



Industrial Mixing & Processing Equipment

Chemical & Plastic Machinery Manufacturer Since 2006

HENGMEI CHEMICAL MACHINERY CO., LTD. · Shandong, China

Official Product Catalog · 2026 Full Edition

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About HENGMEI Machinery

Founded in 2006, HENGMEI CHEMICAL MACHINERY CO., LTD. is a leading manufacturer of industrial mixing, dispersing, grinding and plastic recycling equipment, located in Laizhou Industrial Zone, Shandong Province, China — the national equipment manufacturing base. Over 20 years of specialization, we have developed complete product lines covering high speed dispersers, double planetary mixers, sigma kneaders, ribbon blenders, bead mills, three roll mills and plastic recycling lines.

Every machine undergoes strict 8+ hours load testing before shipment, with full CE, ATEX and ISO9001 compliant manufacturing. Our equipment is trusted by manufacturers in coatings, inks, adhesives, sealants, battery materials and plastics industries, exported to more than 50 countries across Europe, North America, Southeast Asia and the Middle East. We welcome factory visits from customers worldwide, with pickup service from Qingdao airport available.

20+ Years OEM Experience

Professional engineering team with deep process know-how for every material viscosity and application.

Full Customization

Explosion-proof, vacuum, heating/cooling, PLC control and special blade designs built to your exact process requirements.

Strict Quality Control

Incoming material inspection, in-process testing and final load testing — every machine verified before delivery.

Global After-Sales Support

24-hour response, lifetime technical consultation, spare parts supply and optional on-site installation & training.

High Speed Disperser

GFJ Series | The Standard Workhorse for Coatings, Inks & Paints

The high speed disperser works on the principle of high-speed rotation of the dispersing disc, generating strong shear, impact and crushing to achieve rapid dispersion, dissolution and mixing of solid pigments in liquid resin media. It is the most widely used basic equipment in the coatings and inks industry.



Key Features

- Heavy-duty hydraulic lifting & tilting design, 360° rotatable arm for easy tank change and cleaning
- Frequency inverter speed regulation, infinitely variable 0–1440 RPM
- Stainless steel 304 wetted parts, anti-corrosion and easy to sanitize; SS316L available for corrosive materials
- Explosion-proof motor and electrical components optional for hazardous solvent areas

Optional Configurations

- Stainless steel mixing tanks (single layer / jacket cooling / vacuum tank) available
- Dual shaft design with low-speed wall scraper for high viscosity materials
- PLC + touch screen control, recipe storage and automatic operation available

Technical Parameters

Model	Power (kW)	Capacity (L)	Disc Dia. (mm)	RPM	Lifting Stroke (mm)
GFJ-2.2	2.2	50–150	150	0–1440	600
GFJ-7.5	7.5	100–300	250	0–1440	800
GFJ-15	15	150–500	300	0–1440	1100
GFJ-22	22	200–1000	300	0–1440	1100
GFJ-37	37	400–2000	400	0–1440	1800
GFJ-55	55	600–3000	450	0–1440	1800
GFJ-75	75	800–4000	550	0–1440	2100
GFJ-110	110	1600–8000	700	0–1440	2300

Typical Applications

Architectural coatings, industrial paints, printing inks, pigment dispersion, resin mixing, adhesives, additives and fine chemicals.

Vacuum High Speed Disperser

VGD Series | Bubble-Free Dispersion for High-End Formulations

The vacuum disperser combines high-speed dispersion disc with a low-speed PTFE wall scraper inside a sealed vacuum vessel. Negative pressure removes all entrapped air during mixing, eliminating pinholes and bubbles in the final product, ideal for high-end coating and adhesive formulations.



