SEMIX COMPACT 100

Precast Plant for 7D Construction



SMX-A-2303011613-8

PROPOSAL

GLOBAL CONSTRUCTION SERVICES

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Delivery 12-16 Weeks

Validity Of Offer 04-04-2023

Terms Of Payment %50 Advance, %50 Before Shipment





COMPACT 100

1) COMPACT 100 1.1) TOTAL CAPACITY: 100 YD³/H 1.2) MIXER TYPE & CAPACITY: 2 YD³ TWIN SHAFT MIXER 1	1	0,000.00 \$280,00 - -	-
	1		-
1.2) MIXER TYPE & CAPACITY: 2 YD ³ TWIN SHAFT MIXER	1	-	-
		-	
1.3) MIXER MOTOR POWER: 2 X 50 HP			-
1.4) AGGREGATE BIN CAPACITY : 2 X 12 = 24 YD ³	1	-	-
1.5) AGGREGATE TRANSFER MECHANISM: CONVEYOR BELT	1	-	-
1.6) AUTOMATION SYSTEM : SEMIX CONTROL SOFTWARE WITH SCHNEIDER ELECTRICAL PANEL (PC & PLC)	1	-	-
1.7) ADDITIVE WEIGHING HOPPER	1	-	-
1.8) CEMENT WEIGHING HOPPER 1	1	-	-
1.9) WATER WEIGHING HOPPER 1	1	-	-
1.10) ADDITIVE PUMPS: 1	1	-	-
1.11) CONTROL CABINE: PRESENT	1	-	-
1.12) COMPRESSOR: PRESENT	1	-	-
1.13) 75 TONS CEMENT SILO (WITH COMPLETE EQUIPMENTS)	1	-	-
1.14) INSTALLATION AND COMMISSIONING	1	-	-
1.15) SHIPPING TO BALTIMORE	1	-	-
	Su	ubtotal: \$280,00	00.00
		Total: \$280,00	00.00
TRANSPORTATION			
		Ġ	\$0.00
	Genera	al Total: \$280,00	00.00



Overview of the Compact Concrete Batching Plant

Model: Compact 100 Concrete Batching Plant

Theoretical Production Capacity: 90-140 yd³/h (Depending on the mix

design)*

Aggregate Storage Bins: 1 bins total 12 yd³ storage capacity **Mixer Capacity**: 2.0 yd³ compacted Concrete per batch **Total Electrical Power**: 2 x 50 HP, 60 Hz Frequency

*Technical changes can be made after the final examination of the engineering department.

Designed For Small Areas

SEMIX Compact type batching plants are designed for limited spaces. Our engineering team succeeded in installing a compact type batching plant into the undermining tunnel. Thanks to its design, **SEMIX Compact Concrete Batching Plants** can be fit into areas with minimal space requirements.





Weighing Hoppers

Cement Weighing Capacity: 2425 lbs Cement Weighing Load-cells: 3 units Water Weighing Capacity: 1350 lbs Water Weighing Load-cells: 2 units

Additive Weighing Capacity: 1 x 20 lt (optional 2 to 4 additional hoppers)

Additive Weighing Load-cells: 1 unit 220 lbs

Weighing Hopper Equipments

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

Cement Hopper Vibrator: 1 unit - OLI (Italy)

Water Discharge Valve: Ø 100 Butterfly Type mm - **WAM (Italy)** Additive Discharge Valve: 1 Unit - 1 ½" ball valve with actuator





Aggregate Weighing Conveyor

Rubber Belt Conveyor: **EP125, 4 layered**

Vibrator: 1 unit, WAM-OLI (Italy)

Motor Power: 11 kW three phase electric motor.

Drive drum: Bolted shaft design for easy maintenance.

Aggregate Storage Silos







- Storage Capacity: $2 \text{ bin } \times 12 \text{ yd}^3 = 24 \text{ yd}^3$ (with heaping, 14 yd^3 is achievable per bin)
- Shape of the design: Square type or Inline storage hoppers
- Pneumatic Pistons: **Festo (Germany)**
- Pneumatic Valves: **Festo (Germany)**
- Vibrators: 1 Vibrator located at the middle of discharging hatches with

strengthened plate, MVE 200/3 WAM-OLI (ITALY)

- Sheet Metal: 4 + 4 milimeters S235JR steel:
- -Strenghtened with the extra sheet weldments for back-up.
- -Trapezoidal bending process for increasing the durability



2.0 yd3 Twin Shaft Mixer - Technical Details

Compacted Concrete Per Batch: 2.0 yd3

Dry Volume: **3.0 yd³**Motor Power: **2 x 50 HP**Maximum Grain Size : **4 inch**

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.



References

































