# TWIN SHAFT CONCRETE MIXERS

HIGH CAPACITY
AND EFFICIENCY







# CONCRETE BATCH MIXER IS THE MOST IMPORTANT COMPONENT OF CONCRETE PLANT

Homogenous mixing of aggregates, cement, water, additives and other components is one of the most important steps in concrete manufacturing.

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.

## WHAT IS TWIN SHAFT CONCRETE MIXER?

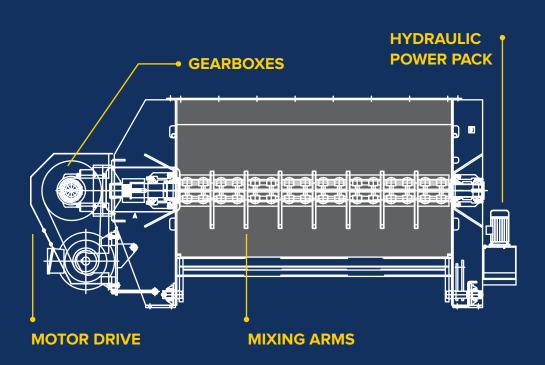
Twin shaft mixers are equipped with double synchronized mixing spiral. This structure allow excellent concrete mixing with short mixing and discharge times.

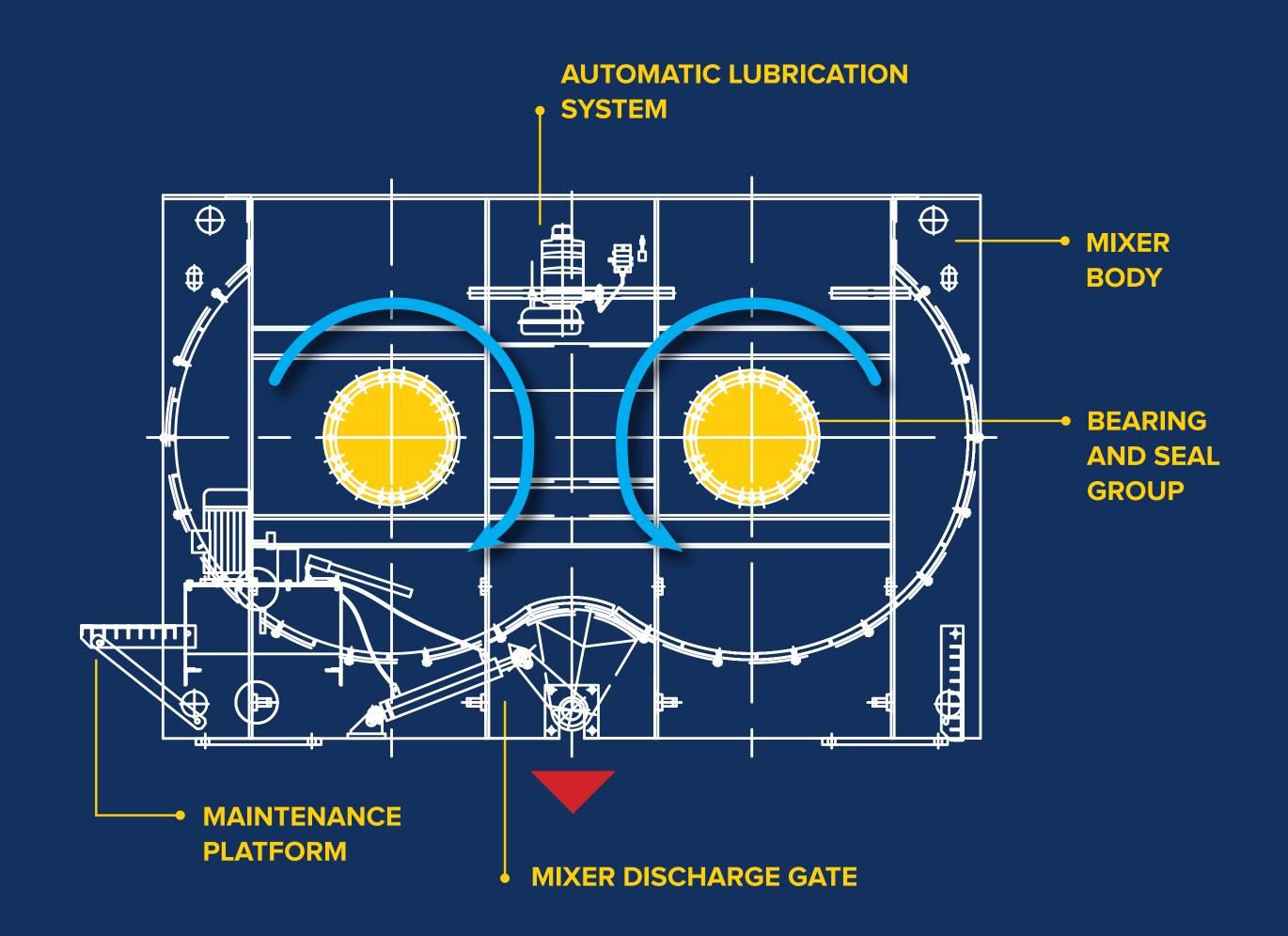




# THE MAIN PARTS OF MEKA TWIN SHAFT CONCRETE BATCH MIXERS

With each and every MEKA Concrete Plant, a MEKA Twinshaft Concrete Mixer is at its heart, which is a combination you can always rely on.





# MEKA TWIN SHAFT CONCRETE MIXERS HIGHLIGHTS

### 1 HEAVY AND ROBUST CHASSIS

MEKA Twin-Shaft concrete mixers offer long life, as they are 5-10% heavier than most of their equivalents on the market today, due to their robust steel structure and thick interior abrasion proof linings.

#### 2 MORE POWER

More powerful motors and gearboxes can be supplied according to the application, such as heavy-weight concrete with lead or iron ore, low slump concrete and others.

