



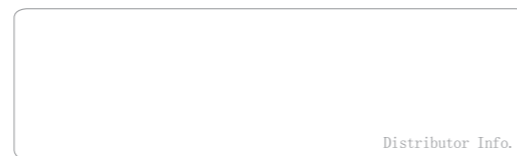
## SANY ASPHALT BATCHING PLANT



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

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# Contents

- P01 Manufacturing Facility
- P02 Facility Features
- P04 Technical Specifications
- P06 Industry Leading Technology
- P10 Lean Manufacturing
- P12 Guaranteed Quality
- P14 Worldwide Sales & Service Locations

## THE WORLD'S LARGEST ASPHALT BATCHING PLANT MANUFACTURING FACILITY



# 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  $\pm 1.0\%$ .
- ◆ Component measurement accuracy is also  $\pm 1.0\%$ .
- ◆ Double-door aggregate measurement structure with automatic drop correction results in a process accuracy of  $\pm 1.5\%$ .
- ◆ Accuracy of bitumen aggregate ratio is  $\leq \pm 0.1\%$ .

## ECO-FRIENDLY

- ◆ Exhaust emission concentration is  $\leq 20 \text{ mg/Nm}^3$ , Ringelmann blackness  $\leq \text{Grade 1}$ , ambient noise  $\leq 85 \text{ dB}$  (70 dB in the control room).

## ENERGY EFFICIENT

- ◆ Optimized power usage reduces energy consumption.
- ◆ Heat exchange rate of the drying drum is  $\geq 85\%$ .
- ◆ 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.

## 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.

## EXCEPTIONAL EFFICIENCY

- ◆ 15% capacity redundancy design.
- ◆ Specially designed mixing body with a mixing efficiency increase of 10%.
- ◆ Screening efficiency  $\geq 90\%$ .

