

# MEKA

## MB-100M

MOBILE CONCRETE BATCHING PLANT

[www.mekaconcreteplants.com](http://www.mekaconcreteplants.com)



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MB-100M model is the best choice for mass concrete production on temporary work sites. Combining the durability of stationary concrete batching plants with the flexibility of the mobile design it becomes an unmatched solution for every professional. The installation requires minimum or no foundations which reduces the operational costs and brings the mobility to a new level.



MEKA CRUSHING SCREENING  
AND CONCRETE BATCHING TECHNOLOGIES  
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# TECHNICAL SPECIFICATIONS

<b>Compacted Concrete Output</b>	83-94 m <sup>3</sup> /h   108-123 yrd <sup>3</sup> /h (For 30 and 20 seconds mixing times)
<b>Mixer Capacity</b>	2,0 m <sup>3</sup>   2.6 yrd <sup>3</sup> Compacted Concrete
<b>Mixer Type</b>	Twin Shaft
<b>Mixer Motor Power</b>	2x37 kW   2x50 Hp
<b>Aggregate Bins</b>	4x15-18 m <sup>3</sup>   19.6-23.4 yrd <sup>3</sup>
<b>Aggregate Feeding</b>	Ramp or Pre-Feeding System
<b>Aggregate Weighing/Transfer belt</b>	1.000x15.630 mm   3'-3"x 51'-3"
<b>Air Compressor Included,</b>	7,5 kW   10 Hp
<b>Piston or Screw Type</b>	
<b>Cement Weighing Hopper</b>	1.000 kg   2,205 lbs
<b>Water Weighing Hopper</b>	700 kg   1,545 lbs
<b>Additive Weighing Hopper</b>	1 or 2 x 20-40 kg   1 or 2 x 44-88 lbs
<b>Cement Screw Conveyor</b>	1-4 pcs D=273mm   1-4 pcs D=10.7"
<b>Length</b>	18.710 mm   61'-5"
<b>Height</b>	4.540 mm   14'-11"
<b>Width</b>	3.100 mm   10'-2"

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## MB-100M

MOBILE CONCRETE BATCHING PLANT

### HIGHLIGHTS

LONG LIFE,  
EASE OF OPERATION  
AND SUPERIOR  
FEATURES FOR  
EXCELLENT CONCRETE  
PRODUCTION

#### RIGID ROBUST CHASSIS

Heavy and stable main chassis allows extreme durability, safe transportation, continuous long-life operation and sensitive weighing by minimizing the vibrations to the scales.

#### HIGH MOBILITY

Due to its rigid structure MB-100M concrete plant with 2 complete sets of screw conveyors, filters and other silo equipment can be transported with the help of only one single trailer truck. All MEKA mobile batching plants are equipped with two axles to ensure good weight distribution.

#### FAST INSTALLATION

MEKA Mobile concrete batching plants come pre-wired with maximum equipment installed to ensure fast installation on site. Typically a standard mobile concrete batching plant can be installed in 1-2 days.

#### MINIMUM FOUNDATION REQUIRED

Due to the design focused on mobility our mobile batch plants require no or minimum foundation to minimize the operational costs on temporary sites.



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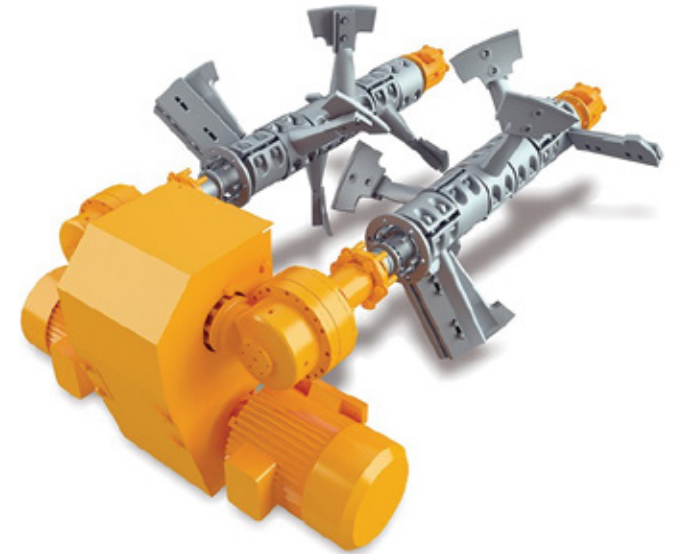
# 2,0 OR 2,25 m<sup>3</sup> TWINSHAFT MIXER

### 2,0 OR 2,25 m<sup>3</sup> TWINSHAFT MIXER

Achieving the desired homogeneity and workability of modern concrete mixtures, within the shortest period possible, is often the most critical phase of concrete production, therefore, the need for reliable, high quality mixing equipment is essential.