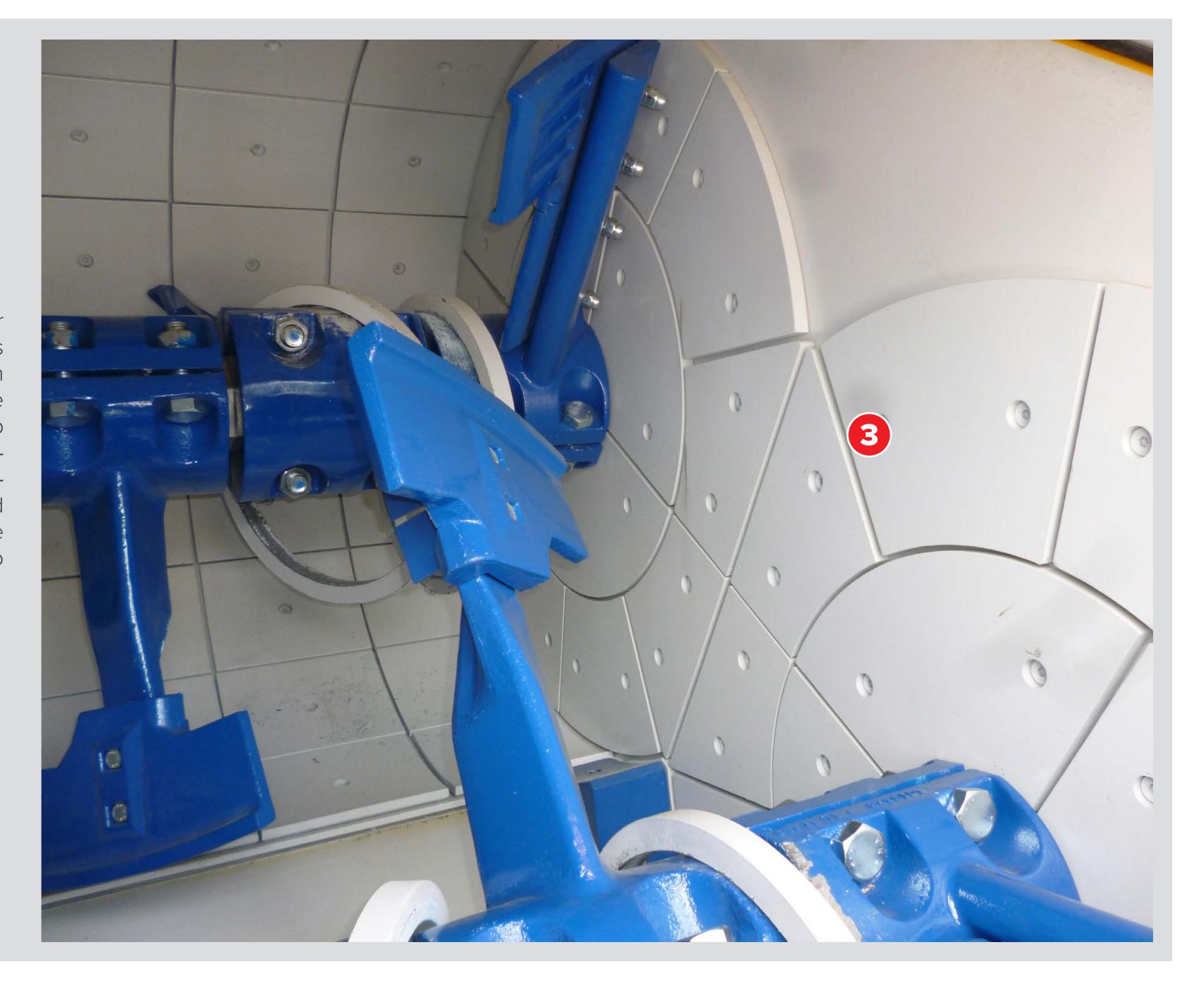




# MEKA TWIN SHAFT CONCRETE MIXERS HIGHLIGHTS

#### 3 NI-HARD WEARING LININGS

We offer NI-HARD alloy cast wearing linings in our Twin-Shaft Mixers as standard. This particular alloy is well known for its abrasion resistance and is used in a variety of different applications, such as concrete mixing, coal and other mineral grinding, slurry pump manufacturing, concrete pumping, piston manufacturing, gears manufacturing and many others. Despite being more expensive at the outset, Ni-hard out performs Hardox in terms of abrasion resistance and overall operating costs, as NI-HARD is proven to have up to 3 times the wear life of Hardox material.

