Disc Mixer

Product Overview

The disc mixer is specifically designed for high-intensity operations at construction sites and serves as a highly efficient tool for mixing concrete, ultra-high-performance concrete, and various types of mortar. The equipment employs a forced mixing principle, with mixing arms inside the disc that rapidly break up cement agglomerations, ensuring that both high-strength concrete with a low water-to-cement ratio and viscous mortar achieve microscopic uniformity, thereby eliminating mixing dead zones. The entire machine is equipped with wear-resistant liners and alloy mixing blades, significantly extending its service life; an optional fully enclosed drum design is available to effectively control dust.



青岛钤 限公司
Qingdao Quannang Machinery Co., Ltd

Technical Specifications

Model Number	HMT100	HMP300	HMP500	HMP1000
Mixing Capacity (kg)	100kg	300kg	500kg	1000kg
Combined Power (kW)	4Kw	7.5Kw	11Kw	30Kw
Feed Height (mm)	1100mm	1200mm	1315mm	22500mm
Total Weight (kg)	430kg	580kg	950kg	3600kg

Key Benefits and Features of the Product

Forced planetary mixing ensures exceptional homogeneity

Utilizing a vertical-shaft planetary drive system, the mixing arms combine orbital and rotational motion to achieve three-dimensional forced agitation of the material within the drum.

Even with high-strength concrete or highly viscous mortar with a water-to-cement ratio below 0.30, the system achieves microscopic uniformity in a short time, eliminating the risk of strength variation.

High processing capacity, capable of handling even the toughest materials

For high-blend cementitious materials such as silica fume and mineral powder, as well as specialty formulations like self-leveling mortar and grout, the mixing process prevents clumping and balling, maintains consistent workability, and fully meets the construction requirements for high-strength concrete.

High wear resistance and long service life, with low maintenance costs

Both the mixing blades and the disc liners are cast from wear-resistant alloy, offering excellent resistance to erosion and wear, and capable of withstanding prolonged exposure to aggregate abrasion.

Wear parts are designed to be removable, making replacement easy and significantly reducing maintenance costs over the entire lifecycle.

青岛铨航机械设备有限公司
Qingdao Quanhang Machinery Co., Ltd

Intelligent Control, One-Button Standardized Production

Supports PLC automatic control systems, allowing for the presetting of multiple concrete mix designs. It precisely controls mixing time, water addition sequences, and admixture dosages, ensuring the traceability of every batch of concrete and reducing reliance on manual operations.

Applications

Chemical Industry: Pigments, coatings, plastic pellets, and premixed additives

Building Materials Industry: Dry-mixed mortar, joint compound, and insulation materials

Food Industry: Seasonings, milk powder, and protein powder blending

Pharmaceutical Industry: Pharmaceutical powders and raw material blending for nutritional supplements

Feed Industry: Production of premixes and concentrated feed

Why Choose Us?

Expert Technical Team: Over 10 years of experience in R&D of mixing equipment, providing customized solutions

Quality Assurance: Rigorous quality control system; ISO 9001-certified company

After-Sales Service: Global service network, 24-hour response, and lifetime technical support

Success Stories: Serving over 500 companies across more than 20 countries and regions

Customer Testimonial

1.

★★★★☆ Site Manager, a cement plant (Kenya)

We use the HMT100 for our refractory repair and patching work. It is lightweight enough to move around the site manually and fast enough to keep up with our crew's pace. Uniformity is good, and we have had no segregation issues. The only reason for four stars instead of five is the feeding height on the HMT100 could be slightly lower for our setup, but it is a minor ergonomic issue. Overall, a highly practical and cost-effective machine.

2.

★★★★★ Project Engineer, an engineering and construction contractor (Saudi Arabia)

The portability of the HMT300 was the main reason we chose it. Our projects are spread across different sites and we needed a mixer that could keep up. It delivers fast, even mixing every single batch, and the compact design means it fits through standard doorways. Water distribution is consistent — our mortar consistency has noticeably improved since we started using it. Low maintenance, easy to clean. Very happy with this purchase.

3.

★★★★★ Site Supervisor, an engineering and construction company (Mexico)

We bought the HMT500 specifically for our on-site refractory lining projects, and it has been a game changer. The built-in bag-breaking mechanism saves us significant prep time — no more manual breaking of large cement bags. Loading height is comfortable, mixing is uniform, and we can move it between different work zones without a crane. Setup takes minutes. For any contractor doing refractory work on location, this is exactly what the industry needed.

FAQ

1.

Q: What is the minimum order quantity for your products?

A: For larger equipment such as mixers, our minimum order quantity is one unit; for smaller products such as valves and fittings, the minimum order quantity ranges from 50 to 100 pieces. Please contact our sales representatives to confirm the specific minimum order quantity.

2.

Q: From which port do you ship?

A: Since our company is located in Qingdao, most of our shipments depart from the Port of Qingdao.