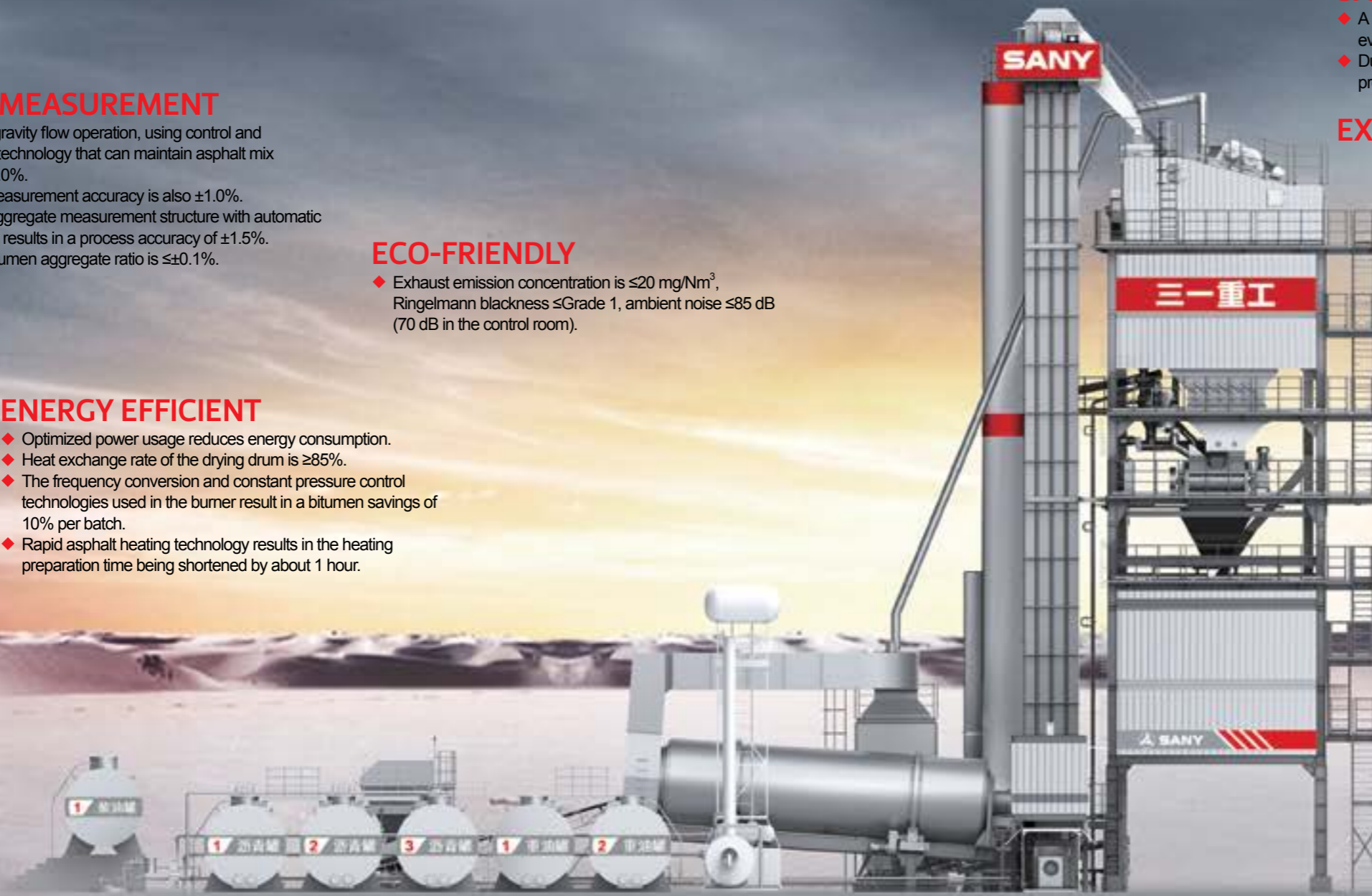
## CONVENIENT

## MANAGEMENT

- ◆ Network data sharing and GPS remote fault diagnostic system.

## COMPACT STRUCTURE

- ◆ Minimal facility footprint.
- ◆ Space saving, compact construction.



# TECHNICAL SPECIFICATIONS



Item		SLB2000B	SLB3000B	SLB4000B
Main Parameters	Rated Productivity	120-160t/h	180-240t/h	280-320t/h
	Fuel	Light Oil、Heavy Oil、Natural Gas、Coal Gas、Liquefied Gas		
	Finished Product Silo	45t	80t	80t
	Max Total Power	415KW	584kW2	702kW
Cold Aggregate System	Number of Cold Aggregate Silo	4	5	6
	Cold Aggregate Silo Capacity	13m <sup>3</sup>	13m <sup>3</sup>	13m <sup>3</sup>
	Material Loading Width	3.6m	3.6m	3.6m
Drying System	Drying Drum Length	9m	10m	11m
	Drying Drum Diameter	2m	2.5m	2.75m
	Rated Burden Capacity	14MW	21MW	27MW
Hot Aggregate Elevator	Aggregate Conveying Trolley Power	180t/h	260t/h	340t/h
Screening System	Screen	4.5 layer	4.5 layer	5.5 layer
Hot Aggregate Silo	Hot Aggregate Silo	21m <sup>3</sup>	50m <sup>3</sup>	65m <sup>3</sup>
Mixing System	Rated Mixing Capacity	2000kg	3000kg	4000kg
	Mixing Power	2×30kW	2×37kW	2×45kW
Powder System	Powder Filling Silo	50m <sup>3</sup>	52m <sup>3</sup>	60m <sup>3</sup>
	Powder Recycling Silo	65m <sup>3</sup>	80m <sup>3</sup>	80m <sup>3</sup>
Heat Conduction Oil & Asphalt System	Diesel Tank Capacity	1×12000L	1×12000L	1×30000L
	Asphalt Tank Capacity	2×50000L	3×50000L	4×50000L
	Heavy Oil Tank Capacity	1×30000L	1×50000L	2×30000L
	Heat Conducting Furnace	60000kcal/h	75000kcal/h	75000kcal/h
Dedust System	Filtration Area	520m <sup>2</sup>	900m <sup>2</sup>	1200m <sup>2</sup>
	Induced Draft Fan Capacity	55000Nm <sup>3</sup> /h	98000Nm <sup>3</sup> /h	125000Nm <sup>3</sup> /h
	Induced Draft Fan Power	110KW	160KW	185KW
Control System	Control Mode	Manual/ Automatic Computer Control		

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 Characteristics

- ◆ Dust collecting and drying integrated design, compact structure, small 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.
- ◆ Stable and reliable operation.
- ◆ 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.

# 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  $\geq 85\%$  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.



## Patented technology

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



## Latest burner technology

- ◆ Low pressure, medium atomization with good fuel adaptability.
- ◆ Fuel pump and blower with dual frequency control for improved system reliability.
- ◆ Constant pressure control technology results in accurately controlled fuel supply resulting in an excellent air-fuel ratio. This results in a 10% reduction in fuel use.
- ◆ Direct ignition of heavy oil does not require diesel fuel.
- ◆ Forced draft blower ensures a stable flame profile and prolongs the service life of the sprayer plate.
- ◆ Online fuel/gas leakage detection and reporting for safety and reliability.
- ◆ Automatic shut-off to prevent accidents.
- ◆ Constantly upgraded fault diagnostic system.



