M 120



M 120 / SCOTLAND

M 120 MOBILE CONCRETE BATCHING PLANT

THE MOST PREFERRED MOBILE PLANT FOR SHORT-TERM PROJECTS

100 m³ CAPACITY

EASY AND QUICK **INSTALLATION**

FULL **AUTOMATION**

MORE THAN **100 COUNTRIES**

GREAT **CUSTOMER SATISFACTION**

GENERAL INFO

Plant Type	Mobile (Portable) Concrete Batching Plant
Plant Capacity	100 m^3/hour compacted concrete
Mixer Capacity	2,25 m^3 compacted concrete
Mixer Type	Meka Twin Shaft Mixer
Voltage/Frequency	400V / 50Hz - Standard value. May vary depending on regional standards
Control	Fully automatic with SIEMENS PLC/SCHNEIDER PLC

WE ARE MEKA. WE CREATE THE RIGHT SOLUTIONS TO AGGREGATE PRODUCTION, READY-MIX CONCRETE AND MINING INDUSTRIES.

sales@mekaglobal.com • **www.mekaglobal.com**

MAIN ADVANTAGES

Ultra Performance and Flexibity

MEKA M 120 Mobile concrete batching plants are flexible, durable and give class-leading productivity. The plant is the preferred by contractors for temporary needs, and ready-mix concrete firms for corporate flexiblility.

Unique Single-Chassis Design

All of the operational equipment required for production is installed on the main single chassis of a mobile concrete plant and is transported on it.

Transport With a Single Tow Truck

M 120 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.

Quick Start Up Time

To reduce installation time and crane operations, the main components in the M 120 mobile concrete plant are installed, pre-wired and tested in production facilities.

Minimum Foundation Required

Thanks to its design Meka mobile batch plants require no or minimum foundations which reduces the operational costs and brings the mobility to a new level.

180 Degree Truck Mixer Aproach Opportunity

Due to heavy duty chassis design, M 120 MEKA mobile concrete batching plant not 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.

The information contained in this document is for general information purposes only. Options and technical details presented in your formal quotation supersede all the information presented in this brochure.
MEKA reserves the right to change the technical information and specifications indicated in this brochure.
Please consult your MEKA representative for the most updated data.



M 120 / UNITED KINGDOM

M 120 MOBILE CONCRETE BATCHING PLANT
TECHNICAL SPECIFICATIONS

1. MAIN CHASSIS

- Supporting legs, mobile chassis frame, safety guarding fences.
- The surface of the metalwork is sandblasted, primed, and coated with finishing paint
- The design of the mixing unit, creating a convenient height for work, is made of high-quality sheet steel in accordance with DIN/ISO norms.
- Weighing hoppers of cement, water, and additive are located on 1 mobile chassis.
- Fixing constructions of pipelines, electric cable channels.

2. CEMENT WEIGHING HOPPER

Hopper Design	Cone type, Sheet Metal, Dustproof and Waterproof
Paint	Anticorrosion Primer Coat, Final Coat
Weighing Capacity	0 - 1350kg
Loadcell	3 x 1000kg, with hinged suspension
Dust Suppression	By-Pass system connecting to Mixer
Discharge pneumatic valve	Equipped with Ø300 mm valve WAM (Italy)
Valve Actuator	CP 101 WAM (Italy)
Vibrator	1 Unit MVE 60/3 OLI-WAM (Italy)



M 120 / GEORGIA

3. WATER WEIGHING HOPPER

Hopper Design	Rectangular type, Sheet Metal, Dustproof and Moistureproof
Paint	Anticorrosion Primer Coat, Final Coat
Weighing Capacity	0 - 620kg
Loadcell	2 x 1000kg, with hinged suspension
Discharge pneumatic valve	Ø250 mm WAM (Italy)
Valve Actuator	CP 101 WAM (Italy)



M 120 / ROMANIA

4. ADDITIVE WEIGHING HOPPER

Hopper Design	Cone type, Sheet Metal, Dustproof and Waterproof
Paint	Anticorrosion Primer Coat, Final Coat
Weighing Capacity	0 -25 kg
Loadcell	1 x 50 kg, with hinged suspension
Discharge pneumatic valve	1 ½”spherical valve with actuator
Additive Pump	2 units pumps 1,5kw - 0,75kw with installations.
Other Features	A weighted portion of the additive is discharged into the water weighing hopper and then through a distributor are charged into the mixture together with water.