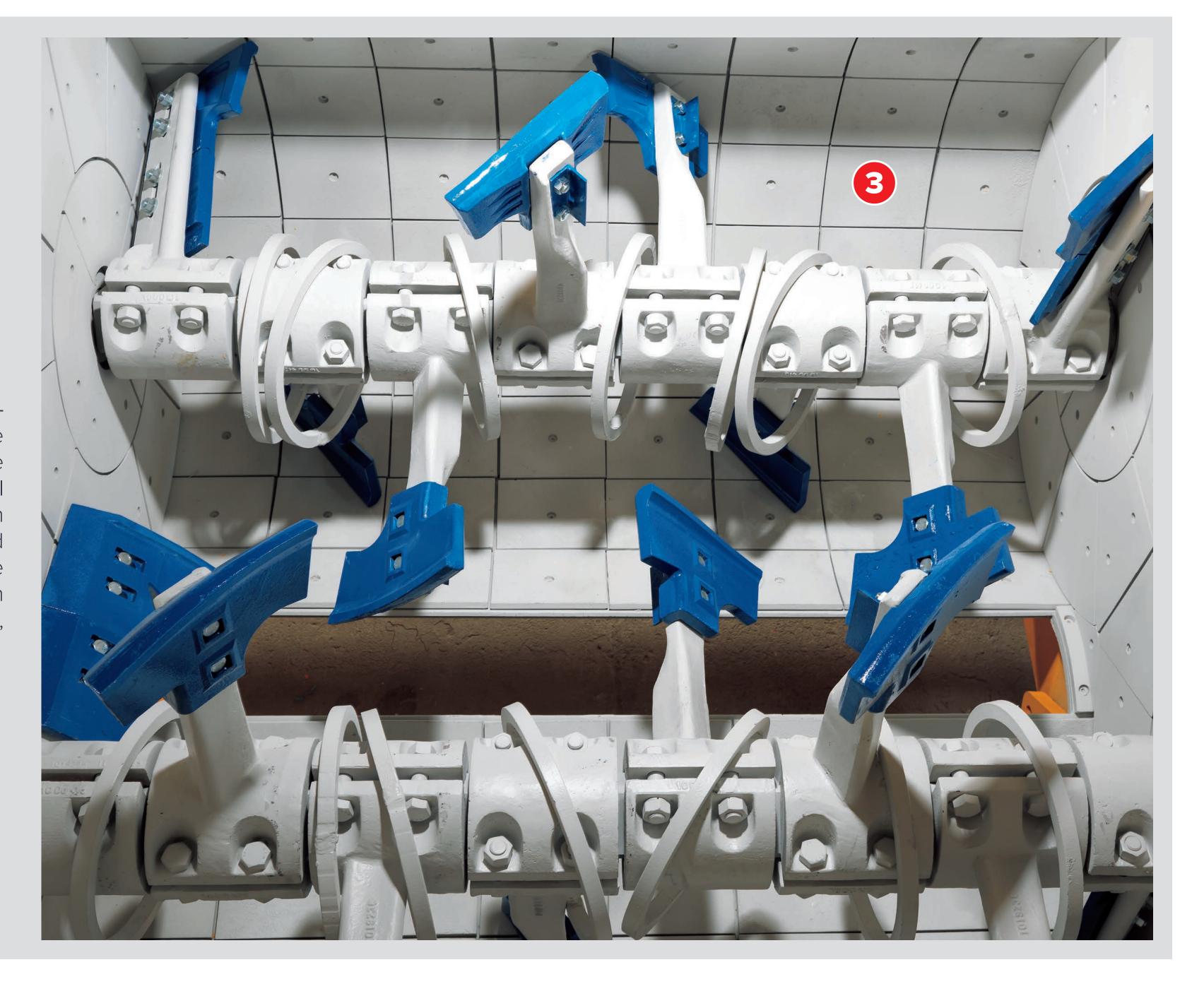




### 3 NI-HARD WEARING LININGS

WHY USING NI-HARD?

The Surface rigidity of Hardox materials is only approximately 3mm deep, therefore the abrasion resistance decrease rapidly, as the plates begin to wear. Unlike Hardox, the rigidity of NI-HARD material is identical through every section and layer, therefore, abrasion rates do not vary, as the plates begin to wear and subject to the rigidity of the aggregates used, the life expectancy of the Ni-Hard mixer wear parts, can reach a production capacity of up to 1,000,000 m<sup>3</sup>, depending on the material and mixer size.





### 4 UNIQUE BEARING AND SEAL DESIGN

The specially designed Bearing and Twin-Shaft Mixer seal group, consists of a number of metallic and polyurethane components. The bearings are place on the outside of the mixer in the specially designed housing, which prevents the ingress of cementitious grouts, if a seal failure should occur, therefore, with the correct routine maintenance, the life expectancy of each bearing can exceed 500,000 m³ of production. The Labyrinth seal structure, encapsulates the grease, provided by the automated greasing system, to create a seal, preventing the grout from penetrating the bearing.

