FANGYUAN GROUP

CONCRETE MACHINERY OVERVIEW

YOUR SUCCESS, OUR COMMITMENT

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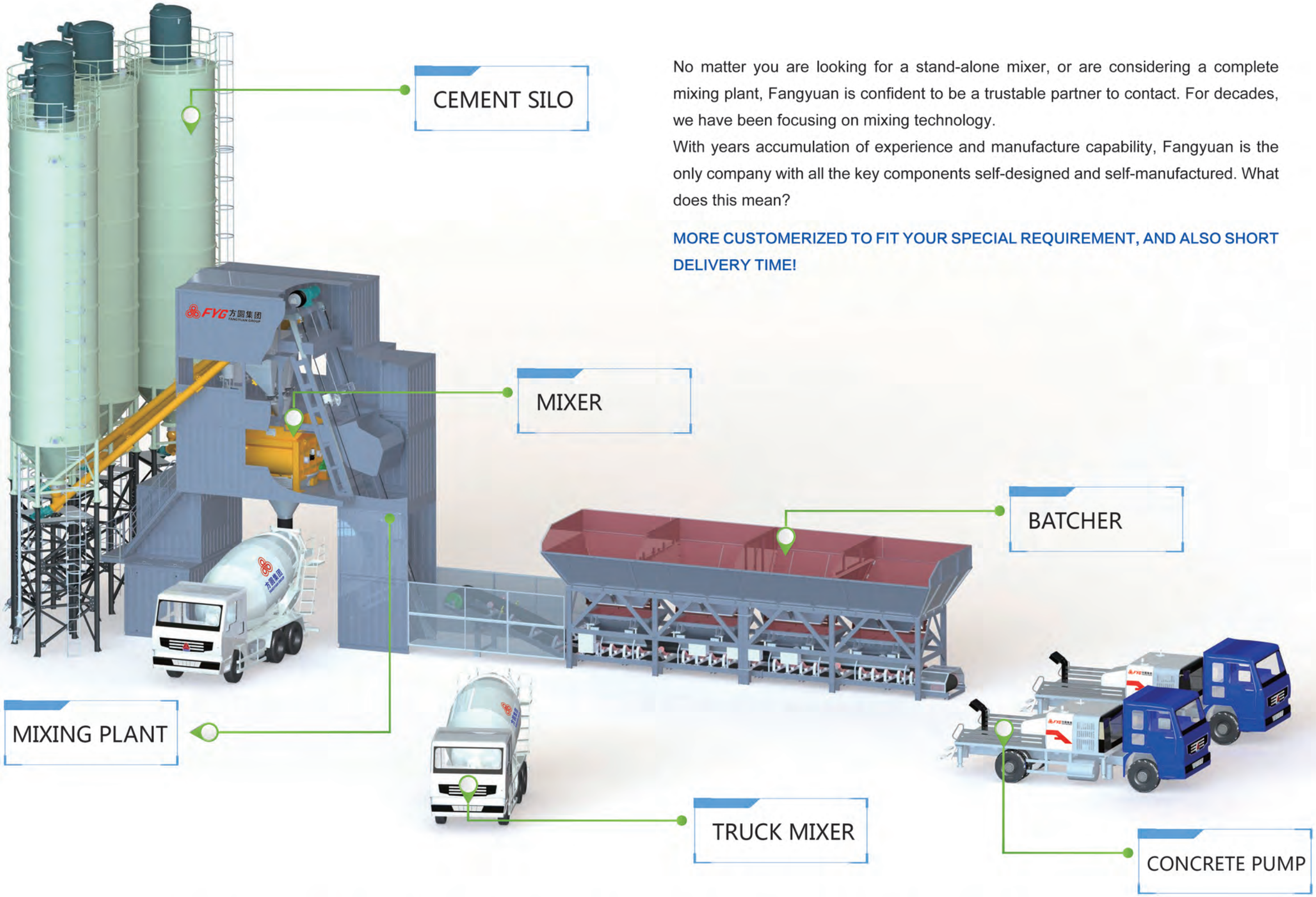
Subject to alteration without prior notice

No matter you are looking for a stand-alone mixer, or are considering a complete mixing plant, Fangyuan is confident to be a trustable partner to contact. For decades, we have been focusing on mixing technology.

With years accumulation of experience and manufacture capability, Fangyuan is the only company with all the key components self-designed and self-manufactured. What does this mean?

MORE CUSTOMERIZED TO FIT YOUR SPECIAL REQUIREMENT, AND ALSO SHORT DELIVERY TIME!



