

# STR08E-3, STR13, STR16, STR20-5, STR23 TRIMMING DOZERS SERIES

LET'S MAKE CONSTRUCTION EASIER



GROUP PRODUCTS



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Model	STR08E-3	STR08ES-3	STR13	STR16	STR20-5	STR23
Power,kW/rpm	58.5/2350	58.5/2350	105/1900	131/1850	162/1950	179/2000
Operating weight,kg	7950	8500	14500	17050	21000	25540
Dozing capacity,m <sup>3</sup>	1.24	1.35	1.86	2.16	2.26	2.43

# STR08E-3 STR08ES-3

Engine model: WP4G90E330  
 Power(kW/rpm): 58.5/2350  
 Blade ,L –W (mm): 2200-750/2400-750  
 Dozing capacity (m<sup>3</sup>): 1.24/1.35  
 Operating weight(kg): 7950/8500



Trimming Dozers have the advanced and reasonable structures, mature track structures and drive technologies and could perform the pushing and racking if equipped with the special working equipments. The high-performance air filter and the large radiator could work under the dusty and hot environment.

They are mainly used for sorting the bulk materials inside of cabin, such as the coal, the mineral, the chemical fertilizer, fodder and foot, as well as the trimming in the power plant and the surface coal mine.

## Power system

Weichai WP4G90E330 turbocharger engines enjoy strong power, efficient energy, high torque backup factor

- The diesel engine has the prolonged stroke, furthering the diesel engine performance.
- Adopts the stage-III air filter, effectively preventing the dust from wearing the engine
- Excellent low-temperature start, reasonable structure, easy maintenance



## Drive system

The transmission with the power shift features the flexible operations and the high working efficiency.

- The torsional damper is adopted to absorb the impact

and vibration from the drive system and to prevent the vibration transmission, protecting the engine and the drive parts and prolonging the service life.

- The transmission with the power shift could make sure the smooth gear-shifting, realizing the change of direction quickly and improving the flexibility in change of both velocity and direction.

## Cooling system

Adopts the large gilled tube radiator that effectively ensures the normal operations under the higher temperature and provides the convenient cleaning; adopts the four-point mountings for radiator, featuring the high stability

## Hydraulic system for working equipments

Adopts the multi-stage filter system that could effectively ensure the fluid cleanness and reduce the failure ratio of hydraulic system

## Structure

The box-shaped main frame connects the front balance beam, the mounting points of working equipment, the rear supporting points of lifting cylinder, improving the durability and the consistency between the left cylinder and the right one. The rear balance beam frame is of modular type, easy to be changed.

## Chassis system

Durable and steady performance and excellent traction

- The rigid running system could transfer the working load and the impact load to the main frame, effectively protecting the drive parts and improving the stability under the complex working conditions.
- The assembled type and signal grouser track is of main chain link, which is easy for the track to be removed and maintained. The inside of track pin bushing is filled with the lubricant, minimizing the wear of track pins and track bushing.



## Driving environment

The controls and instrument assembly are easy to operate and the cab is comfortable.

- The four-leg cab shed is easy to observe the front, back, left and right situations, effectively preventing against cabin sidewall.
- The single handle could control the running system and the working equipment, featuring the sensitive operations and greatly dropping the labor intensity.

- The instruments are reliable and give the intuitive and accurate readings.

## Accessories for working parts

- The large-angle forward and backward shovels have the symmetrical structures that are suitable for dual-face working. Besides, welding of the inside vertical plate guarantees the strengths of each part of shovels, improving the working efficiency and suitable for more complicated environment.
- The rear protective frame is made of high-strength plate through the welding, effectively preventing the impact of cabin and protecting the drive system and thus prolonging the machine reliability and service life.

## Maintenance and safety

Your intimate assurances are the durable Shantui STR trimming dozers, expanded maintenance service, perfect service network and timely service.

- In addition, the sport bars for litters and the seatbelts are optional and could protect the operators in emergency.
- The reversing alarm, horn, excellent brake and the distinctive painting could give the effective safety to the periphery peoples.
- The driver will feel safe due to a lot of handles and the safety signs.

# STR13

Engine model: SC8DK143G3

Power(kW/rpm): 105/1900

Blade dimension ,L –W (mm) 2908-800

Dozing capacity (m<sup>3</sup>): 1.86

Operating weight(kg): 14500



The engine with the high power, low fuel consumption and the high torque backup greatly improves the working efficiency and the reliable performance. In addition, the transmission with the power shift is easy and flexible to control.

STR13 Trimming Dozers are widely used for sorting and filling of bulky material in ports, as well as trimming of bulky material in the power plant and the port.