Main MEKA Twinshaft Mixer Advantages

- Reliable
- Manufactured with high precision machinery
- Heavy and Robust
- Hi resistant Ni-Hard cast inner linings
- Unique paddle structure
- Unique bearing and seal design
- Perfect lubrication system
- RCC Concrete Ready



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### UNIQUE SINGLE-CHASSIS DESIGN

All the equipment necessary for the operation of the batch plant is installed on the main chassis and is being transported on it.

### ADDITIVE TANK

Preinstalled additive tank allows storage for 1 or 2 additives (depending on the model). This feature is very useful on temporary and distant sites.

### ADDITIVE PUMP

Additive pumps come preinstalled as well and supply the additives from preinstalled additive tanks or any other tanks that are connected.

### WATER PUMP

MEKA installs water pump which supplies water from the buffer tank to the scales. It can be connected to bigger water tanks if necessary. By default, it supplies the water from buffer tank to the water weighing scales.

### AIR COMPRESSOR

We have developed a place for air compressor as well. It comes preinstalled on the main chassis and does not need to be removed for transport.

### WATER BUFFER TANK

No water? No problem. Water buffer tank (3 tons) for water supply ensures continuous operation despite water supply interruptions and low volume supply problems that are very common on temporary sites. Water buffer tank can be filled manually or with the help of a floating switch that can control the main supply pump or valve.

### PRE-WIRED AND TESTED

Almost no cable work is required on site since all the equipment is pre-wired at MEKA factory to minimize the installation time on site. All the mechanical and electrical parts are tested for any possible faults to ensure the quality and reliability of the final product.



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### **BELT CLEANING SYSTEM**

Due to the design and restricted space on the chassis transfer belt conveyor's angle on mobile concrete batching plant is steep and require chevron type rubber belt. Generally, chevrons are difficult to clean and create material spillage on the mixer platform and all around the belt. Simple scrapers are not performing well. All MEKA mobile batch plants are equipped with cleaning brush system with electrical drive by default.

### **AGGREGATE DRIP TRAYS**

What is left after the cleaning system is being collected by drip trays which discharge all the spilled material in one place. All MEKA mobile concrete batching plants are equipped with aggregate drip trays which help to keep the mixer platform and area around the transfer belt clean.

### **NO FRONT SUPPORTS**

Due to heavy duty chassis design, none of MEKA mobile concrete batching plants require front supports. The absence of front supports doesn't only reduce the installation time but also offers useful operation characteristics allowing for the mixer truck to approach from 3 points (180 degrees) and drive through. This feature is very useful for strict and narrow site conditions.

### **SUFFICIENT BELT WIDTH**

Many of the competitors are using narrower transfer belts to reduce the cost. This application increases the aggregate transfer time which means less overall capacity. MB-60M and MB-100M are equipped with 800mm and 1000mm transfer belts respectively to maximize the stated capacity.



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### HIGH WEIGHING ACCURACY

**Heavy Main Chassis:** Heavy main chassis minimizes the vibrations occurring during normal operation coming from the loading process, belt operation and mixing. Less vibration not only increases the accuracy but also increases the weighing speed which contributes to overall capacity.

**Separate Weighing Hoppers:** On all MEKA concrete mixing plants weighing hoppers for cement, water, additives and other materials are separated from the mixer frame and are installed on a separate chassis to minimize vibrations. Installing these directly on the mixer frame transfers the vibrations coming from the mixer to the scales. It affects the weighing process which becomes less accurate and requires more time to finish. Both accuracy and speed are negatively affected.

**Multi-Loadcell Design:** Cement and water scales are equipped with 3 and 2 loadcells respectively to optimize the load distribution and to maximize the accuracy. On the other hand, cardan connections allow free movement and prevent the loadcell and other connection from breakdowns. MEKA never installs weighing hoppers on mixers.