5. MEKA TWIN SHAFT MIXER

- The mixing process is carried out by two precise horizontal shafts with special shape paddles installed with an angle of 45degrees to ensure the intensive and compulsory movement of components and best homogeneity within short period of time.





MIXER MAIN SPECIFICATIONS

Application	Ready-mixed Concrete, CVC, RCC (Volume may vary depending on gravel size)
Special Applications	Please, contact us for any non-standard requests
Brand / Type	MEKA / MB-T 2,25 m^3, Twin-Shaft 3375/2250
Loading Dry Capacity	3.375 l / 3,375 m^3
Fresh Concrete Capacity	2.812,5 l / 2,8125 m^3
Compacted Concrete Output	2.250 l / 2,25 m^3
Mixer Body	Welded
Paint	Sand Blasted and Layer Painted (Epoxy Prime Coat + Industrial Paint for Final Layer) Total Paint Thickness 120-200 micron
Motor	Two electric motors 2x37 kW GAMAK (Turkey)
Motor Safety	Adjustable Thermic Overload Protection Relay SIEMENS (Germany)
Gearbox/Transmission	Planetary type / Elastic transmission with synchronization shaft
Mixing Shafts / Arms	Two robust shafts made from forged steel / Arms from cast steel, replaceable
Shaft Alignment	Ultra precision CNC robot machine with strict quality control
Shaft Cleaning Rings	Included as standard between the arms
Main Body Wearing Plates	High Crome - 20 mm thickness, replaceable
Mixing Paddle	Ni Hard 4 (Hardness 600 Brinell) - 30 mm thickness, replaceable
Automatic Lubrication	LINCOLN (Germany), SSV-KN Type Sensors, up to 350 Bar, 2lt.
Bearings / Seals	Long-life bearings with labyrinth type unique design steel and plastic seals
Discharge Gate	Hydraulic, rotary with manual pump for emergency discharge
Discharge Control	2 switches with wide range control in automation (time for opening, time for waiting)
Water Distribution	From nozzles over shafts
Emergency Stop Button	Lockable, according to CE regulations
Dust Suppression	By-Pass system connecting the Mixer, Cement Scales and Agg. Holding Hopper (It may vary according model of concrete plants)
Maintenance Cover	With safety switch, wide, dustproof, including inspection hatch with safety grid
Inspection Platform	Wide, non slippery grid, flippable.
Wiring	Completely pre-wired to the IP55 Junction Box on main chassis
Discharge Chute	With replaceable wearing liners
Mixer Weight	7.200 kg

6. AGGREGATE BIN

Bin Layout Design	Cross Type
Bin Volume	4x15m^3
Compartments	Cross 4 by 15m^3
Discharge Gate	1 gate per compartment
Pneumatic Pistons	4 units (FESTO (Germany) with electro-pneumatic control
Air Preparation Unit	1 unit, FESTO (Germany)
Sand Vibrator	1 unit, MVE 300/3 OLI-WAM (Italy)
Paint	Anticorrosion Primer Coat, Final Coat
Other Features	MEKA aggregate bins are designed and manufactured for heavy-duty operation in accordance with related DIN norms. The electro-pneumatically controlled valves provide easiness and options in discharge. They also create an elevation that decreases ramp building costs and operation costs by helping the materials slide and reduce friction and wear.