CONCRETE MACHNIERY, WE ARE YOUR ONE-STOP PROVIDER

中国铁建 筑你所想 共建未来
中铁二十四局
中国中铁二局
中铁大桥局
中铁大桥局

REFERENCES

▲ FANGYUAN Group Headquarters

SELF-RELIANCE

RESPONSIBLE

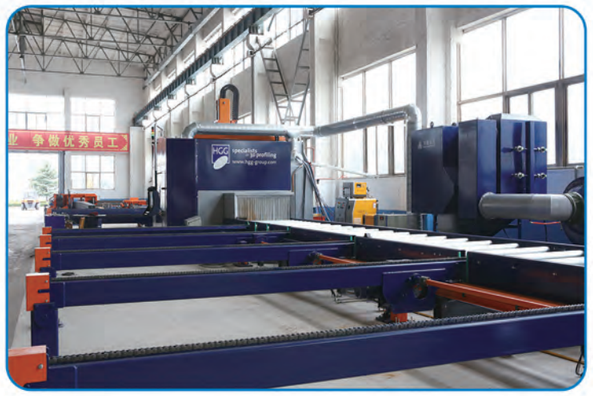
INNOVATIVE

COOPERATIVE

FANGYUAN Group

TAKING CONSTRUCTION TECHNOLOGY TO THE NEXT LEVEL IS OUR MISSION – AND THAT MEANS MAKING IT COST-EFFICIENT, ACCURATE, FUTURE-PROOF AND CONNECTED. WE ARE A MARKET AND TECHNOLOGY PIONEER IN CONSTRUCTION MACHINERY. OUR INNOVATIONS PLAY A ROLE IN VIRTUALLY EVERY SECTOR OF CONSTRUCTION INDUSTRY, FROM MACHINES FOR CONSTRUCTION MATERIAL PRODUCTION & LOGISTICS TO SOFTWARE SOLUTIONS THAT PAVE THE WAY FOR SMART CONSTRUCTION SITES. SOME 2200 PEOPLE WORK AT FANGYUAN, HELPING TO PROMOTE ITS POSITIVE ATTITUDE AND ACHIEVEMENTS AS AN EMPLOYEE-OWNED COMPANY.

Manufacture Facility



Production Lines - Concrete Mixer, Pump

Production Lines - Concrete Mixing Plant, Truck Mixer

Modular Container-Design Mixing Plants with Skip Loading

Designed for minimum space requirement and large quantities of concrete production performance, durable container modules enable economical transportation, minimum time and operations of erection and disassembling, robust structure reduces the requirement of foundation, leading to economical plant relocations, plant fully enclosed and protected from harsh environment, also low noise and dust emission.

Item		Unit	HZS50D	HZS90D	HZS120D	HZS180D
Nominal output/h		m^3/h	50	90	120	180
Mixer charging		m^3	1	1.5	2	3
Batching machine			PLD1600-Ⅲ	PLD2400Q-Ⅳ	PLD3200QD-Ⅳ	PLD4800QD-Ⅳ
Aggregate storage bins charging		m^3	7	15	20	20
Aggregate storage bins qty.		pc	3	4	4	4
Aggregate weighing capacity		kg	2000	3000	4x2000	4x3000
Cement weighing capacity		kg	600	1000	1200	1600
Flyash weighing capacity		kg	/	300	400	600
Water weighing capacity		kg	250	400	500	800
Additive weighing capacity		kg	40	40	50	80
Mixer power		kW	37	2x30	2x37	2x55
Belt conveyor power		kW	15	18.5	30	45
Total power		kW	80	120	150	190
Mixer discharge height		m	3.8	3.8	3.8	3.8
Total weight		t	24	42	51	62
Outline dimension(L×W×H)		m	17.7x10.4x19.4	30.8x15x19.4	34x13.2x19.4	40x19x18.5
Loading			Skip hoist			
Weighing accuracy	Aggregate	%	±2	±2	±2	±2
	Powder	%	±1	±1	±1	±1
	Water	%	±1	±1	±1	±1
	Additive	%	±1	±1	±1	±1

Modular Container-Design Mixing Plants with Conveyor Loading

- Quick and easy installation.
- Cost effective sea and land transportation.
- Quick and easy relocation.
- Flexibility in the configuration.
- Minimum foundation cost.

Item		Unit	HZS120	HZS180
Nominal output/h		m^3/h	120	180
Mixer charging		m^3	2	3
Batching machine			PLD3200QD-Ⅳ	PLD4800QD-Ⅳ
Aggregate storage bins charging		m^3	15	20
Aggregate storage bins qty.		pc	4	4
Aggregate weighing capacity		kg	4x2000	4x3000
Cement weighing capacity		kg	1200	1600
Flyash weighing capacity		kg	400	600
Water weighing capacity		kg	500	800
Additive weighing capacity		kg	50	80
Mixer power		kW	2x37	2x55
Belt conveyor power		kW	30	45
Total power		kW	150	200
Mixer discharge height		m	3.8	4.1
Total weight		t	60	72
Outline dimension(L×W×H)		m	46.7x23x20	43.5x21x20
Loading			Belt conveyor	
Weighing accuracy	Aggregate	%	±2	±2
	Powder	%	±1	±1
	Water	%	±1	±1
	Additive	%	±1	±1

Standard Mixing Plants with Conveyor Loading

- High production capacity.
- Easy operation and maintenance in wide areas.
- High efficiency.
- Flexibility in configuration.
- Conformity with special site layouts.

