearings** : Lubrication Grease Nipple over SNH series

Capacity

Scraper : V type with its weights -1 Unit

Emergency Stop Button : 1 Unit

Pull-rope Switch : 1 Unit





#### **Transfer Conveyor**

Belt Quality & Sizes : EP 125 / 4 coats 1200 mm x 28000 mm

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

#### **SCREW CONVEYORS**

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





#### **EQUIPMENTS - 5 SET**

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. AIR JETS AERATION SYSTEM

7. SILO FILTER

#### Bolted Silos - 100 Tons 5 Units (OPTIONAL)

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 bolted silos in a range between 100 to 2000 tons. Semix provides a mechanical supervisor for assembling the bolted silo correctly.



### **Product Gallery**







# Schneider Electric





**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

