M 120 /TURKIYE

7. WEIGHING BELT CONVEYOR

Dimensions	1000 x 15.630 mm (Chevron Type Belt)
Paint	Anticorrosion Primer Coat, Final Coat
Loadcells	4 x 5000kg, with hinged suspension with loadcell gap protection system
Rubber Belt	EP 125 4 layers; 4/2 coating.
Bearings	SNH series bearings with lubrication greasers
Drums	Drive drum covered with 10mm rubber
Weighing Hopper Vibrator	1 unit, MVE200/3
Motor - Gearbox	30 kW (Accuplated gearbox)
Return Lock	On motor
Belt Cleaning	Brush type with external independent motor and gearbox
Other Features	Belt tensioning Aggregate distributors Side leak belt 150x10mm Hinged Maintenance Gate for easy maintenance.

8. AIR COMPRESSOR AND PNEUMATIC EQUIPMENT

COMPRESSOR

Brand	Atlas Copco
Model	AC100E500
Compressor Type	Piston
Capacity/Operating Pressure	774 l/min / 10 Bar
Motor Power	7,5 kw
Receiver Capacity	500 lt

- ATLAS COPCO has been manufacturing compressors since 1873.
- Cast iron cylinders with low-speed pistons have historically been recognised for their durability
- AC series oil lubricated compressors have a slow running compressor block for long service life.
- Pressure switch, safety valve and power socket with ‘Off’ and ‘Auto-operation’ buttons for single-phase models.
- Worldwide after-sales network in over 100 countries.

PNEUMATIC EQUIPMENT

Brand:	**FESTO (Germany)**
Pneumatic Pistons	Self-adjusting, hygienic and safe. Pneumatic self-tuning PPS damping, “saving up to 5 minutes of time to tune each cylinder.”
Pneumatic Actuators:	Part-turn actuators with 90 ° coupling angle Butt surface for NAMUR distributors / sensor blocks according to VDI / VDE 3845 Receiver tanks are located at the inlet of the main air consumers and ensure uninterrupted operation in normal cycle and in emergency mode.
Pneumatic Valves	Electro and pneumatic control
Air Preparation Units	FRC, dry or with oil spray
Pressure indicators	Pressure gauge with bar scale, psi, MPa
Degree of filtration	40 microns
Filter regulators	LFR - Reliable compressed air preparation for all conditions.



9. AUTOMATION

Basic Automation System

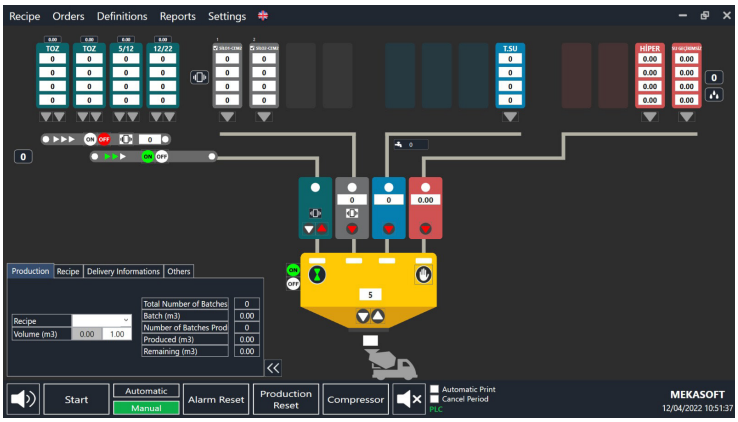
The plant is fully automated and the system is controlled on an 7” coloured touch-screen with integrated mouse and keyboard connection points.

- The system is equipped with Siemens/Schneider electrical installation devices and sensors.
- PLC is Siemens or Schneider.
- Advanced PLC programs and error control algorithms enable high sensitivity in weighing and dosage control even at maximum capacity.
- The MCC and command panel is built for all working conditions and equipped with electrical protection systems
- The operator is able to set up all parameters, enter receipts and perform calibration operations on the touch screen.
- All process, production and failure information are also visible and may be printed by the operator.
- The operator may chose between automatic or manual operations on the computer screen.
- The system provides real-time simulation for the operator. This ensures fast and safe training with no lot material.

