SANY ASPHALT BATCHING PLANT







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Due to our process of continuous innovation, materials and specifications are subject to change without notice.

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SANY ASPHALT BATCHING PLANT QUALITY CHANGES THE WORLD

Contents

P01	SANY Road Machinery			
P 03	SANY Asphalt Batching Plant Features			
P 05	Technical Specifications			
P 09	Industry-leading Technology			
P 13	Lean Manufacturing			
P 15	Guaranteed Quality			
P17	Service			



SANY ROAD MACHINERY

SANY Heavy Industry Co., Ltd. is one of the largest complete equipment suppliers of road machinery. The products cover pavers, rollers, asphalt batching plants, graders, and milling machines etc.

Taking "Quality changes the world" as the mission and "Creating the greatest values for customers" as the duty, Hunan SANY Road Machinery Co., Ltd., has set up SANY (USA) Road Machinery Institute and SANY (Germany) Road Machinery Institute and integrated the most cutting-edge technologies into its products, of which: heavy graders designed by the United States and double drum vibratory rollers designed by Germany are high-quality products of internationally top level; the pavers and asphalt batching plants, having been best sellers in China for 5 consecutive years, are No.1 brand in China and sold well in over 60 countries across the world.

Faced with the construction of expressways, roads in airports and urban high-class roads and with the global market, we provide road construction complete equipment and series of solutions. We have created an unmatched service system to eliminate the customers' worries. In the service satisfaction surveys performed by China Association for Quality, SANY has ranked No.1 for 3 consecutive years and won high trust from the customers. Keeping "Construct roads in China, Connect with the world freely" in mind, SANY Road Machinery Co., Ltd. will spare no effort in serving the global economic development and road construction.



SANY ASPHALT BATCHING PLANT FEATURES

PRECISE MEASUREMENT

- The plant is a gravity flow operation, using control and measurement technology that can maintain asphalt mix accuracy of ±1.0%.
- Component measurement accuracy is also ±1.0%.
- ◆ Double-door aggregate measurement structure with automatic drop correction results in a process accuracy of ±1.5%.
- ◆ Accuracy of bitumen aggregate ratio is ≤±0.1%.

ECO-FRIENDLY

 ♦ Exhaust emission concentration is ≤20 mg/Nm³ Ringelmann blackness ≤Grade 1, ambient noise ≤85 dB (70 dB in the control room).

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ENERGY SAVING

- Optimized power usage reduces energy consumption.
- Heat exchange rate of the drying drum is ≥85%.
- The frequency conversion and constant pressure control technologies used in the burner result in a bitumen savings of 10% per batch.
- Rapid asphalt heating technology results in the heating preparation time being shortened by about 1 hour.

EFFICIENCY

- ♦ 15% capacity redundancy design.
- Specially designed mixing body with a mixing efficiency increase of 10%.
 - ♦ Screening efficiency ≥90%.

SAFE AND RELIABLE

• A mechanical safety device is installed in the access door of every key part for greater protection and security. Dual computer redundancy design for the control system provides greater reliability in operating performance.

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COMPACT STRUCTURE

Minimal facility footprint.

Space saving, compact construction.

EASY MAINTAINING

 Network data sharing and GPS remote fault diagnostic system.

TECHNICAL SPECIFICATIONS



Technical Characteristics

- Dust collecting and drying integrated design, compact structure, small Stable and reliable operation. footprint and high thermal efficiency
- Modular design and multiple available layouts make it suitable for installation at narrow, complicated and/or irregular sites. Footprint is reduced 33% over traditional plant structures.
- Independently developed, dual-frequency converting burner features a higher burning efficiency and better fuel adaptability.
- Exceeds previous plant productivity by 15%.
- Sany developed accurate metering technology.
- Wear parts with long service life
- The screen mesh is quickly replaceable.
- Maintenance free structure.

TECHNICAL SPECIFICATIONS

	Item	SLB1000X8	SLB1500X8	SLB2000C8	SLB3000C8	SLB4000C8
Main Parameters	Rated Productivity(t/h)	80	120	160	240	320
	Fuel	Light Oil, Heavy Oil,Natural Gas, Coal Gas, Liquefied Gas				
	Max Total Power(kW)	260	327	380	603	730
Cold Aggregate System	Number of Cold Aggregate Silo	4	4	4	5	6
	Cold Aggregate Silo Capacity(m ³)	8	8	10	13	13
	Material Loading Width(m)	3.2	3.2	3.54	3.6	3.6
Drying System	Drying Drum Length(m)	7	8	9	10	12
	Drying Drum Diameter(m)	φ1.7	ф1.8	ф2	ф2.5	ф2.75
	Rated Burden Capacity(mW)	10	14	14	28	35
Hot Aggregate Elevator	Aggregate Conveying Capacity(t/h)	100	130	180	280	380
Screening System	Screen	4	4	5	5	6
Hot Aggregate Silo	Hot Aggregate Silo(m ³)	12	15	25	55	65
Mixing System	Rated Mixing Capacity(kg)	1250	1650	2250	3500	4500
	Mixing Power(kW)	2*18.50	2*22	2*30	2*45	2*55
Powder System	Powder Filling Silo(m ³)	40	40	50	50	50
	Powder Recycling Silo	10(optional)	10(optional)	25	50	50
Heat Conduction Oil & Asphalt System	Diesel Tank(L)	12000	12000	12000	12000	30000
	Asphalt Tank(L)	1*30000	2*30000	2*30000	3*50000	4*50000
	Heavy Oil Tank(L)	1*30000(optional)	1*30000(optional)	1*30000	1*30000	2*30000
	Heat Conducting Furnace(kcal/h)	300000(optional)	300000	600000	800000	800000
Dedust system	Filtration Area(m ²)	360	480	600	800	1200
	Induced Draft Fan Air Volume(Nm ³ /h)	30000	40000	55000	85000	105000
	Induced Draft Fan Power(kW)	55	90	110	160	185
Finshed product silo capacity	Standard	0	0	0	90	100
	Optional(t)	281	35	45		
Control system	Control Mode	Centralized	Centralized	Distributed	Distributed	Distributed