Key Features

- Full vacuum system down to -0.098 MPa, eliminates entrapped air and pinholes completely
- Dual-shaft design: high speed disperser disc + low speed PTFE wall scraper, no dead corners
- Water/oil heating or cooling jacket option for temperature-controlled processes
- PLC + touch screen control with recipe storage, automatic vacuum and temperature control

Technical Parameters

Model	Working Capacity (L)	Disperser Motor (kW)	Scraper Motor (kW)	Vacuum (MPa)
VGD-50	50	5.5	1.5	-0.098
VGD-100	100	7.5	2.2	-0.098
VGD-200	200	11	3	-0.098
VGD-500	500	22	5.5	-0.098
VGD-1000	1000	37	7.5	-0.098
VGD-2000	2000	55	11	-0.098

Typical Applications

High-end coatings, UV inks, epoxy resins, structural adhesives, sealants, battery cathode/anode paste, cosmetics and food-grade pastes.

Double Planetary Mixer

DPM Series | Proven Solution for Medium-to-Ultra-High Viscosity Materials

The double planetary mixer uses two agitators that rotate on their own axis while orbiting the vessel, delivering intense kneading and shear across the entire vessel volume. It is the industry standard for materials over 500,000 cP where conventional dispersers cannot achieve uniform mixing.



Key Features

- Dual planetary agitators: rotate on own axis while orbiting the vessel, thorough kneading of high viscosity materials
- No submerged shaft seals or bearings in the product zone, zero contamination risk, easy to clean
- Vacuum hood, heating/cooling jacket and discharge pump available as standard options

Technical Parameters

Model	Working Capacity (L)	Orbit Speed (rpm)	Main Motor (kW)	Vacuum (MPa)
DPM-5	5	0–30	1.5	-0.098
DPM-50	50	0–30	5.5	-0.098
DPM-100	100	0–30	7.5	-0.098
DPM-200	200	0–30	11	-0.098
DPM-500	500	0–30	22	-0.098
DPM-1000	1000	0–25	37	-0.098

Typical Applications

Silicone sealants, MS polymers, epoxy & polyurethane adhesives, hot melts, battery electrode paste, ceramic pastes, solder pastes.

Lab Double Planetary Mixer

Scalable Laboratory Platform for R&D & Pilot Production

The lab model uses identical kneading geometry as our production scale units, so R&D results translate directly to full-scale production without process re-optimization. Compact design fits standard lab benches for new material formulation.



Key Features

- Identical kneading action as production scale units — results translate directly to bulk production
- Compact benchtop / floor-standing design, small footprint for lab and pilot plants
- Borosilicate transparent vacuum cover for real-time process observation
- Jacketed vessel for heating/cooling, vacuum capability available

Technical Parameters

Model	Working Capacity (L)	Main Motor (kW)	Voltage	Vacuum
LDPM-2	0.5–2	0.55	220V	Optional
LDPM-5	1–5	1.1	220V	Standard
LDPM-20	5–20	2.2	220V/380V	Standard
LDPM-50	10–50	4	380V	Standard

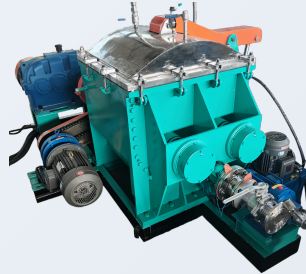
Typical Applications

University & industrial R&D labs, new material formulation, cosmetics development, pharmaceutical ointments, small-batch custom production.

Sigma Mixer (Kneader)

Z-Blade Kneader | For Ultra-High Viscosity Putties, Rubbers & Compounds

Two sigma-shaped blades rotate at differential speeds, generating intense shear, folding and kneading action on semi-dry or rubbery viscous materials, achieving homogeneous mixing of extremely high viscosity compounds that no other mixer can process.