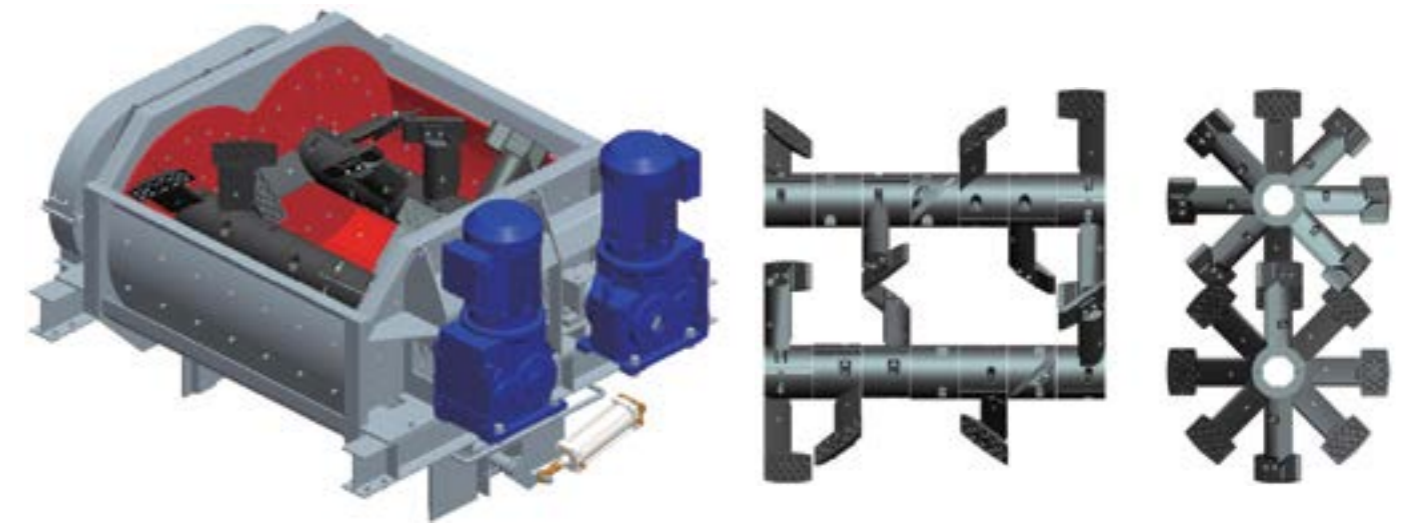
### Efficient vibrating screen

- ◆ Usage of both digital simulation and dynamic simulation technologies during design results in screening efficiency  $\geq 95\%$  and a material mixing rate  $< 5\%$ .
- ◆ Unique leakproof structure means no water seepage or dust leakage; rock wool wrapping for heat retention, thus little heat loss and low noise factor.
- ◆ Maintenance free vibrating motor.
- ◆ Plug in screen mesh mounting method makes replacement almost effortless.



### Mixing system

- ◆ Complete upgrade capability: asphalt cool and hot recycling interface, multiple additives interface.
- ◆ Specially designed layout of the mixing body and blades, unique mixing shaft and mixing arms shorten the mixing cycle by 2-3 s, and provides uniform material blending, increasing the mixing efficiency by 10%.
- ◆ Safety device guarantees the safety of maintenance personnel.



### Dedusting system

- ◆ High-quality, efficient corrosion resistant bags feature high temperature resistance and long service life.
- ◆ Dust emission concentration less than 20 mg/Nm<sup>3</sup>.
- ◆ High and low temperature warnings with automatic over-temperature cut off.



# LEAN MANUFACTURING

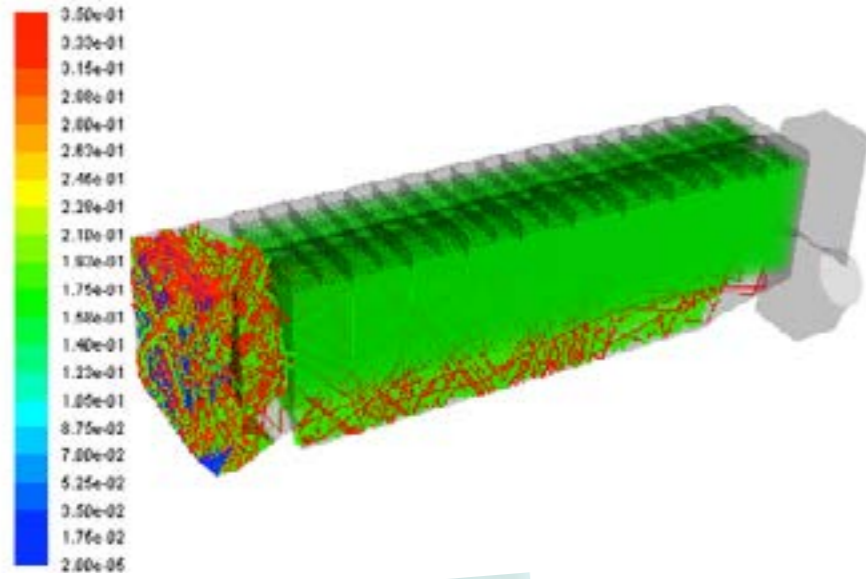
Sany uses a lean manufacturing system designed to produce reliable products in the most efficient manner possible.