### 5 MAINTENANCE (Inspection) PLATFORM

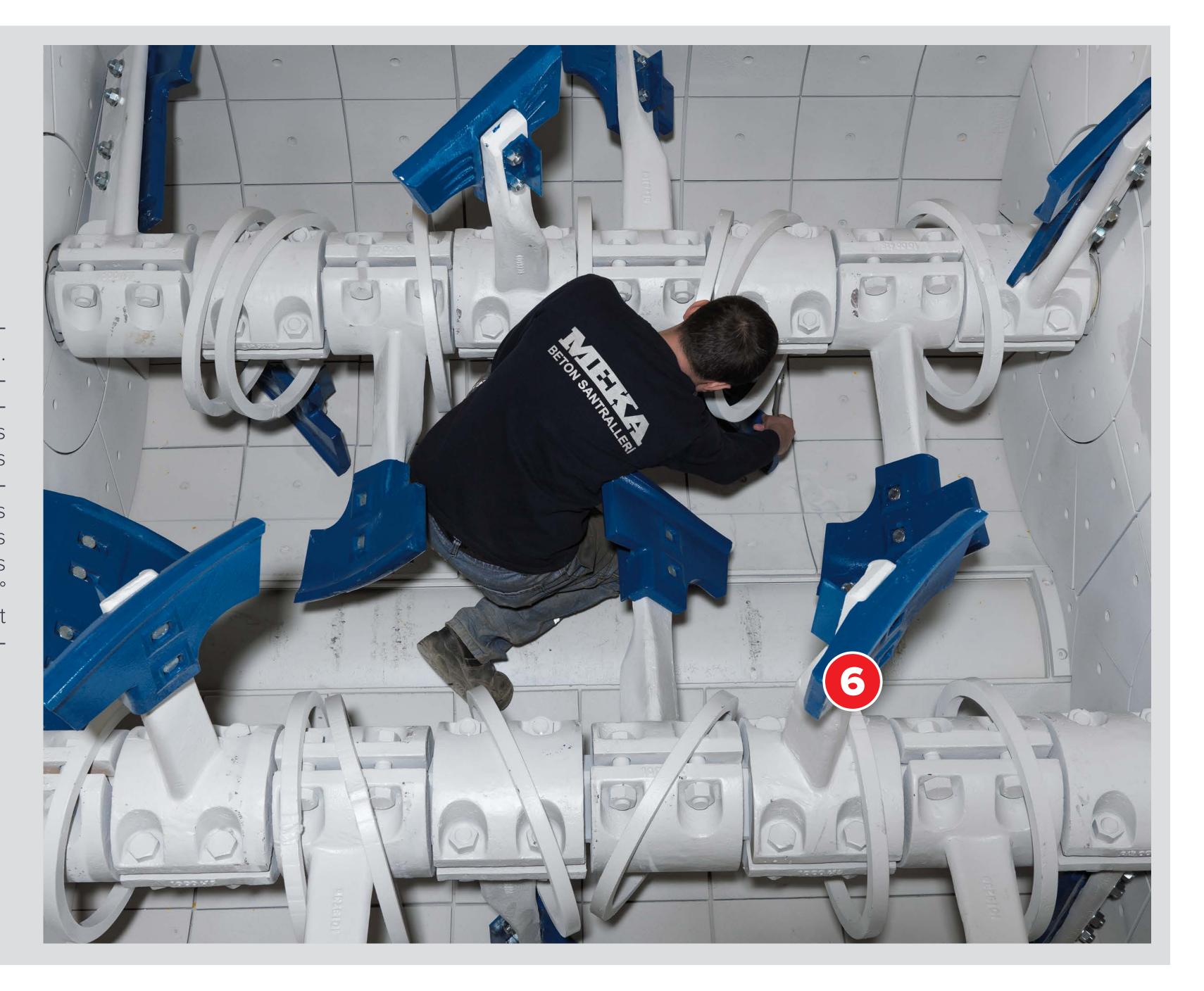
All MEKA Twin-Shaft mixers are supplied with a maintenance platform as a standard.



# MEKA TWIN SHAFT CONCRETE MIXERS HIGHLIGHTS

#### 6 UNIQUE PADDLE STRUCTURE

Twin-Shaft Mixer paddle structure has been specifically designed for strength and abrasion resistance. Each Pallet group has been reinforced against failure, and the concave structure, improves life expectancy. The life expectancy of the mixing group, is equal to the abrasion proof liners and cast thickness of the mixer structure, therefore, the life expectancy of MEKA equipment is more than often, in excess of many of our competitors. MEKA Twin-Shaft mixers are capable of blending materials with particle sizes of up to 150mm in diameter. The paddle angle of 45° also means it can withstand higher loads, therefore it is capable of mixing zero slump concretes, RCC mixes and all types of ready mixed concrete mixtures.





### 7 PERFECT LUBRICATION SYSTEM

The Centralized automatic lubrication system, continuously supplies the mixer labyrinth seals, with sensors on each seal, to ensure, you are informed of a failure, before it is too late.









#### 8 MIXER DISCHARGE GATE

A hydraulic rotary discharge gate with position sensors is supplied as standard. Several options for twin discharge legs are available upon request.

### 9 HYDRAULIC DRIVE FOR DISCHARGE GATE

Discharge gate is driven by a hydraulic power pack, which ensures the full open and close. Manual operation with the help of a manual pump in case of an emergency is possible.

#### 10 EASY CONCRETE PLANT INTEGRATION

MEKA Twin Shaft Mixer's compact and universal design fits easily into allt type of concrete plants (mobile, compact or stationary plants) and is hassle free to transport.



#### 11 MIXER TOP COVER

Dustproof mixer cover is equipped with wide maintenance hatch with safety switches (13), supported by industrial gas shocks for secure and easy access for maintenance. Several connection types for loading of materials and other controls are available.

12 STI SAFETY LOCK





### 3D SOLID MODELLING AND TESTING

All MEKA products are designed and tested in parametric 3-dimensional space prior to manufacture, to eliminate any potential faults.

#### PERFECT WATER DISTRIBUTION

Water distribution pipes allow perfect water distribution within the mixer to ensure fast and homogeneous mixing in less than 30 seconds.