## Power system

SDEC SC8DK143G3 turbocharger engines enjoy strong power, efficient energy, high torque backup factor and the rated power up to 105kW.

- The improved air filter and air inlet and exhaust system make the filtration precision of the air filter up to 99.9%. The improved cold-start device could reduce the vibration.
- The original rubber seals are replaced with the excellent composite material, so as to prevent the trimming dozer damper from leaking of oil.
- The engine could be also available even at the western plateau section of 3000m.

## Drive system

The reliable transmission with the power shift and the final drive with the stage-II spur-gear reducer could steadily transfer the power and have the excellent durability.



- The transmission with the power shift could make sure the smooth gear-shifting, realizing the change of direction quickly and improving the flexibility in change of both velocity and direction.
- The cylindrical torsional damper is adopted to absorb the impact and vibration from the drive system and to prevent the vibration transmission, protecting the engine and the drive parts and prolonging the service life.

## Cooling system

The large gilled tube radiator is used to effectively guarantee the normal operation under the high temperature, with easy cleaning.

## Hydraulic system for working equipments

Adopts the multi-stage filter system that could effectively ensure the fluid cleanness and reduce the failure ratio of hydraulic system

## Structure

The full-box type main frame has the high impact load and the torsional strength, with the quality welding seam ensuring the main frame works for its life cycle.

## Chassis system

- Durable and steady performance and excellent traction
- The rigid running system could transfer the working load and the impact load to the main frame, effectively

protecting the drive parts and improving the stability under the complex working conditions.

- The assembled type and signal grouser track is of main chain link, which is easy for the track to be removed and maintained. The inside of track pin bushing is filled with the lubricant, minimizing the wear of track pins and track bushing.

## Driving environment

The controls and instrument assembly are easy to operate and the cab is comfortable.

- The four-leg cab shed is easy to observe the front, back, left and right situations, effectively preventing against cabin sidewall. The new cab could not only increase the internal space, but also widen the vision. The A/C system is designed to comfort the operations.
- The drivers' seat is more beautiful and comfortable according to the ergonomic human engineering and could be easily adjusted backward and forward. In addition, the speed control, steering control and the engine hand accelerator are at the left side of driver, with the speed control separated from the steering control.
- The instruments are reliable and give the intuitive and accurate readings. The welded instrument box completely satisfies the high-frequency requirements of trimming dozer.

## Accessories for working parts

- The large-angle forward and backward shovels have the symmetrical structures that are suitable for dual-face working. Besides, welding of the inside vertical

plate guarantees the strengths of each part of shovels, improving the working efficiency and suitable for more complicated environment.

- Both sides of flanks and beams from H-shaped shovels are welded by using square steel tubes, with the beam being of integral bending plate and thus enhancing the shovel strength.



## Maintenance and safety

Your intimate assurances are the durable Shantui STR trimming dozers, expanded maintenance service, perfect service network and timely service.

- In addition, the sport bars for litters and the seatbelts are optional and could protect the operators in emergency.
- The reversing alarm, horn, excellent brake and the distinctive painting could give the effective safety to the periphery peoples.
- The driver will feel safe due to a lot of handles and the safety signs.

# STR16

Engine model: WP10G178E355

Power(kW/rpm): 131/1850

Blade dimension ,L –W (mm) 3020-935

Dozing capacity (m<sup>3</sup>): 2.16

Operating weight(kg): 17050



STR16 Trimming Dozers feature the high technological content, reasonable design, high power and high productivity, widely used for unloading and cleaning of the bulky materials in cabin, port, power plant and others. In all, the STR16 Trimming Dozers are essential to large wharf.

## Power system

Weichai WP10G178E355 engines feature the high power, high combustion efficiency, and environmental protection, meeting the China-II emission standards.



## Drive system

- The convenient operations, the higher power output and the production efficiency are achieved due to the steering system with hydraulic assist and the transmission with both the planetary power shift and the compulsory lubrication.
- The three-element, monopole and single-phase

torque converter could steadily transfer the power to the drive system, effectively protecting the drive system.

## Cooling system

The closed system is adopted to keep the radiator pressure at the constant value, featuring the high heat dissipation. The fan power comes from the engine, generating the forced air supply and reinforcing the cooling efficient.

## Hydraulic system for working equipments

The mainstream 14MPa work hydraulic system enjoys the steady work and the overloading protection, greatly reducing the ratio of failures occurring to the hydraulic elements.

## Structure

The full-box type main frame has the high impact load and the torsional strength, with the quality welding seam ensuring the main frame works for its life cycle.