### HIGH QUALITY COMPONENTS

We offer only premium parts from global well-known brands with our concrete batch plants. Most of the equipment can easily be found on global markets. This ensures long-term reliable continuous operation with minimum possibilities of break-downs.

### EASY MAINTENANCE

Wide service platforms on the mixer chassis and service platforms on the weighing level allow safe and easy servicing, which is very important from health&safety perspective.





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## OPERATIONAL OPTIONS

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### **BUILT-IN 30 TON CEMENT SILO**

Considering the mobility and installation in distant locations where cement supply might be difficult we have designed a MB-60M mobile concrete batching plant with built-in 30-ton cement silo. This option is available upon request.

### **MOBILE STEEL FOUNDATION FOR CEMENT SILOS**

Mobile steel foundations allow installation of cement silos on flat ground without any concrete slab or column foundation required. This allows even faster installation and reduces the operational costs as the foundation can be transported together with the plant.

### **MOBILE AGGREGATE FEEDING SYSTEM**

Due to the structure and design of mobile concrete batching plants aggregate bin height is quite high. In order to reduce the cost for building a one-side or two-side feeding ramp we have developed a mobile aggregate feeding system which allows easy aggregate feeding without any extra costs for foundation or ramp.



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# OPTIONS FOR DIFFERENT CLIMATIC CONDITIONS



### HEATING OPTIONS

**Cladding:** MEKA offers sandwich panel or steel sheet cladding options.

**Steam Generators:** Steam generators start to provide steam in short period of time comparing to steam boilers. Different types of fuel are available.

#### Steam/Hot Water Suppliers:

**Open Cycle Heat Exchangers (Injection):** Being the most economical and effective type of aggregate heating systems open cycle steam heat exchangers inject hot steam into the aggregate under the pressure of 3 bar at 135 degrees Celsius. Despite hard moisture control open cycle is the most economical, effective and fast way of heating the aggregates.

**Closed Cycle Heat Exchangers (Circulation):** Closed cycle heat exchangers are circulating the steam inside the pipes and don't inject steam directly into the aggregates. The process of heating is therefore

slower according to open cycle but much better moisture control is provided. Closed cycle heat exchangers operate under the pressure of 6 bar at 160 degrees Celsius.

**Hot Water Heat Exchangers:** Hot water heat exchangers are circulating hot water inside the pipes. The process is the slowest among all of the types and is only used when big heat plants are nearby.

### COOLING OPTIONS

**Chillers:** MEKA offers a range of chiller systems to be used with concrete batching plants. Check the chillers product page for more information.

**Ice Weighing Hoppers:** MEKA offers ice weighing hoppers for implementation of ice during concrete production in extra hot conditions.

**Ice Screw Conveyors:** MEKA offers ice screw conveyor for implementation of ice during concrete production in extra hot conditions

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IMPROVE THE  
CAPABILITIES  
AND CHARACTERISTICS  
OF YOUR  
MEKA CONCRETE  
BATCH PLANT

### Additional Weighing/Dosing

Different concrete types and characteristics can be achieved with a variety of additives, powders, fibers and many other options. MEKA offers additional weighing equipment for automatic manufacturing.

- Microsilica weighing hoppers (dry or slurry)
- Ice weighing hoppers and screw conveyors
- Flowmeters for water and additives for exact or tempered weighing
- Pigment (dry paint) dosing systems
- Automatic fiber dosing systems for soft or steel/polypropylene fiber

### Extra Health and Safety Features

Take care of your people on the highest level. Ask for additional health and safety options.

- Isolation of moving parts
- Pinch valves
- Safety key interlocking systems
- Silo pressure sensors and alarms

### Measurement and Monitoring

Additional measurement and monitoring equipment allows full control of the mixtures consistency and temperature, stock level and other important characteristics.

- Mixer moisture probe and flowmeter for water/cement ratio correction
- Mixer Temperature monitor
- Mixer slump reader
- Silo level control accessories (Radar/Ultrasonic measurement)
- Cement and Water Temperature monitor

### Operational Options

MEKA operational options are designed for ease and safety of the operation along with extra useful features.