#### APPROVED QUALITY

All MEKA products and manufacturing processes are compliant with the quality requirements of ISO 9001, CE norms, EAC standards and other specific quality and safety based directives.



# MEKA TWIN SHAFT CONCRETE MIXERS HIGHLIGHTS

#### MIXER MOISTURE PROBE

A microwave moisture sensor reading at 25 times per second and combined with on-board functionality such as signal processing, smoothing and averaging accurately measures the moisture content of material as it passes over the ceramic faceplate.

#### MIXER TEMPERATURE SENSOR

No matter what is the season, cold or hot, the purpose of this sensor is to ensure that the temperature of the mix is within acceptable levels.





#### **PROJECT SUPPORT**

Not sure, if our equipment fits? Let us offer you a complete solution. Our project team will be happy to create unique solutions for different applications.

#### DRIVETRAIN TO LAST

High quality motors and gear-boxes from the best manufacturers with perfectly chosen RPM's, to lower energy consumption and provide a long lasting service life of our mixers.

#### **WIDE RANGE**

With a wide range of different types of mixers and capacities, we have a solution for every application.



### MOBILE TWIN SHAFT MIXER

MEKA Mobile Twin Shaft Mixers are perfectly designed for adopting to stationary Dry Batch concrete plants. Having a mobile Twin Shaft Mixer allows for manufacturing of high-grade, low slump mixes, like RCC or Road Concrete, when necessary. It is a great solution for temporary needs.

### Why Mobile Twinshaft Mixers?

With low profile MEKA Mobile Twin Shaft Mixers it is possible to convert a typical dry-batch concrete plant into a wet-batch almost without any modifications to the existing structure. Along with easy transport and fast installation this new setup gives more manufacturing flexibility with different high quality mix designs such as RCC (Roller Compacted Concrete), Zero slump concrete (for ex. road concrete applications), SCC (Self Compacted Concrete) and others. 5 different capacities were developed to suit our customers' needs in the best possible way. Technical specifications and features are described below.