Item		Unit	HZS60	HZS90	HZS120	HZS180	HZS240	HZS300
Nominal output/h		m^3/h	60	90	120	180	240	300
Mixer charging		m^3	1	1.5	2	3	4	5
Batching machine			PLD1600-Ⅲ	PLD2400Q-Ⅳ	PLD3200QD-Ⅳ	PLD4800QD-Ⅳ	PLD6400QD-Ⅳ	PLD8000QD-Ⅳ
Aggregate storage bins charging		m^3	7	15	15	20	25	25
Aggregate storage bins qty.		pc	3	4	4	4	4	4
Aggregate weighing capacity		kg	2000	3000	4x2000	4x3000	4x4000	4x6000
Cement weighing capacity		kg	600	1000	1200	1600	2200	3000
Flyash weighing capacity		kg	/	300	400	600	800	1000
Water weighing capacity		kg	250	400	500	800	1000	1400
Additive weighing capacity		kg	40	40	50	80	100	150
Mixer power		kW	37	2x30	2x37	2x55	2x75	2x90
Belt conveyor power		kW	15	15	30	45	55	75
Total power		kW	80	110	150	200	260	320
Mixer discharge height		m	3.8	3.8	3.8	4.1	4.1	4.1
Total weight		t	32	39	60	72	78	90
Outline dimension(L x W x H)		m	31.4x15.4x19.4	26.6x21x19.4	46.7x23x20	43.5x21x20	43.5x24x20	43.5x24x20
Loading			Belt conveyor					
Weighing accuracy	Aggregate	%	±2	±2	±2	±2	±2	±2
	Powder	%	±1	±1	±1	±1	±1	±1
	Water	%	±1	±1	±1	±1	±1	±1
	Additive	%	±1	±1	±1	±1	±1	±1

Compact Mixing Plants with Skip Loading

- Small space, great performance.
- Versatile, economical, durable.
- compact dimension.

Item		Unit	HZS25	HZS35	HZS50	HZS75
Nominal output/h		m^3/h	25	35	50	75
Mixer charging		m^3	0.5	0.75	1	1.5
Batching machine			PLD800	PLD1200-Ⅲ	PLD1600-Ⅲ	PLD2400Q-Ⅲ
Aggregate storage bins charging		m^3	3	3	7	15
Aggregate storage bins qty.		pc	2	3	3	3
Aggregate weighing capacity		kg	1000	2000	3000	4000
Cement weighing capacity		kg	300	400	600	1000
Flyash weighing capacity		kg	/	/	/	/
Water weighing capacity		kg	/	200	250	400
Additive weighing capacity		kg	/	40	40	40
Mixer power		kW	18.5	30	37	45
Belt conveyor power		kW	5.5	7.5	11	18.5
Total power		kW	35	60	80	90
Mixer discharge height		m	3.8	3.8	3.8	3.8
Total weight		t	7.4	13	32	24
Outline dimension(L x W x H)		m	8.4x6.2x7.9	15.2x9.4x19.2	15.4x12.3x19.2	28.1x11x19.2
Loading			Skip hoist			
Weighing accuracy	Aggregate	%	±2	±2	±2	±2
	Powder	%	±1	±1	±1	±1
	Water	%	/	±1	±1	±1
	Additive	%	/	±1	±1	±1

Mobile Concrete Mixing Plant

- Quick and easy installation.
- Cost-effective transportation.
- Quick and easy jobsite relocation.
- Low foundation cost.
- Easy maintenance and low operating cost.

Type	HZS35	HZS50	HZS75
Nominal output/h	35 m^3/h	50 m^3/h	75 m^3/h
Aggregate storage bins charging	3 x 5m^3	3 x 5m^3	3 x 5m^3
Aggregate weighing capacity	1500 kg	2000 kg	3000 kg
Loading	Belt conveyor		
Mixer	1200/750 L	1600/1000 L	2400/1500 L
Cement weighing capacity	400 kg	600 kg	1000 kg
Water weighing capacity	200 kg	250 kg	400 kg
Additive weighing capacity	40 kg	40 kg	40 kg
Total power	52 kW	60 kW	82 kW
Discharge height	3.8 m		
Air compressor	1 m^3/min		
Control system	Full-automatic		
Control room	Foldable		

Dry Batching Plant

The plant delivers the dry concrete materials into the truck mixer vehicle and injects the necessary volume of water, cement and additives at the same time. The product is then held in the drum of the vehicle which revolves and agitates the wet mix whilst delivering it to its destination.