- Swivel Chute to prevent concrete leak on the trucks
- Moving discharge chutes for different operations
- High Pressure Mixer Washout System
- Filter over the mixer for dust suppression
- BIG-BAG cement transfer system

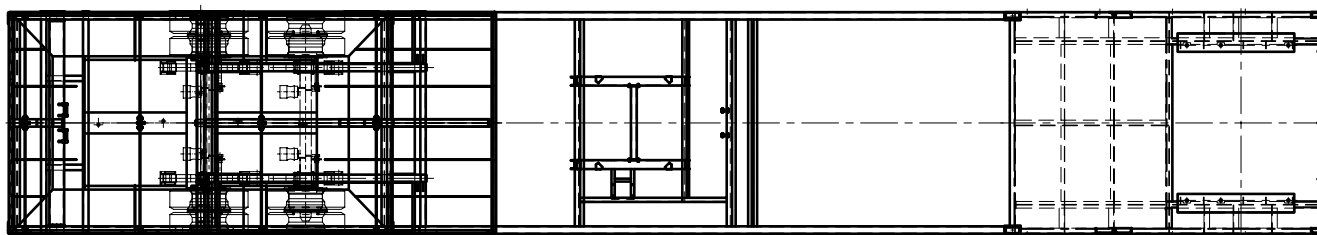
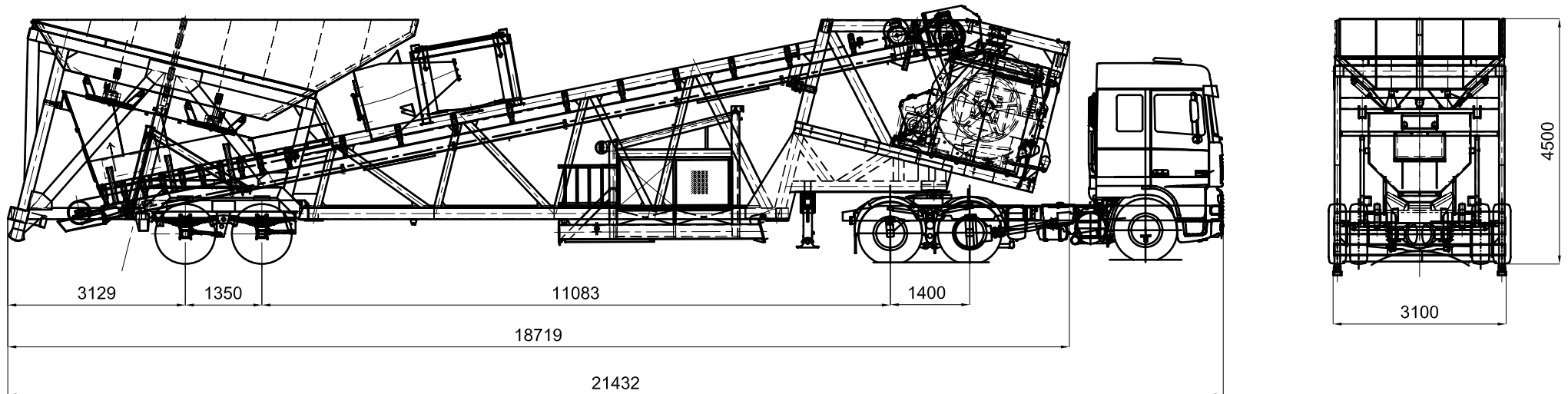