3.

Q: Are you a factory or a trading company?

A: We are a manufacturing company with our own factory; all our equipment is produced in our factory's production lines.

4.

Q: What products can your mixers produce?

A: Our mixers can be used in a wide range of industries to produce various products.

Classified by industry and material type (dry or wet):

Dry materials:

Building materials industry: dry-mix mortar, putty powder, gypsum powder, cement, dry refractory castables

Food industry: flour premixes, starch, milk powder, powdered sugar, instant coffee powder, powdered beverages, chicken bouillon powder

Pharmaceutical Industry: Tablet granules, capsule filling powders, traditional Chinese medicine powders

Chemical Industry: Powder coatings, pigments, dyes, plastic additive premixes

Metallurgical Industry: Metal powders (iron, aluminum, copper, titanium) mixed with lubricants

Feed Industry: Complete compound feed, premixes, concentrates

Wet Materials:

Building Materials Industry: Concrete, wet mortar, self-leveling mortar, foam concrete slurry, refractory slurry

Coatings/Ink Industry: Water-based/solvent-based coatings, emulsion paint, printing ink, UV ink

青岛铨航机械设备有限公司
Qingdao Quanhang Machinery Co., Ltd

Adhesives/Sealants Industry: Epoxy AB adhesives, polyurethane adhesives, silicone sealants, hot-melt adhesives

Cosmetics/Personal Care Industry: Shampoo, body wash, face cream, lotion, toothpaste, makeup pastes

Pharmaceutical Industry: Ointments, creams, gels, oral suspensions, injectable emulsions

Food Industry: Tomato sauce, mayonnaise, chocolate paste, jam, honey crystallization treatment, meat paste

Rubber/Plastics Industry: Compounded rubber, PVC paste resin, color paste, masterbatch wet premixing

Battery Industry: Lithium battery anode and cathode slurries (wet vacuum mixing)

Environmental Protection Industry: Fly ash solidification slurry, sludge stabilization slurry, water treatment chemical solutions

5.

Q: Can your mixers be customized to meet my specific needs?

A: Yes, all our mixers can be customized. We will tailor them to your specific requirements based on the raw materials you use, the products you manufacture, and your desired output.

6.

Q: How often do the mixing blades in your mixers need to be replaced? Is it easy to obtain replacement parts?

A: In theory, replacement is recommended every six months to a year, though there is no fixed replacement schedule. The raw materials used in production vary, and different materials cause varying degrees of wear on the blades. Additionally, the daily operating hours of the mixer differ. Therefore, we recommend checking the wear on the blades through the inspection window to determine the replacement frequency. All mixing blades in our mixers are made of wear-resistant materials and are reinforced with wear-resistant welds, resulting in a longer service life than standard mixing blades on the market. The mixing arms and blades inside the mixer are all secured with bolts, making it very convenient to replace parts.

7.

Q: There are many types of mixers. How should I choose the right one?

青岛铨航机械设备有限公司
Qingdao Quanhang Machinery Co., Ltd

A: Generally, horizontal mixers are used for mixing powders, granules, pastes, and high-viscosity materials; vertical mixers are used for low- to medium-viscosity liquids, slurries, and suspensions; disc mixers are primarily used for high-hardness and highly abrasive materials; and ribbon mixers are commonly used for powders, granules, pastes, and high-viscosity materials.

8.

Q: Aside from equipment sold separately, do you offer design, manufacturing, and installation services for complete production lines?

A: Yes. We have customers in over 20 countries worldwide who use production lines that we have designed, manufactured, and installed.

9.

Q: What is the measurement accuracy of this precision measurement system?

A: Typically ±0.2%. (Higher measurement accuracy can be customized upon request.)

10.

Q: How do I choose the right type of packaging equipment for my products?

A: When selecting packaging equipment, the following factors should be considered:

1. Product characteristics: including product dimensions, shape, weight, and material

2. Packaging format: such as bagging, boxing, bottling, or canning

3. Production capacity requirements: Determine the equipment speed based on the production line's output needs

4. Level of automation: Choose between fully automatic, semi-automatic, or manual equipment

5. Budget range: Select the equipment with the best cost-performance ratio based on your investment budget

6. Space constraints: Consider equipment dimensions and workshop layout requirements

11.

Q: How can we verify that the quality of equipment packaging meets standards?

A: Packaging quality verification primarily includes the following aspects:

青岛铨航机械设备有限公司
Qingdao Quanhang Machinery Co., Ltd

• Sealing test: Checking the integrity of the packaging seal

• Visual inspection: Ensuring the packaging appears neat and free of wrinkles

• Measurement accuracy: Verifying that weighing or measurement meets standards

• Production efficiency: Confirming that the nominal production speed is achieved

• Pass rate statistics: Calculating the pass rate after continuous production of a certain quantity

• Stability testing: Assessing stability during 8 hours of continuous operation