Key Features

- Two sigma-shaped blades rotating at differential speeds, intense shear and kneading action
- Hydraulic tilting discharge, easy and complete emptying, or screw extrusion / ball valve discharge options
- Jacketed trough for steam / water / oil heating or cooling, precise temperature control
- Vacuum kneader model available for moisture-free degassing of sensitive materials

Technical Parameters

Model	Total Volume (L)	Batch Capacity (L)	Main Motor (kW)	Blade Speed (rpm)
ZM-5	5	1.5–3.5	1.5	20 / 10
ZM-50	50	15–35	5.5	20 / 10
ZM-100	100	30–70	11	20 / 10
ZM-200	200	60–140	18.5	20 / 10
ZM-500	500	150–350	37	20 / 10
ZM-1000	1000	300–700	75	18 / 9

Typical Applications

Silicone rubber, butyl rubber, chewing gum base, PVC compounds, hot melt adhesives, battery ceramic paste, clay, ink pigments.

Ribbon Mixer

Horizontal Ribbon Blender | Efficient Bulk Solid & Powder Mixing

The U-shaped trough contains dual helical ribbon agitators: the outer ribbon moves material toward the center while the inner ribbon moves material outward, creating continuous radial and axial flow for fast, uniform powder blending with minimal material degradation.



Key Features

- Dual helical ribbons move material radially and axially, fast homogeneous blending in 3–6 minutes
- U-shaped trough, minimal dead zones, low power consumption per batch, easy cleaning
- Jacketed trough for heating, cooling or drying of moisture-sensitive powders
- Liquid spray bar for adding binders, oils or minor liquid ingredients uniformly

Technical Parameters

Model	Total Volume (L)	Batch Capacity (L)	Motor (kW)	Ribbon Speed (rpm)
RL-100	100	30–60	2.2	65
RL-300	300	90–180	4	65
RL-500	500	150–300	5.5	46
RL-1000	1000	400–600	11	38
RL-2000	2000	600–1200	18.5	33
RL-3000	3000	900–1800	30	28

Typical Applications

Dry powder blending, food ingredients, spice mixes, chemical powders, plastic masterbatch additives, construction materials, detergent powders.

Twin Shaft Paddle Mixer

Double Shaft Paddle Blender | Fast, Gentle Blending for High-Volume Batches

Two counter-rotating paddle shafts create a fluidized blending zone that lifts material into free fall, achieving extremely fast and uniform blending with zero shear and zero particle degradation — ideal for high-volume continuous production.



Key Features

- Two counter-rotating paddle shafts create a fluidized blending zone, ultra-fast cycle time
- Uniform blending in 1–3 minutes, ideal for high-volume continuous or batch production
- Full-width bottom gate discharge, emptying in seconds with zero residue
- Wear-resistant cast paddles, adjustable clearance, long service life

Technical Parameters

Model	Working Capacity (L)	Motor (kW)	Shaft Speed (rpm)
TS-500	500	7.5 × 2	45
TS-1000	1000	11 × 2	45
TS-2000	2000	18.5 × 2	40
TS-3000	3000	22 × 2	40

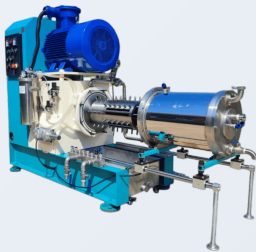
Typical Applications

Dry-mix mortar, concrete admixtures, putty powder, refractory castables, ceramic powders, food additives, animal feed.

Horizontal Bead Mill / Sand Mill

HM Series | Nano-Scale Wet Grinding for Paints, Inks & Battery Materials

Horizontal grinding chamber with high-speed rotating agitator discs shears and accelerates grinding media (zirconia beads) inside the chamber, achieving fine particle size reduction down to nanometer range for wet grinding applications.



Key Features

- Horizontal grinding chamber, high energy density, particle size down to 50–100 nm
- Centrifugal gap separator, no screen blockage, suitable for 0.1 mm zirconia beads
- Jacketed grinding chamber for water cooling, precise temperature control
- Ceramic / PU chamber liner available for contamination-free grinding

Technical Parameters

Model	Chamber Volume (L)	Motor (kW)	Flow Rate (L/h)	Final Particle Size
HM-10	10	15	50–300	≥ 100 nm
HM-30	30	37	200–800	≥ 100 nm
HM-60	60	55	500–1500	≥ 100 nm
HM-100	100	90	1000–3000	≥ 100 nm

Typical Applications

Paint pigment grinding, printing inks, color pastes, pesticide suspensions, lithium battery cathode paste, ceramic inks.