Remarks:

1. Specific optional configuration shall be subject to the contract agreement. This table is for reference only. The optional parts are not included in the standard configuration. 2. Due to continuous technological improvement, the above technical specifications may change without notice. SANY reserves the right of final interpretation of all technical specifications. ** Standard working condition: ambient temperature, 20°C; standard atmospheric pressure; average water content of cold aggregate - 5%; temperature of hot aggregate - 160°C; cycling time - 45 s; final product is common, medium sized aggregate asphalt. This follows GB/T 17808-2010 Road construction and road maintenance machinery and equipment—asphalt mixing plant.

TECHNICAL SPECIFICATIONS



Technical Characteristics

- + High efficiency: Reinforced special hot recycling drying drum, increase production capacity by more than 10%
- Energy efficient: total installed capacity will be reduced by 20%, energy saving 16%
- Fuel efficient: Equipped with an extra-long drum providing, long heat exchange time and high thermal efficiency
- Eco-friendly: full negative-pressure operation of the whole machine, without dust leakage

Leading technologies

- Distributed control technology, suitable for remote hot recycling signal transmission, stable digital signal, strong anti-interference ability
- Unique combustor patented technology, RAP would not direct touch with the flame, at the same time, it could avoid overheating of drum feed box
- Heavy oil dual cycle system technology to achieve the roof burner to stabilize constant temperature supply
- A fully independent thermal oil heating system to reduce material sticking

TECHNICAL SPECIFICATIONS

Item	SHR120C8	SHR160C8		
Fuel	Light Oil, Heavy Oil,Natural Gas, Coal Gas, Liquefied Gas			
Rated Productivity(t/h)	120	160		
Max Total Power(kW)	190	220		
Material Loading Width(m)	3.6	3.6		
Cold Aggregate Silo Capacity(m ³)	13	13		
Number of Cold Aggregate Silo	2	2		
Aggregate Conveying Capacity(t/h)	130	180		
Hot Aggregate Silo(m ³)	10	10		
Drying Drum Length(m)	2.5	2.5		
Drying Drum Diameter(m)	12	15		
Rated Burden Capacity(mW)	14	21		
Control Mode	Distributed	Distributed		

INDUSTRY-LEADING TECHNOLOGY

Totally upgraded control system

- Dual computer redundancy.
- Event recording which promotes continuous product improvement and enables excellent fault tracing and clearing.
- Firewall system which prevents computer virus invasion and enhances system stability.

Drying and heating system

- ◆ Energy efficient drying drum has a thermal efficiency ≥85% attained by improving the initial material dispersing angle, material capacity of the blades, material curtain density and material retention time.
- Highly abrasion resistant material dispersing blades contribute to the long drum service life.
- ◆ A variety of burner types are available, including light oil, heavy oil, fuel-gas, natural gas, and coal oil.



Tatented technology

• Sany has been awarded many national patents for invention, utility and appearance.







New type burner

- Low pressure medium atomization, good fuel adaptability;
- Fuel pump and blower with double frequency conversion control which improve the system reliability;
- mixed material per ton by 10%;
- Direct ignition with heavy oil instead of diesel;
- ◆ Special blower which ensures a stable flame profile and prolongs the service life of the flame tube;
- Online fuel-gas leakage detection function which ensures safety and reliability;
- Self-resetting valve-off which prevents safety accidents;
- Constantly upgraded fault diagnosis expert system which may instruct and remind the users to eliminate relevant faults.



◆ Constant pressure control technology which realizes accurately-controlled fuel supply and a high-precision air-fuel ratio, reducing the

Efficient vibrating screen

- ◆ Application of digital simulation and dynamic simulation technologies realizing a screening efficiency ≥ 95% and a material mixing rate < 5%;
- Unique leakproof structure without water seepage or dust leakage and wrapped with rock wool for heat preservation, thus achieving little heat loss and low noises;
- Maintenance-free vibrating motor
- Plug-in screen mesh mounting method with which the screen mesh may be replaced easily.





Mixing system

- Complete upgrading ability: asphalt cool and hot recycling interface and multiple additives interface;
- Specially designed layout of mixing body and blades, unique mixing shaft and involved mixing arms, which shortens the mixing
- cycle by 2-3 s, provides uniform material wrapping and increases the mixing efficiency by 10%;
- Safety device which mandatorily protects the operating safety of maintenance personnel



Dedusting system

- Dust emission concentration less than 20 mg/Nm3;
- + High and low temperature warning, and automatic cutoff at superhigh temperature



+ High-quality bags characterized by high filtering accuracy, high temperature resistance, corrosion resistance and long service life;

LEAN MANUFACTURING

Sany uses a lean manufacturing system designed to produce reliable products in the most efficient manner possible.









Sany's world class road machinery production line is the result of advanced design, optimized layout, and technical innovation. Sany continuously researches automation and intelligent equipment technologies and has created an information oriented production management system, utilizing fully automatic robotic welders, automatically guided vehicles (AGVs) and automated warehouses. Rigorous quality control ensures that even the most complicated machine is defect free. Sany has set a new standard for the engineering machinery industry to meet.

GUARANTEED QUALITY