Type	PLZ 80
Production rate	80 m^3/h
Aggregate storage bins charging	4 x 25m^3
Aggregate weighing capacity	2400~9600 kg
Conveyor belt width	800mm
Cement weighing capacity	2400kg
Screw conveyor LSY273	90 t/h
Water supply	46 m^3/h
Single cycle production	2~4 m^3
Total power	55 kW
Discharge height	3.8 m
Air compressor	1 m^3/min
Dust suction system	54 m^2
Control room	4 m^2

Tailor-made Solutions

▲ Precooling concrete mixing plant

▲ Mixing plant with aggregate pretreatment

▲ Mixing plant on water platform

▲ World's largest batching machine, total capacity 1500 m ³

▲ Shipborne mixing plant

JS500-1.5 CONCRETE MIXER

JS750-1.5 CONCRETE MIXER

JS750-3.8 CONCRETE MIXER

JZC350 CONCRETE MIXER

JZC350B CONCRETE MIXER

Item	Unit	Parameter			
		JS500	JS750	JZC350	JZC350B
Charging	L	800	1200	560	560
Output	L	500	750	350	350
Nominal output/h	m^3/h	25	35	10	10
Mixing blade	Qty.	2×7	2×8	2×2	2×2
Mixing motor power	kW	18.5	30	5.5	5.5
Lifting motor power	kW	5.5	7.5		4.5
Water pump power	kW	0.75	1.1	0.55	0.55
Discharge height	m	1.5/2.7/3.8	1.5/2.7/3.8	1.25	1.25
Discharging		Manual / Pneumatic		Manual	

JS1000-3.8 CONCRETE MIXER

JS1500-3.8 CONCRETE MIXER

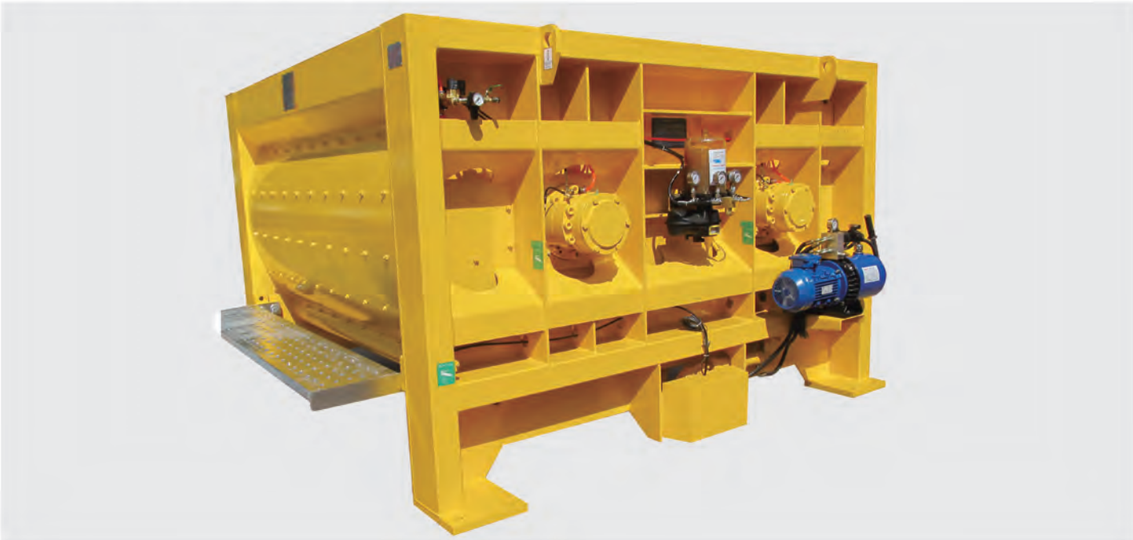
Reliable shaft seals thanks to multiple sealing mechanism