Three Roll Mill

TRM Series | High-Precision Ultra-Fine Dispersion for High Viscosity Pastes

Three rolls rotate at differential speeds, generating extremely high shear in the narrow gaps between rolls. It is the only equipment capable of achieving ultra-fine dispersion for extremely high viscosity pastes where pumps and bead mills cannot feed material.



Key Features

- Three ceramic / alloy steel rolls with differential speeds, intense shear between gaps
- Precise gap adjustment (0.001 mm resolution), reproducible grinding results
- Water-cooled rolls for heat-sensitive materials like UV inks and pigments
- Stainless steel contact parts, easy cleaning and disassembly

Technical Parameters

Model	Roll Dia. × Length (mm)	Motor (kW)	Max. Production (kg/h)
TRM-65	65 × 260	1.5	10–30
TRM-150	150 × 300	5.5	50–150
TRM-260	260 × 500	18.5	200–500

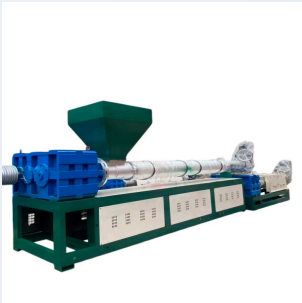
Typical Applications

Offset & gravure inks, high viscosity pigment pastes, lipstick & cosmetic creams, solder paste, electronic silver paste, ceramic paste.

Plastic Recycling Pelletizing Line

Waste Plastic Washing & Pelletizing | PP / PE / PET / PVC Recycling

Complete turnkey line for waste plastic recycling, covering crushing, washing, dewatering, extrusion filtration, pelletizing and packaging. Fully automated one-person operation, producing uniform plastic pellets ready for re-extrusion.



Key Features

- Complete turnkey line: crushing → washing → dehydrating → extrusion → pelletizing
- Single / twin screw extruder, water-ring or strand pelletizing options
- Automatic temperature control, PLC touch screen operation, stable output
- Quick screen changer for continuous extrusion without stopping production

Technical Parameters

Model	Output (kg/h)	Screw Dia. (mm)	Main Motor (kW)
HPL-100	100–150	65	37
HPL-200	200–300	80	55
HPL-400	400–600	100	110
HPL-800	800–1200	120	160

Typical Applications

PP woven bags, PE films, HDPE bottles, PET flakes, PVC pipes, plastic drums, battery cases, automotive bumpers.

Plastic Crusher & Granulator

Heavy-Duty Shredder | For Pipes, Profiles, Bottles & Films

Heavy-duty crusher for all types of rigid and flexible plastic waste. Blades are made of high-grade alloy steel, easily removable and re-sharpenable. Screen mesh sizes are customizable to produce desired granule size.



Key Features

- Heavy-duty welded steel frame, double-wall sound-insulated hopper for low noise operation
- SKD-11 / hardened steel blades, easily removable and re-sharpenable
- Screen mesh sizes from 8 mm to 30 mm, custom granule size on request
- Bearing housing installed outside crushing chamber, no dust contamination, long life

Technical Parameters

Model	Hopper Size (mm)	Blade Qty (moving/fixed)	Motor (kW)	Output (kg/h)
HPC-300	300 × 400	2 / 18	7.5	80–200
HPC-400	400 × 500	3 / 24	15	200–400
HPC-600	600 × 700	3 / 36	37	400–800
HPC-800	800 × 900	4 / 48	55	800–1500

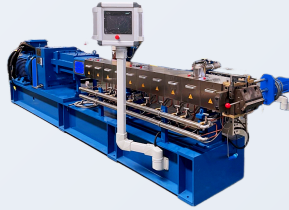
Typical Applications

PVC / PE / PP pipes, plastic profiles, injection molding sprues, plastic bottles, crates, drums, films, woven bags.