Computerized Command And Control System (SCADA)

- The system which comprises a PC, printer, UPS and SCADA software enables the operator to perform all command and control functions, take reports, detect failures, etc on the PC screen with animation support.
- The operator is able to enter as thousands of recipes as desired, enter all customer and truck information into the system where production information is stored for decades.
- You can design your own waybill.
- You can find many different reports.
  There are many tooltips for using the program you can track and control your orders.
- It takes less than 1 minute to install the program on another computer.
- You can export all reports to excel or pdf.
- Remote servicing and maintenance is possible via internet.





10. CEMENT SILOS

MEKA CEMENT SILOS

Model	Capacity	Filling Pipe
100 Ton Welded	100 Ton	4”
100 Ton Bolted	100 Ton	4”
150 Ton Bolted	150 Ton	4”
75 Ton Bolted	75 Ton	4”
75 Ton Welded	75 Ton	4”

- Cement silos can be placed on the zero level ground wit its suitable supporting legs
- Climbing ladder up to the top of the silo with every 6 meters intermediate resting platform compatible with CE regulations.
- Manhole and silo top guardrail.
- Intermediate access platforms between cement silos
- Easy and economical transpor possibilty for bolted type cement silos (2 Units 100 ton bolted type cement silo can be fit into 1 unir 40’ OT (Open Top) container.
- Easy and quick installation opportunity for welded type cement silos.



WELDED / 75 - 100 TON



BOLTED / 75 - 100 - 150 TON



WELDED / 75 - 100 TON

11. SILO EQUIPMENT (WAM)

Pressure Release Valve	1 Unit
Level Indicator	ILTC220 (Max level)
Fluidisaton Nozzle	6 units per silo, U025
Mechanical Valve and Lever	V2FS300S + CM4
Other Items Included	Filter regulator, ½" Solenoid valve, 220v
	Pneumatic pipe installation



12. SILO TOP ZERO FILTER (WAM)

Filter	24 m² JetPulse
Dimensions	d=800mm, 1 mm AISI304 material
Filter Surface Area	24,5 m²
Number of Filter Cartridges	7 Units
Air Filtration Flow	2200 - 2500 Nm^3/h
Control	Electrical
Cleaning System	JetPulse, pressurized air
	High filtration efficiency due to POLYPLEAT filtering elements
	Tool-free filtering element removal
	Low dust emission level due to B.I.A.-certified filter media
	Filtering element replacement within a few minutes by one person