Spiral-groove lifting drum ensures long wire rope service life

Centralized lubrication with shaft-end pressure monitoring

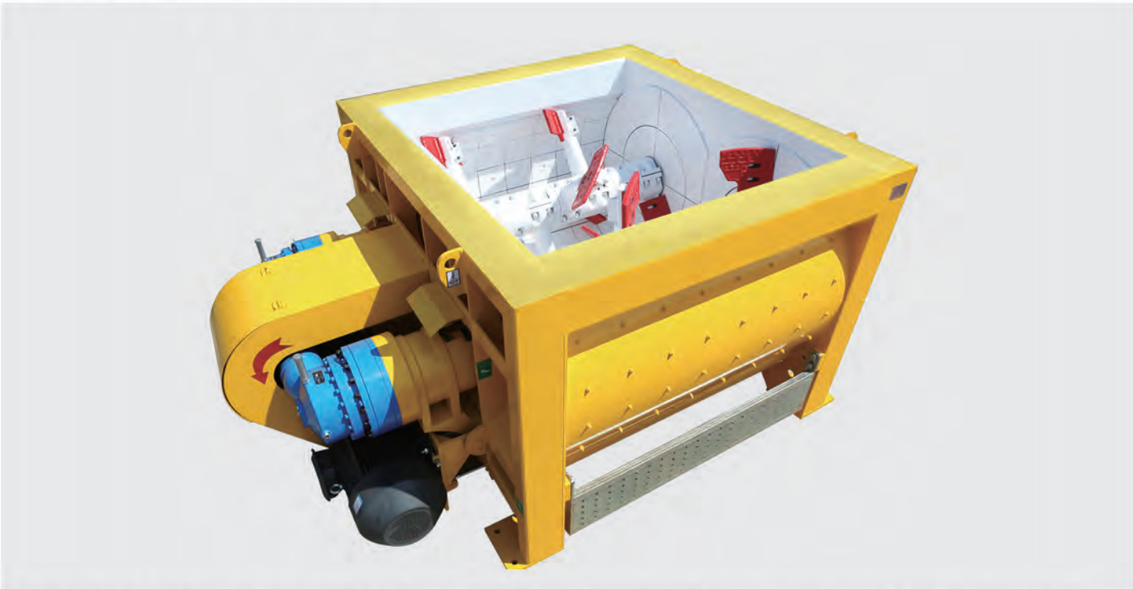
Item	Unit	Parameter	
		JS1000	JS1500
Charging	L	1600	2400
Output	L	1000	1500
Nominal output/h	m^3/h	50	75
Mixing blade	Qty.	2×8	2×9
Mixing motor power	kW	37	45
Lifting motor power	kW	11	18.5
Water pump power	kW	3	3
Discharge height	m	2.7/3.8	2.7/3.8
Discharging		Pneumatic	Hydraulic

Standard Series



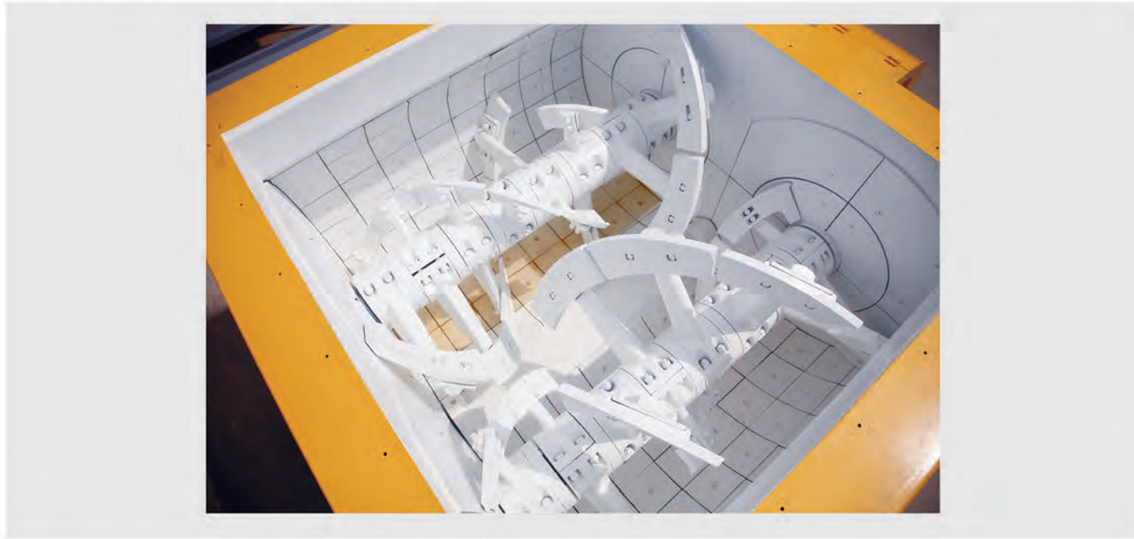
- Durable structure design ensures a long service life.
- Proven design and arrangement of the mixing tools guarantee homogeneous mixing results.
- Multiple mixing shaft seals together with fully automatic central lubrications ensure reliable operations.
- Optimized arrangement of high wear-resistant liners enables much longer service life than others.