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## TECHNICAL HIGHLIGHTS

### TRANSPORTATION SPECS



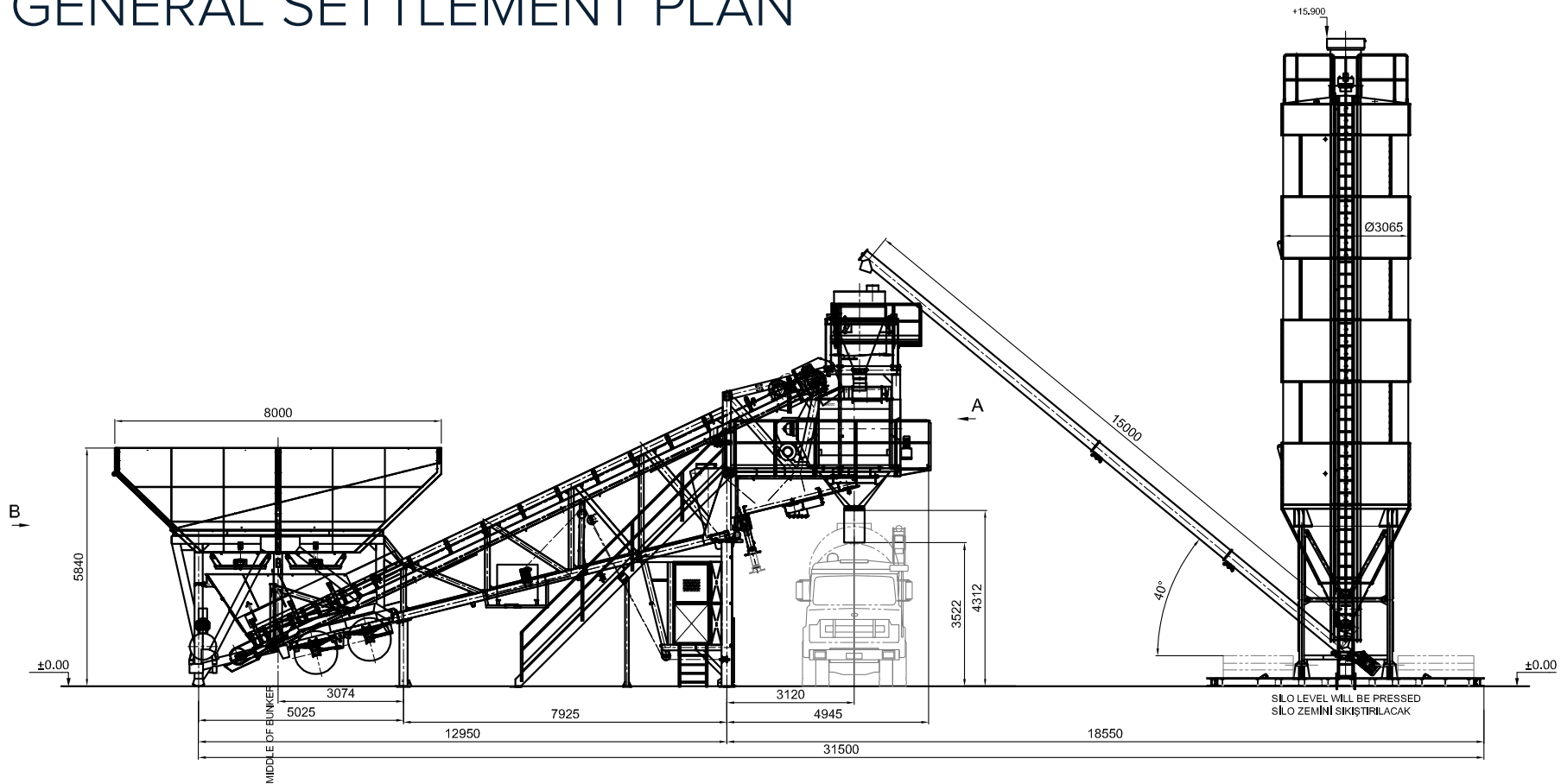
TOTAL WEIGHT: 40.000 KG

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## TECHNICAL HIGHLIGHTS

### GENERAL SETTLEMENT PLAN



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CRUSHING SCREENING AND  
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TECHNOLOGIES

THE CHOICE OF  
PROFESSIONALS  
IN THE AGGREGATE  
PRODUCTION,  
READY-MIX CONCRETE  
AND MINING INDUSTRIES



Meka has developed and produced mobile, fixed, and compact concrete plants, concrete recycling systems, fiber feeding systems, crushing-screening machines, and complete facilities for many projects including concrete road, RCC, and precast applications. Today, more than 2,000 Meka plants in over 65 countries across four continents contribute to the construction of a better world. Meka is preferred by global leaders such as Holcim, Lafarge, Cemex, and Heidelberg, and it is acknowledged as “The Choice of Professionals” worldwide.



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CRUSHING SCREENING AND  
CONCRETE BATCHING  
TECHNOLOGIES

The Choice of Professionals  
in the Aggregate Production,  
Ready-Mix Concrete  
and Mining Industries

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