### HIGH PRESSURED MIXER WASHING SYSTEM







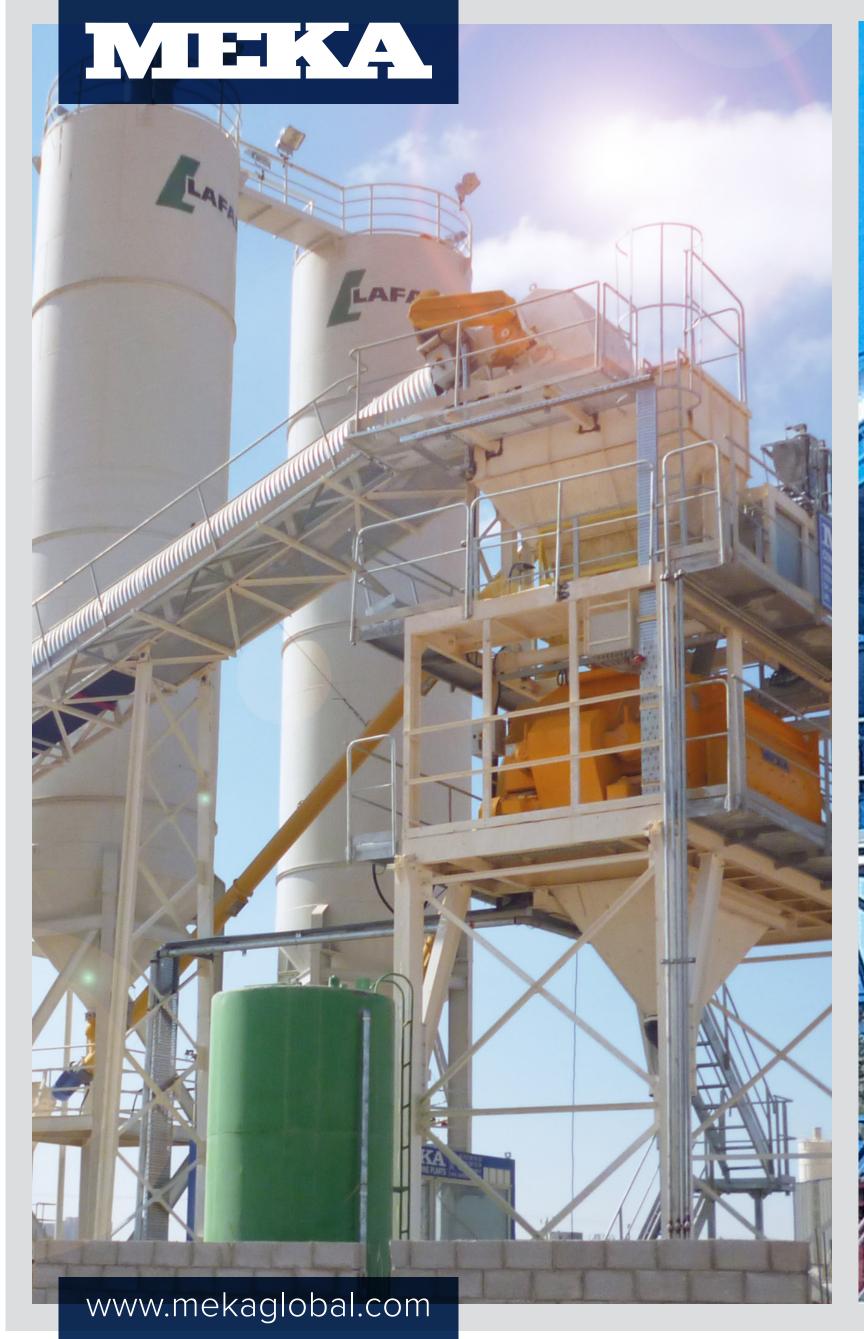


# IN RCC GRAIN SIZE MATTERS

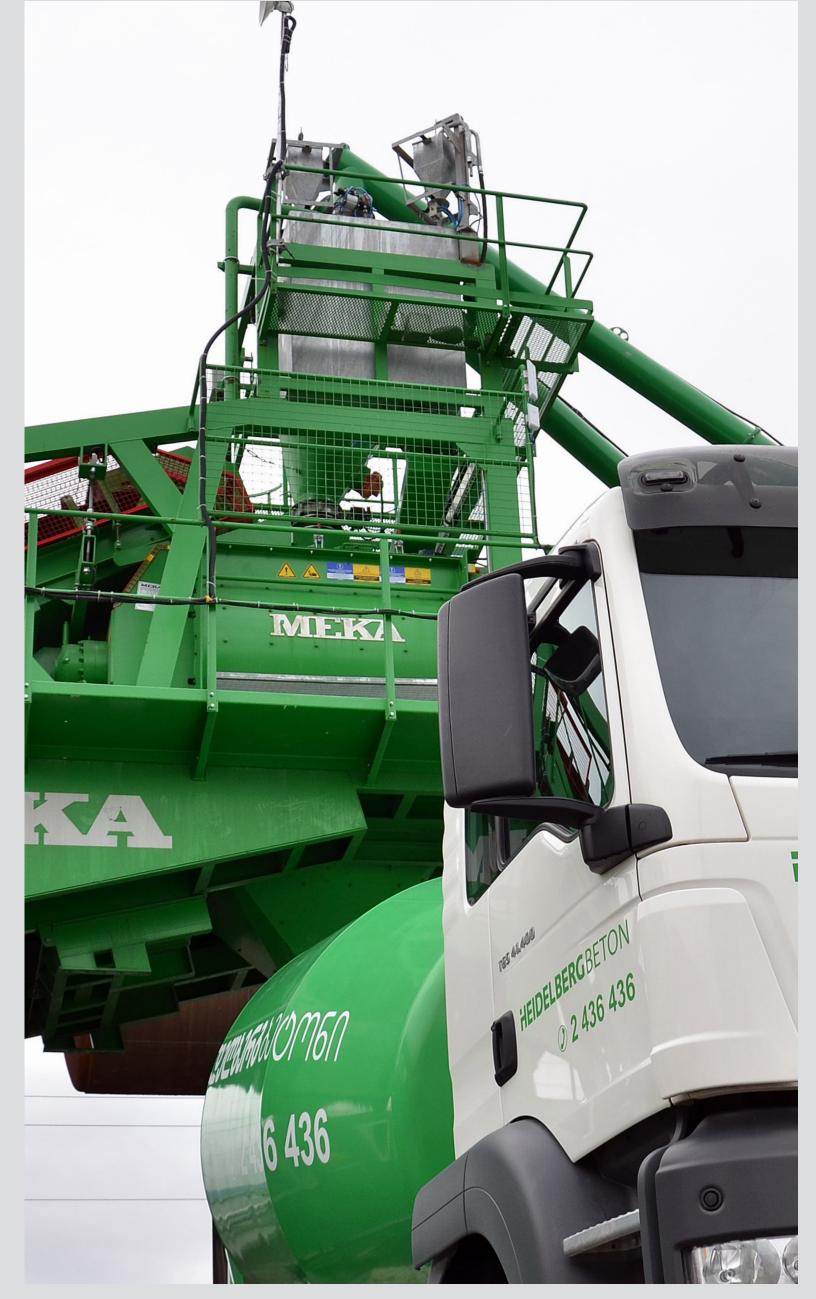
MEKA Twin-Shaft Mixers have maximum workable particle size of approximately 50mm, where as a single-shaft mixer can process materials containing particles up to 70mm in diameter and twin-shift mixers up to 150mm in diameter.

