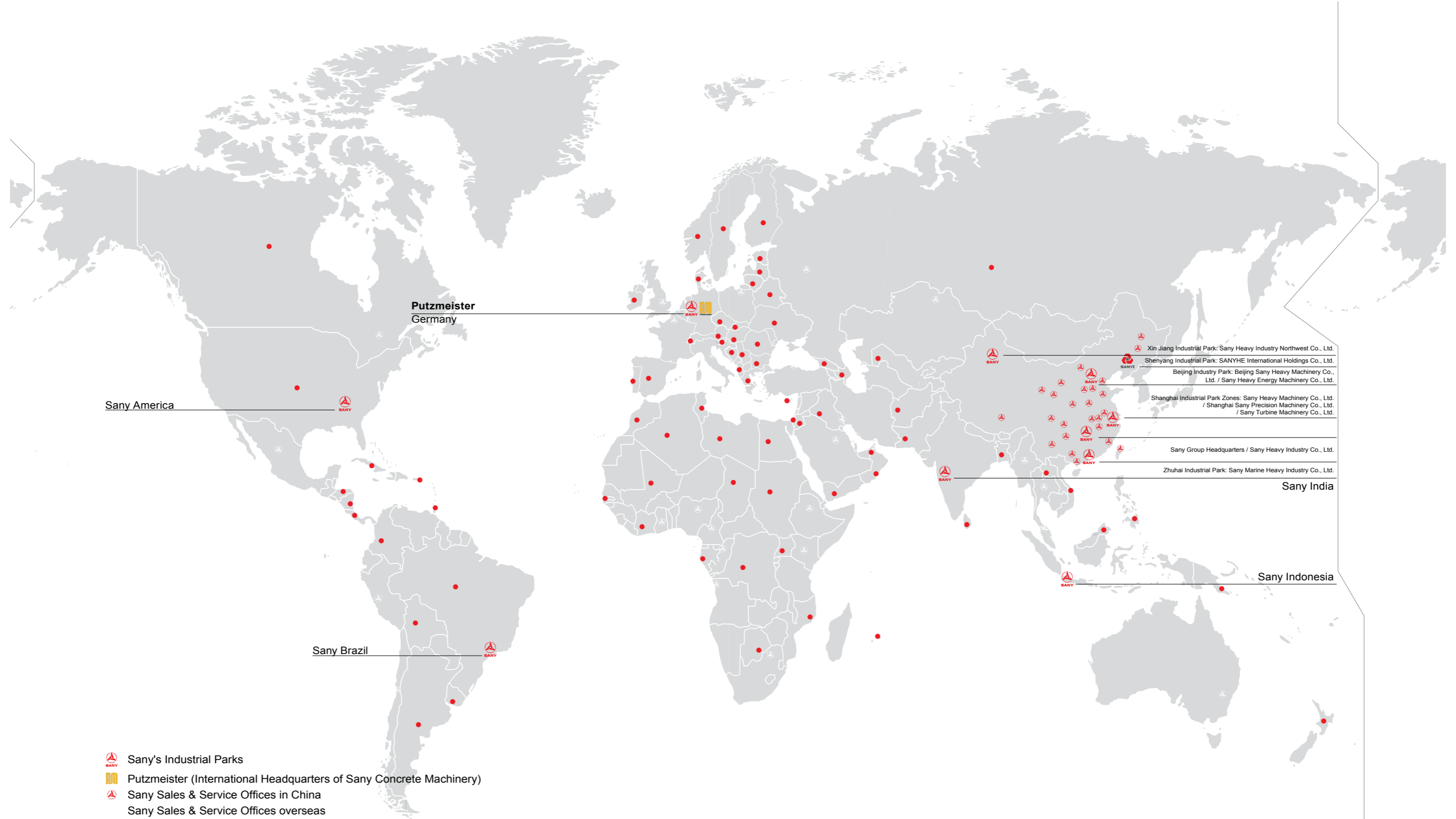
Sany's world class road machinery production line is the result of advanced design, optimized layout, and technical innovation. Sany continuously researches automation and intelligent equipment technologies and has created an information oriented production management system, utilizing fully automatic 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







-  Sany's Industrial Parks
-  Putzmeister (International Headquarters of Sany Concrete Machinery)
-  Sany Sales & Service Offices in China
-  Sany Sales & Service Offices overseas
-  Sany Global Coverage