Hydro-Dam Series



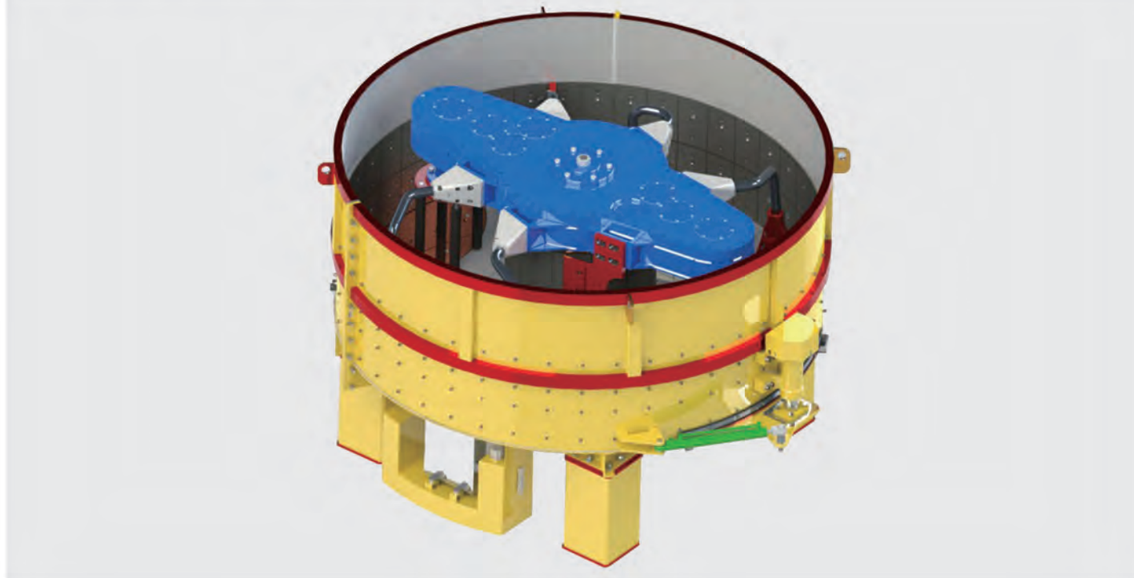
- Optimized designs for the production of large-size aggregate concrete for hydro dam construction.
- Special designed mixing blades guarantee reliable operations.
- Reinforced mixing arm, anti-bending, anti-impact.
- Meet for mixing concrete aggregate with high compressive strength and high corrosion.

Double-Spiral Series



Double-spiral mixing system, with the unique mixing principle, shortened the mixing time, suitable for mixing light-weight concrete and mortar.

Planetary Series



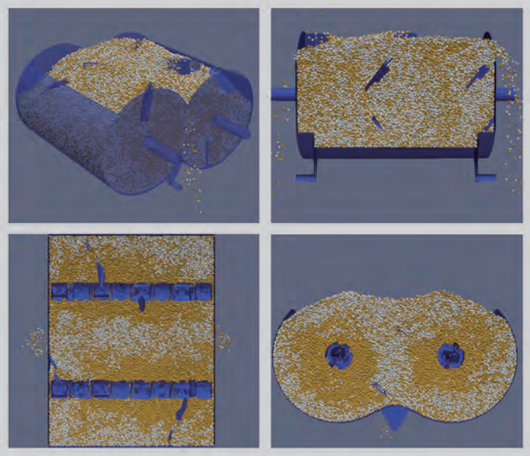
- Effective mixing system with agitators ensures homogeneous mixing in a short time, especially suitable for precast concrete industry.
- Variable mixing speeds enable a wide range of concrete to be manufactured efficiently.
- Flexible arrangement of inlets and discharge gates.
- High reliability and low maintenance effort.

Post–weld aging treatment

Large NC machining center

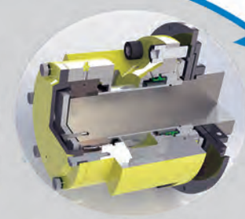
Post–aging processing

NC cutting



Comprehensive In–silico study of mixing process

Non–stick shaft design



Micro oil lubricated shaft–end seal

Independent shaft end pressure display

Adjustable multi–point discharge, accurate and reliable

Genuine high–quality wear–resistant parts

Steel pretreatment

Test running with 10% overloaded dry aggregate

Item	Unit	Mixer parameter					
		JS1000	JS1500	JS2000	JS3000	JS4000	JS5000
Charging	L	1600	2400	3200	4800	6400	9000
Output	L	1000	1500	2000	3000	4000	5000
Nominal output/h	m^3/h	60	90	120	180	240	300
Mixing arm	Qty.	2×8	2×9	2×8	2×9	2×8	2×10
Motor power	kW	2×22	2×30	2×37	2×55	2×75	2×90
Outline dimension(L×W×H)	mm	2700×1970×1450	3600×2130×1475	3510×2320×1680	3990×2600×1700	4300×2900×1900	4700×3050×2385
Discharge		Hydraulic					

PLD1200-Ⅲ

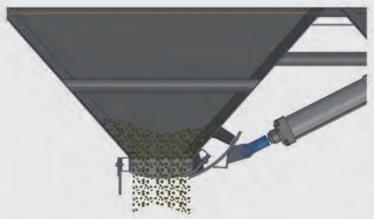
PLD1600-Ⅲ

Item	Unit	Parameter				
		PLD800	PLD800-Ⅲ	PLD1200	PLD1200-Ⅲ	PLD1200-Ⅳ
Nominal volume	L	800	800	1200	1200	1200
Aggregate chamber		2×3m³	3×2m³	2×3m³	3×3m³	4×3m³
Weighing capacity	kg	1000	1000	1500	1500	1500
Loading height	mm	2780	2364	2780	2780	2780
Loading width	mm	3100	2790	3100	3100	3100
Total power	kW	6.6	8	6.6	10.6	14.6
Dimension (L×W×H)	mm	6280×1890×2900	8390×1890×2860	6270×2290×2900	9380×2290×2900	12490×2290×2900