13. CEMENT SCREW CONVEYOR (WAM)

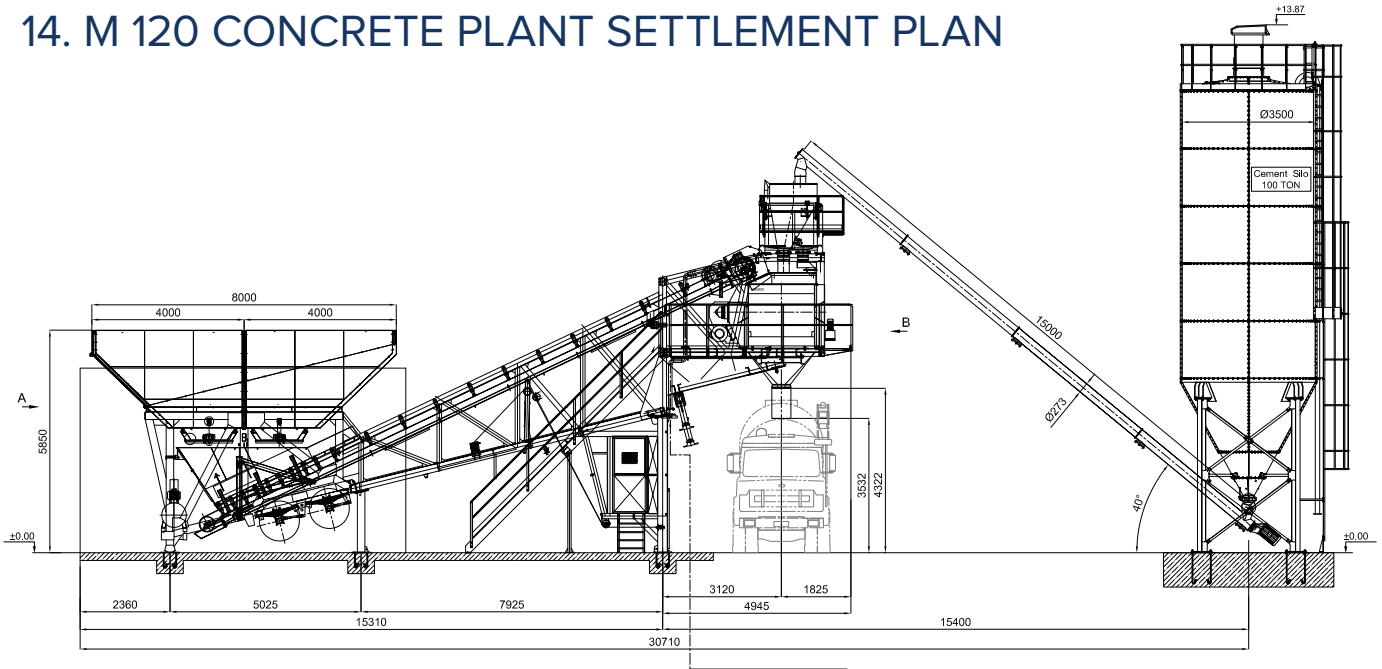
	Dimensions	Brand	Motor Power
Concrete Foundation	Ø 273x11500 mm	WAM	15 kw
Ground Level Concrete	Ø 273x15000 mm	WAM	18,5 kw

Other Features	Splined connecting sleeves
	Lifting eyes on each section of the screw
	Screw helicod welded to the central shaft
	End supports complete with self-adjusting shaft seals
	Maintenance-free intermediate cast supports aluminum housing with self-lubricating sliding clutches.
	Sectional design, compact overall dimensions
	Outer pipe complete with welded flanges, one inlet and one outlet pipe, inspection hatches under the first inlet pipe and under each intermediate support.