Twin Screw Compounding Extruder

Co-Rotating Twin Screw | Compounding, Masterbatch & Filling

Co-rotating intermeshing twin screws provide excellent distributive and dispersive mixing, devolatilization and reactive extrusion. Modular screw and barrel design allows flexible configuration for different compounding processes.



Key Features

- Co-rotating intermeshing twin screws, excellent mixing and devolatilization performance
- Modular screw segments and barrels, flexible configuration for different processes
- Frequency-controlled main drive, high torque, stable long-run operation
- Water strand pelletizing / air-cooling die face pelletizing options

Technical Parameters

Model	Screw Dia. (mm)	L/D Ratio	Main Motor (kW)	Output (kg/h)
HTE-35	35.6	32-48	11-15	30-80
HTE-52	51.5	32-48	37-45	150-300
HTE-65	62.4	32-48	75-90	300-600
HTE-75	71	32-48	110-132	600-1000

Typical Applications

Color masterbatch, filler masterbatch, polymer modification, glass fiber reinforced compounds, biodegradable plastics, PVC compounding.

Custom Turnkey Production Lines

One-Stop Solution: From Equipment Design to On-Site Installation

Beyond individual machines, we design and deliver complete production lines for coatings, adhesives and plastic recycling, integrating mixing, grinding, filling, automation and process control. We provide layout design, equipment manufacturing, installation, commissioning and operator training as a single package.

Coatings & Paint Production Line

- Full set: premixing tank → high speed disperser → horizontal bead mill → finished mixing tank → filter → filling machine
- Capacity from 100 L/batch to 5000 L/batch, for architectural / industrial / anti-corrosion coatings

Hot Melt Adhesive / Sealant Production Line

- Sigma kneader → twin screw extruder → cooling trough → pelletizing / rod cutting system
- For hot melt adhesive pellets, sealants, butyl rubber and silicone sealant cartridges

Plastic Recycling Complete Line

- Crusher → friction washing → dewatering → drying → extruder → pelletizing → storage silo
- For PP/PE films, woven bags, bottles and rigid plastic waste, capacity 100–2000 kg/h

What We Provide

Process flow design, equipment layout drawing, manufacturing, shipping, on-site installation, commissioning, operator training and 1-year warranty with lifetime technical support.

Industries We Serve

Trusted by Manufacturers Across 50+ Countries Worldwide

Coatings & Paints

Architectural coatings, industrial paints, anti-corrosion coatings, powder coatings

Inks & Pigments

Printing inks, offset inks, color pastes, pigment dispersion, nano pigments

Adhesives & Sealants

Epoxy adhesives, polyurethane sealants, hot melt adhesives, structural adhesives

Battery Materials

Lithium battery cathode/anode paste, ceramic separators, electrode slurries

Plastics & Rubber

Plastic recycling, masterbatch, PVC compounds, silicone rubber, butyl rubber

Food & Cosmetics

Food powders, nutritional ingredients, cosmetic creams, ointments, lipsticks

Construction Materials

Dry-mix mortar, putty powder, refractory materials, building chemicals

Fine Chemicals

Pesticide suspensions, ceramic pastes, solder pastes, electronic materials

Our Quality Commitment

Every machine is tested under full load for 8+ hours before shipment, with material sample testing available on request. We provide CE certified manufacturing, 1-year warranty, 24-hour response after-sales service, and lifetime technical consultation for all customers worldwide.



Get Your Custom Solution & Quotation

Tell us your material, batch size and production requirements — our engineers will recommend the right equipment and send you a detailed quotation within 24 hours.

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20+ Years

OEM experience for global brands

50+ Countries

Exported and trusted worldwide

1-Year Warranty

Lifetime technical support