## Chassis system

- Durable and steady performance and excellent traction
- The splayed swing type and balance beam suspension could lessen the vibration of whole vehicle, improving the stability under the complicated conditions.
  - Adopts the dual-tooth track shoes, lessening the machine vibration

## Driving environment

The controls and instrument assembly are easy to operate and the cab is comfortable.

- The four-leg cab shed is easy to observe the front, back, left and right situations, effectively preventing against cabin sidewall.
- The drivers' seat is more beautiful and comfortable according to the ergonomic human engineering and could be easily adjusted backward and forward. In addition, the speed control, steering control and the engine hand accelerator are at the left side of driver, with the speed control separated from the steering control.
- The imported famous instruments and the sensors are sensitive and intuitive to the whole running state. The welded instrument box completely satisfies the high-frequency requirements of trimming dozer.

## Accessories for working parts

- The shovel durability is guaranteed by the standard shovels with the capacity of 2.43m<sup>3</sup>, the high-strength box and the high performance material. These accessories are suitable for cleaning and trimming of the material in large and medium wharf and cabin.
- The rear protective frame is made of high-strength plate through the welding, effectively preventing the impact of cabin and protecting the drive system and thus prolonging the machine reliability and service life.

## Maintenance and safety

Your intimate assurances are the durable Shantui STR trimming dozers, expanded maintenance service, perfect service network and timely service.

- In addition, the sport bars for litters and the seatbelts are optional and could protect the operators in emergency.
- The reversing alarm, horn, excellent brake and the distinctive painting could give the effective safety to the periphery peoples.
- The driver will feel safe due to a lot of handles and the safety signs.

# STR20-5

Engine model: WP12  
 Power(kW/rpm): 162/1950  
 Blade dimension ,L –W (mm) 3175-950  
 Dozing capacity (m<sup>3</sup>): 2.26  
 Operating weight(kg): 21000



STR20-5 Trimming Dozers feature the high technological content, reasonable design, high power and high productivity, widely used for unloading and cleaning of the bulky materials in cabin, port, power plant and others. In all, the STR16 Trimming Dozers are essential to large wharf.

## Power system

Weichai WP12 engines are equipped with the stage-III air filter, anti-scald device, featuring the efficiency and the energy saving.



## Drive system

- The bearings for the transmission and the final drive are imported and the friction discs have the strong anti-wear capacity and the anti-pollution capacity, creating the more excellent performance of trimming dozer.

- The whole-machine circuit is designed to be waterproof and adopts the water-proof fuse box, oil-temperature alarm, oil-pressure alarm, coolant-temperature alarm and the reversing alarm.

## Cooling system

The cooling system adopts the large radiator mounted in the three-point cushioning type and the straight-through type cores, featuring high stability.

## Hydraulic system for working equipments

The lifting cylinder of hydraulic system adopts the tile-shaped structure, featuring the easy maintenance.

## Structure

The full-box type main frame has the high impact load and the torsional strength, with the quality welding seam ensuring the main frame works for its life cycle.



## Chassis system

The floating oil seals in the idler roller assembly, carrier roller assembly and track roller assembly could prevent the dust from getting in and the grease from getting out, ensuring the durability.

## Driving environment

The new cab features the good sealing performance, the low noise, reasonable arrangement of instrument and easy and convenient operations.



## Accessories for working parts

The control level directly controlling the working equipment has the reliable, easy and quick features. Locking of the mechanical operations is also easy and reliable.

## Maintenance and safety

Your intimate assurances are the durable Shantui STR trimming dozers, expanded maintenance service, perfect service network and timely service.

- In addition, the sport bars for litters and the seatbelts are optional and could protect the operators in emergency.
- The reversing alarm, horn, excellent brake and the distinctive painting could give the effective safety to the periphery peoples.
- The driver will feel safe due to a lot of handles and the safety signs.

## Technical Specifications

	STR08E-3	STR08ES-3	STR13
Engine Model	WP4G90E330	WP4G90E330	SC8DK143G3
Rated Power (kW/rpm)	58.5/2350	58.5/2350	105/1900
Fuel Consumption (g/kW.h)	-	-	≤210
Operating Weight (kg)	7950	8500	14500
Overall Dimensions (mm)	4665×2200×2679	4665×2400×2679	5470×2908×2920
Track Gauge (mm)	1450	1650	1880
Track ground length (mm)	2185	2185	2365
Width of Track Shoes (mm)	400	510	460
Ground Pressure (Mpa)	0.045	0.037	0.057
Min. Ground Clearance (mm)	315	315	320
Gradeability (°)	30	30	30
Blade Width (mm)	2200	2400	2908
Blade Height (mm)	750	750	800
Max. Drop Below Ground (mm)	652	652	710
Max. Tilt Adjustment (mm)	1495	1495	1630
Dozing Capacity (m³)	1.24	1.35	1.86
Forward/Reverse,1st (km/h)	0~2.53/2.76	0~2.53/2.76	0~3.2/0~3.9
Forward/Reverse, 2nd (km/h)	0~4.55/4.96	0~4.55/4.96	0~5.9/0~7.1
Forward/Reverse, 3rd (km/h)	0~7.57/8.26	0~7.57/8.26	0~9.8/0~11.9
Carrier Rollers (each side)	1	1	2
Track Rollers (each side)	6	6	6
Working Pressure (Mpa)	17.15	17.15	14
Oil pump form	Gear Pump	Gear Pump	Gear Pump