Item	Unit	Parameter				
		PLD1600	PLD1600-Ⅲ	PLD1600-Ⅳ	PLD1600Q-Ⅲ	PLD1600Q-Ⅳ
Nominal volume	L	1600	1600	1600	1600	1600
Aggregate chamber		2×3(7)m³	3×3(7)m³	4×3(7)m³	3×3.7(7)m³	4×3.7(7)m³
Weighing capacity	kg	2000	2000	2000	2000	2000
Loading height	mm	2780 (3155)	2780 (3155)	2780 (3155)	2734 (3425)	2734 (3425)
Loading width	mm	3100 (3500)	3100 (3400)	3100 (3300)	2990 (3170)	2990 (3170)
Total power	kW	8.4	12.4	16.4	10.6	10.6
Dimension (L×W×H)	mm	6270×2305×2900 (7190×2320×3560)	9380×2305×2900 (10405×2320×3560)	12490×2305×2900 (13615×2320×3560)	9360×2250×2880 (9800×2720×3610)	12300×2250×2880 (13200×2720×3610)

BATCHING SYSTEM

Modular and durable design, easy transport and assembly



Patented chamber gate design ensures accurate batching results

Efficient conveyor-belt cleaning (patented)

Fully-wired and fully-equipped modules, quick to install and easy maintenance

Flexible batching speed control

Sealed pneumatic control cabinet, low-maintenance

Weighing and conveying parts fully-covered (optional), more environmentally-friendly and high safety

Item	Unit	Parameter				
		PLD2400Q-Ⅲ	PLD2400Q-Ⅳ	PLD2400QD-Ⅳ	PLD3200QD-Ⅳ	PLD4800QD-Ⅳ
Nominal volume	L	2400	2400	2400	3200	4800
Aggregate chamber		3×15m³	4×15m³	4×15m³	4×20m³	4×20m³
Weighing capacity	kg	3000	3000	4×1500	4×2000	4×3000
Loading height	mm	3530	3530	3630	3820	4120
Loading width	mm	3400	3400	3400	3400	3400
Total power	kW	8	8	8	11.9	11.9
Dimension (L×W×H)	mm	11600×3515×3880	14975×3515×3880	15000×3515×4020	18100×3560×4825	19055×3560×5125

SC SERIES FACTORY-WELDED SILOS

- Designed and constructed in high-quality, proven reliability.
- Fast erection & installation.
- Good price/performance ratio due to standardization.

ZSC SERIES BOLTED SILOS

- Absolute stability, even for very high loadings.
- Perfectly leak-proof due to special bolted joints.
- Large volumes possible, individual designs and sizes available.
- Transport advantage.

KSC SERIES SEGMENTED SILOS

- Transport advantage over welded silos.
- Faster installation than normal bolted silos.
- Absolute stability, even for very high loadings.
- Perfectly leak-proof due to special bolted joints.

Item	Substructure height	Substructure center distance	Total height	Silo diameter	Nominal volume
SC100-5.32m	5m	2.06 × 2.06m	18.5m	2.88m	72m^3
SC150-5.32m		2.24 × 2.24m	22.1m	3.16m	110m^3
ZSC100-3.32m		2.24 × 2.24m	15.3m	3.16m	73m^3
ZSC150-3.32m		2.24 × 2.24m	19.5m	3.16m	108m^3
ZSC200-3.32m	5.8m	3.16 × 3.16m	16m	4.44m	145m^3
ZSC300-3.32m	6m	3.75 × 3.75m	16.8m	5.30m	230m^3
KSC200-3.32m	5.8m	3.16 × 3.16m	16.5m	4.44m	150m^3
KSC300-3.32m	6.46m	3.75 × 3.75m	17.6m	5.30m	235m^3

Truck Mixer

Special spiral blade design, wear-resistant,smooth,no residue

High water level to ensure load

Low center of gravity,better driving characteristics

High-quality mixing drive system

Product features:

- High-quality wear-resistant steel guarantees a long service life.
- Reliable drive components ensure smooth operation.
- High loading volume thanks to high water line.
- Perfect driving characteristics thanks to a low center of gravity.
- Weight-optimised truck mixers for a maximum payload.
- Simple and fast cleaning thanks to smooth rear wall surfaces.

Type	FYG5	FYG6	FYG8	FYG9	FYG10	FYG12	FYG14	FYG16
Effective agitating	5	6	8	9	10	12	14	16
Geometric volume (m^3)	7.5	11.5	14.5	16.5	17.5	21.5	23.5	27.5
Rolling rate (r/min)	0-16	0-16	0-16	0-16	0-14	0-14	0-14	0-14
Angle (°)	16	15	15	15	12	12	10	9
Weight (kg)	3040	3560	3770	3980	4250	4760	5240	6480

HBTS Series Stationary Concrete Pumps

KEY FEATURES:

- Real power for high rise and long distance concrete conveying, versatile and inexpensive solution.
- S-transfer tube enables continuous concrete conveying and a quite delivery line at high pressure.
- Patented pump switching technology based on full two-way plug-in directional valves, less pulsing and long service life.
- Special design to achieve a high suction efficiency.
- Low maintenance and less prone to wear and tear.
- Efficient lubrication system to ensure long-time continuous operation.
- Convenient one-button switching between high- and low-pressure operations.
- Intelligent electronic control system regulates the engine to the perfect speed to minimize fuel consumption, ear and noise.