## WHO IS MEKA?

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



### ESTABLISHED IN 1987

We have 33 years of experience and the passion of the first day.

focused on manufacturing of



# CONCRETE PLANTS AND CRUSHING&SCREENING EQUIPMENT



### MANUFACTURING CAPACITY

600 Crushing Screening Equipment 250 Concrete Batching Plant / year



### EXPERT ENGINEERING

Highly experienced engineers within Meka work to design machines that are the most suitable for our clients' needs.



### MANUFACTURING FACILITIES

4 technological facilities provide a total production area of 75.000 m<sup>2</sup>.

- 5.000 m<sup>2</sup> closed area in Ostim -ANKARA
- 18.000 m<sup>2</sup> in Temelli1 -ANKARA
- 22.000 m<sup>2</sup> in Temelli2 -ANKARA
- 30.000 m<sup>2</sup> in Eskişehir



# WE PROVIDE A COMPLETE SCOPE OF SERVICES SUCH AS

- identifying customer's needs,
- project planning,
- design,
- engineering,
- manufacturing,
- · quality control, commissioning,
- personnel training and
- after-sales support.

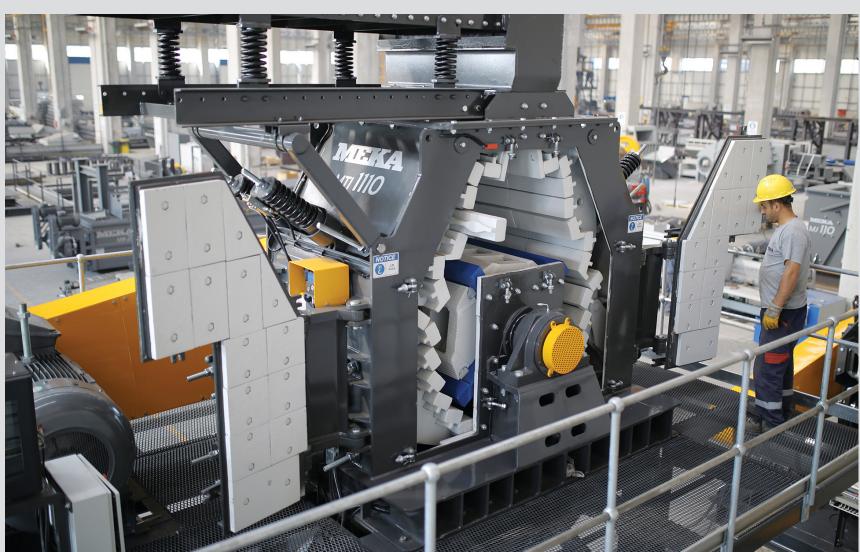


### SERVICE STAYS FOREVER

MEKA supervisors are ready to be on your sitewithin the shortest possible time.



























### STRONG REFERENCES

We have produced more than 3,500 plants and have gained incalculable experience.

Heidelberg, Hochtief, Vinci Contractors, Lafarge, Gazprom, Italcementi Group, London Concretes/Aggregates, Holcim, Strabag Gmbh, Euro Cement Group, Breedon Aggregates, Knauf, Enka, Galfar, Alesco, Recon International, Richard Costain, Tekfen, Lakeshore Group, Gama, Orascom, CCC etc.



**HEIDELBERG** 















































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

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