	STR16	STR20-5	STR23
Engine Model	WP10G178E355	WP12	QSNT-C240
Rated Power (kW/rpm)	131/1850	162/1950	179/2000
Fuel Consumption (g/kW.h)	≤215±5%	≤200.9	≤194
Operating Weight (kg)	17050	21000	25540
Overall Dimensions (mm)	5792×3020×3030	6268×3207×3040	6602×3410×3380
Track Gauge (mm)	1880	1880	2000
Track ground length (mm)	2430	2365	2840
Width of Track Shoes (mm)	510	510	560
Ground Pressure (Mpa)	0.067	0.063	0.081
Min. Ground Clearance (mm)	315	415	485
Gradeability (°)	30	30	30
Blade Width (mm)	3020	3175	3402
Blade Height (mm)	935	950	950
Max. Drop Below Ground (mm)	720	740	740
Max. Tilt Adjustment (mm)	1640	1609	1725
Dozing Capacity (m³)	2.16	2.26	2.43
Forward/Reverse,1st (km/h)	0~3.29/0~4.28	0~3.9/0~5	0~3.8/0~4.9
Forward/Reverse, 2nd (km/h)	0~5.82/0~7.59	0~6.8/0~8.6	0~6.8/0~8.5
Forward/Reverse, 3rd (km/h)	0~9.63/0~12.53	0~10.6/0~13.4	0~13.8/0~14.3
Carrier Rollers (each side)	2	2	2
Track Rollers (each side)	6	7	7
Working Pressure (Mpa)	14	20.6	21
Oil pump form	Gear Pump	Gear Pump	Duplex gear pump

SPARE PARTS

## A key element in Shantui Value

How Shantui's dominant position in the production of all types of parts and components for construction machinery adds up to more VALUE for you.



Shantui actually makes its own structural parts, including arms, tracks, undercarriages, roller sets, buckets, and also makes its own transmissions, torque converters and much more for a wide range of construction machinery products.

Unlike most competitors in China, Shantui doesn't just assemble machines—we build them from scratch. Many of Shantui's competitors in China and around the world—are also its customers when it comes to parts. It's one more reason why Shantui delivers better value in its finished products.

**SHANTUI PARTS WITHSTAND STRESS—SO YOU DON'T HAVE TO!**

Shantui manufactures many of our lines' structural parts—undercarriage, tracks, buckets, roller sets, torque converters, transmissions and more—in house. That means better quality control for our bulldozers and a better price for you. Parts and components—The Shantui Way.

### Easy installation.

Simple design makes for easy cleaning, mounting and dismantling of the main links, assuring reliability and high endurance.

High-temp, inductive hard surfaces ensure the best strength and superior wear-resistance.

### Crack-proof.

When the bushing material is cold extruded, the steel fibers in it are evenly distributed. Carburization then ensures sufficient core hardness and wear-resistance of the surface.

### Strength.

Special heat treatment and quenching ensures the strong wear-resistance of the pin shaft for anti-bump, anti-stress and consistent strength, which is critical to the process.

### All-around adaptability.

Track shoes include single-tooth, double-tooth, as well as swamp type, to meet all varieties of work conditions, with strong wear-resistance and enduring performance.

### Transmissions.

At Shantui, we make our own transmissions for our many lines. This is a key component in our vertical integration, further contributing to our trademark value proposition.



## OUR GLOBAL SALES AND SERVICE NETWORK

Shantui's global sales and service network now covers more than 150 countries and territories around the world.

Shantui has extended its well-regarded domestic market promise of ANYTIME, ANYWHERE SERVICE to its offices abroad and to all of its dealers and agents abroad. The network offers local training, has a mature parts delivery system and is still rapidly growing as Shantui's exports pick up steam.

Contact your local Shantui distributor or dealer to learn more about the ways that Shantui brings value to a wide range of construction and concrete handling projects.



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