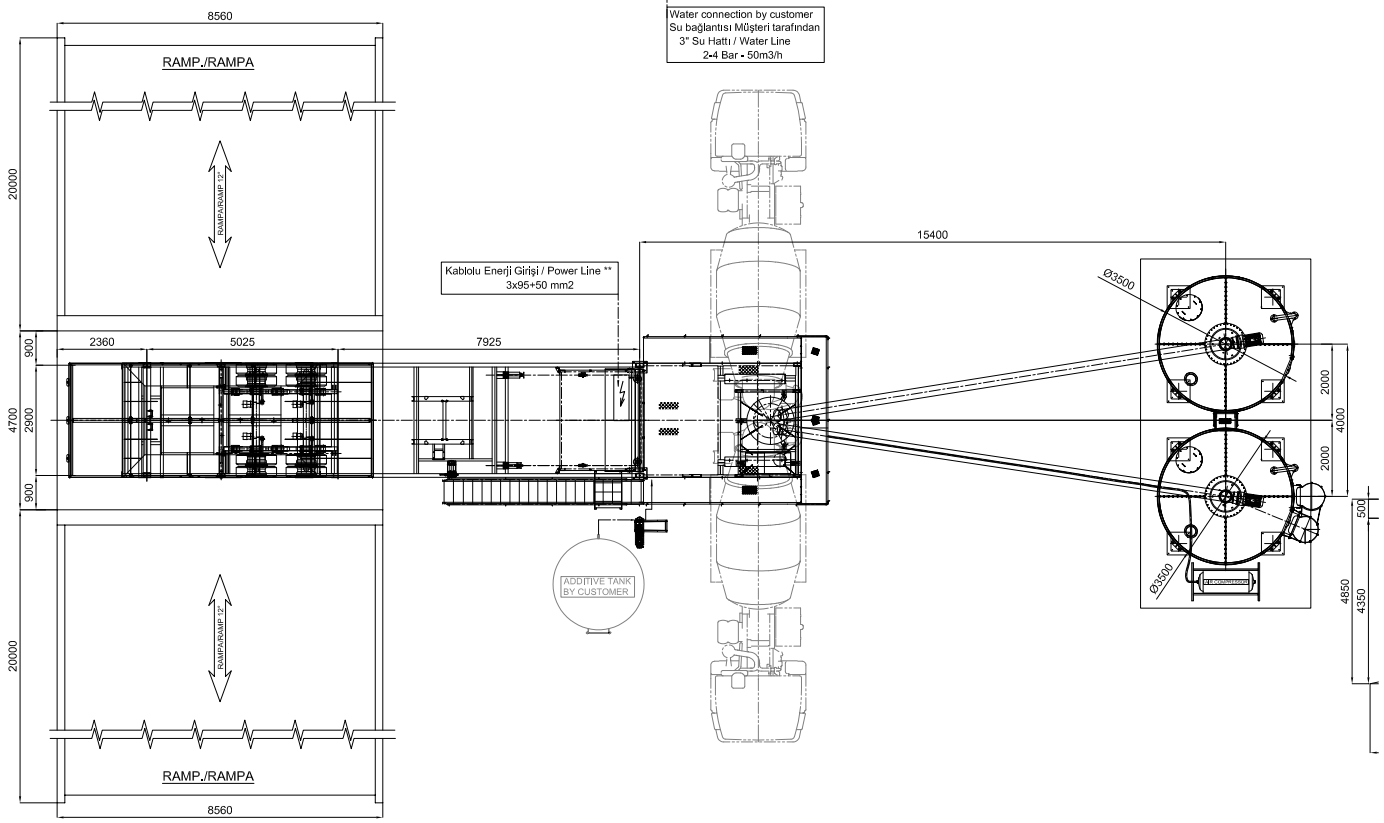


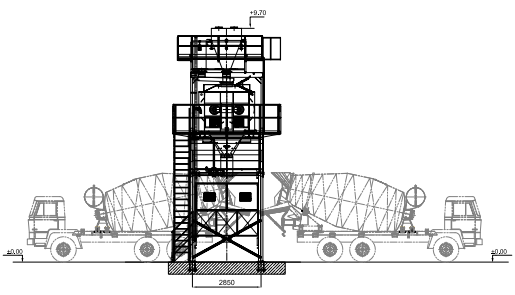


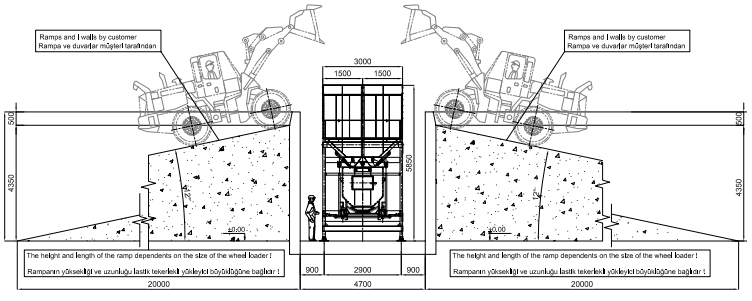
14. M 120 CONCRETE PLANT SETTLEMENT PLAN