Item		Unit	HBTS60-08-75	HBTS60-13-90	HBTS60-13-118	HBTS80-13-110	HBTS80-16-132	HBTS80-16-195
Maximum flow rate	High pressure	m3/h	60	37	60	40	45	67
	lower pressure			74	80	80	80	95
Max. output pressure	High pressure	MPa	8	12.5	12.5	13	15.7	15.7
	lower pressure			7.3	7.3	8	9.2	9.2
Suitable Concrete Specification	Landfall	mm	80-230,better:160-200					
	Aggregate size	mm	pebble≤40, Macadam≤30					
Load hopper	Volume	L	400	500	500	500	500	500
	Height	mm	1375	1375	1375	1375	1375	1375
Mode of distribution			"S" Valve					
Oil tank capacity		L	400	500	500	500	500	500
Power system	Model		Y280S-4	Y280M-4	BF4M1013	Y315S-4	Y315M-4	BF6M1013
	Power	kW	75	90	118	110	132	195
Pipe diameter		mm	ϕ125	ϕ125	ϕ125	ϕ125	ϕ125	ϕ125
Pipe cleaning			Compressed air or water washing					
Delivery cylinder × stroke		mm	ϕ180×1200	ϕ200×1800	ϕ200×1800	ϕ200×1800	ϕ200×1800	ϕ200×1800
Dimension(L×W×H)		mm	4860×1830×2000	6440×2060×2150	6770×2060×2500	6440×2060×2150	6440×2060×2150	6770×2060×2500
Weight		kg	4500	6300	7100	6400	6500	7200

BG Series Industrial Pumps

KEY FEATURES:

- Highly durable and high reliable systems, designed to withstand harshest operations, e.g. dredging of bodies of water, reclamation works, sewage sludge, chemistry and industry, mining etc.
- Powerful diesel engine with intermediate cooling and turbocharging.
- Special anti-corrosion designs to significantly extend service life.
- High electrical protection rating to meet the requirements of humid environment.
- Flexible structure design available to fit customer' s work platforms.
- Low maintenance and less prone to wear and tear due to fewer moving parts.
- Standalone walking system (optional) improves mobility.

Item		Unit	BG120 -10-195	BG150 -08-195
Maximum output		m^3/h	120	150
Max. output pressure		MPa	10	8
Grain size max.		mm	≤60	
Load hopper	Volume	L	1500	
	Height	mm	1420	
Mode of distribution			"S" Valve	
Oil tank capacity		L	500	
Diesel	Model		BF6M1013	
	Power	kW	195	
Pipe diameter		mm	ϕ180	
Pipe cleaning			Compressed air or water washing	
Delivery cylinder Diameter × Stroke		mm	ϕ230 × 1800	ϕ260 × 2100
Dimension(L×W×H)		mm	7980 × 2900 × 3390	11290 × 1750 × 2640
Weight		kg	12500(Incl. vibration sieves)	8500

SBS Series Mortar Pumps

KEY FEATURES:

- High fine concrete conveying output thanks to S-transfer tube.
- Rigid valve box, wear-resistant plate and cutting ring assure long service life.
- Advanced electrohydraulic switching system, less pulsing and high reliability.
- Low maintenance and less prone to wear and tear.

KEY FEATURES:

- The mixing system adopts the self-falling double-cone reversing discharging, high production efficiency and good mixing performance.
- Robust and low-maintenance ring-gear drive of the mixing drum.
- High conveying output thanks to S-transfer tube.
- Advanced electrohydraulic switching system, less pulsing and high reliability.
- Convenient reverse pumping function for removing blockage.

Item		Unit	SBS20-08-30
Maximum flow rate		m3/h	20
Max. output pressure		MPa	7.8
Aggregate size		mm	≤20
Loading height		mm	1140
Mode of distribution			"S" Valve
Motor	Model		Y200L-4
	Power	kW	30
Pipe diameter		mm	ϕ80
Pipe cleaning			Compressed air or water washing
Delivery cylinder×stroke		mm	ϕ140×800
Dimension(L×W×H)		mm	3850×1610×1810
Weight		kg	2740

Item		Unit	SJBS20-08-37
Mixing system	Charging	L	560
	Output	L	350
Pump system	Maximum flow rate	m3/h	20
	Max. output pressure	MPa	8
	Mode of distribution		"S" Valve
	Pipe diameter	mm	ϕ80
	Pipe cleaning		Compressed air or water washing
Power		kW	37
Delivery cylinder×stroke		mm	ϕ140×800
Dimension(L×W×H)		mm	4610×2200×3010
Weight		kg	3200