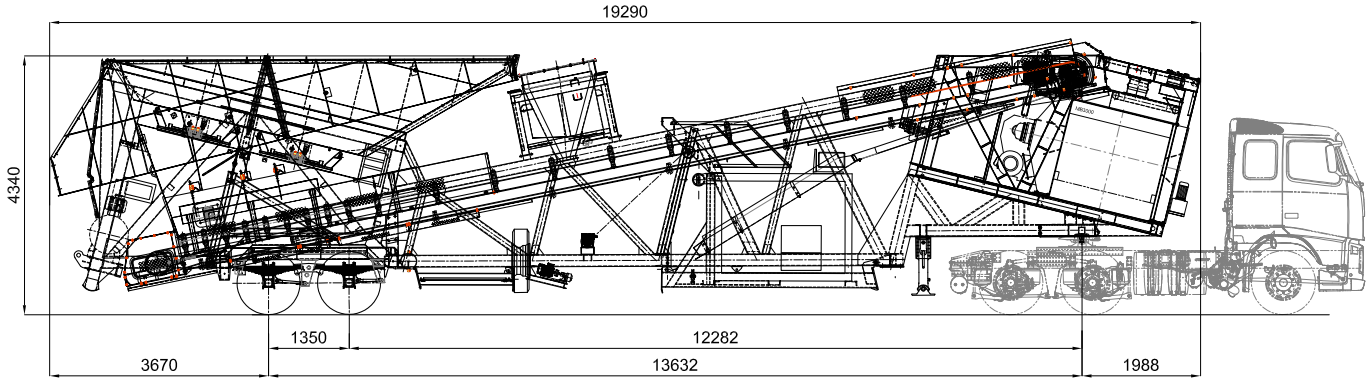
Water connection by customer
Su bağlantısı Müşteri tarafından
3" Su Hattı / Water Line
2-4 Bar - 50m3/h







15. TRANSPORTATION SPECTS





16. COMPACT AGGREGATE PREFEEDING SYSTEM (OPTIONAL)

Hopper Capacity	6 m^3
Conveyor Belt	800 X 17.000 mm
Motor - Gearbox	15 kw with accuplated gearbox
Grid	Included on hopper





17. M 120 MOBILE CONCRETE PLANT GALLERY















More than 110 Countries.
More than 4500 Plants.

MEKA Global has been a leading manufacturer of concrete batching plants, equipment, and crushing-screening-wet processing solutions.

MEKA

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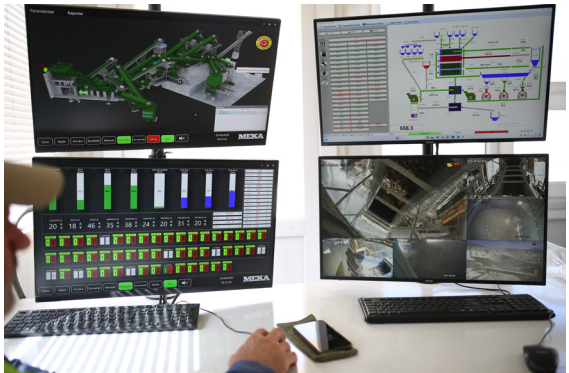














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With decades of proven expertise, MEKA has forged enduring partnerships with ready-mix concrete producers, mining and aggregate companies, global industry leaders, and most of the top contractors recognized by ENR.















CONCRETE BATCHING PLANTS AND SOLUTIONS

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FOR READY-MIX CONCRETE, CONSTRUCTION, AND PRECAST INDUSTRIES

Concrete Batching Plants are used for manufacturing of high-quality concrete for a variety of construction applications, such as buildings, roads, bridges and airports. MEKA offers a wide range of Ready-Mix Concrete Batching Plants and MEKA concrete mixers. Mobile, Compact and Stationary Concrete batching plants can be configured as special solutions for different kinds of concrete, including Roller Compacted Concrete, Road Concrete, Extra Heavy Concrete, Fiber-Reinforced Concrete, etc., according to the customers' specific requirements.

Our Single Shaft, Twin Shaft and Planetary Concrete Mixers cover a wide range of needs and add flexibility to the manufacturing process. MEKA also offers different components and options for the concrete sector that increase performance, add flexibility, improve accountability and enhance operational characteristics.

MEKA CONCRETE BATCHING SOLUTIONS

> Stationary Concrete Batching Plants
> Mobile Concrete Batching Plants
> Compact Concrete Batching Plants
> Job-Site Concrete Batching Plants
> RCC Batching Plants (RCC, Precast e
> RCC Batching Plants
> Precast Batching Plants
> Concrete Mixers
> Fiber Dosing Systems
> Plant Automation
> Technical Services and Spare Parts
> Concrete Batching Engineering Solutions
> Other Solutions













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