

SD22 SERIES

CRAWLER BULLDOZER

235 HP POWERSHIFT TRANSMISSION SERIES



Engine Model:
Cummins NT855-C280S10



Gross Power:
175 kW (235 HP) @1800rpm



Operating Weight:
E - 24,600 kg
F - 27,700 kg
S - 25,700 kg

SHANTUI®
VALUE THAT WORKS

Head Office Gaya Makmur Tractors
Jl. Lingkar Luar Barat No.3 Rawa Buaya-
Cengkareng Jakarta Barat - Indonesia 11740
Telp : (62 21) 5828 799
Email : info@gmtractors.net
Website : www.gmtractors.net

SD22 ENGINE & TRANSMISSION

YOUR RELIABLE PARTNER FOR BULK MATERIAL HANDLING

SD22 series bulldozer adopts Shantui's patented technologies and this product can meet the operation demands for diversified working conditions and is an ideal high-efficiency machine for earth-moving operations and bulk material handling.

• Key Features that make SHANTUI SD22
YOUR RELIABLE PARTNER FOR BULK MATERIAL

Cummins Cummins NT855-C280S10 engine with high power and high efficiency and fuel efficient.

- + High Performance, easy maintenance, high combustion efficiency.
- + Fuel Injection: Mechanical Pressure Injection → resulting in Low Fuel Consumption.
- + Turbocharged → More power & Torque output
- + NT855-S10 series engine → A time tested and proven engine.

NT855-S10 is the latest generation of NT855 engine series with better performance and fuel efficiency.

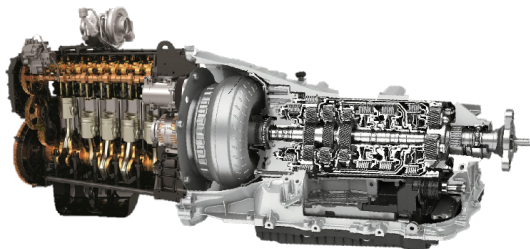
235HP
Gross Power
(175 KW)



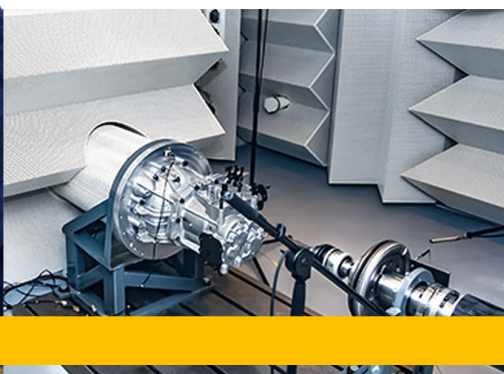
220HP
Net Power
(162 KW)

• AN ENTIRELY IN-HOUSE DEVELOPED TRANSMISSION SYSTEM.

The highly reliable power shift transmission, the stable hydraulic torque converter, and two-stage spur gear final drive feature high power transmission efficiency.



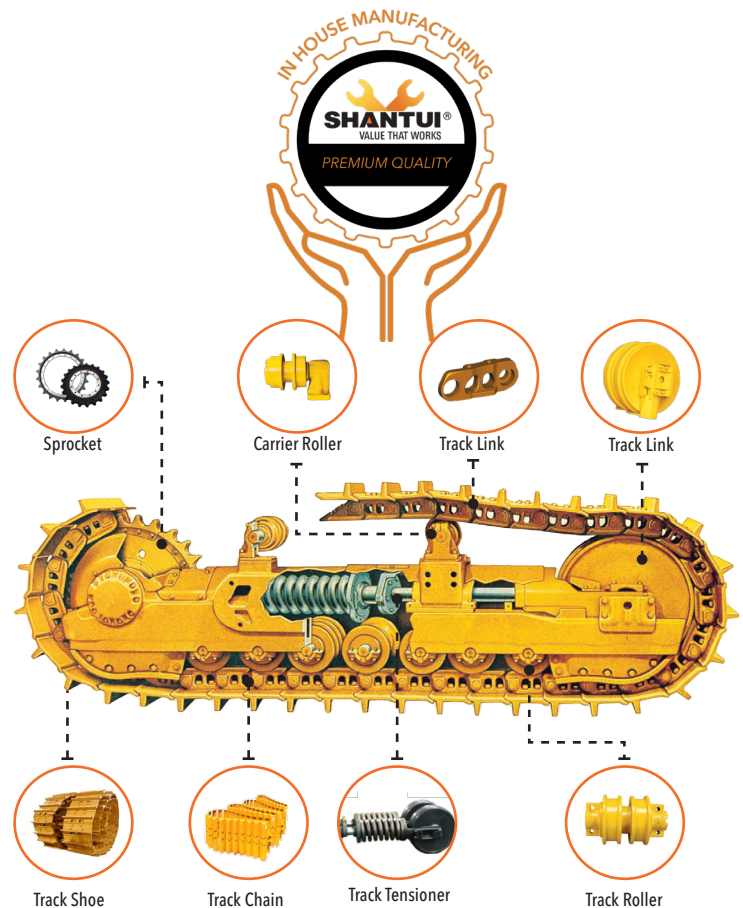
- + The core "Double converter → Torque Converter + Gearbox " is entirely developed in-house.
- + The Entire Transmission system developed in-house → Performs at **90% efficiency** vs 85% efficiency of other brands - giving the dozer the extra needed power and higher traction.
- + Most Advanced, the largest automated manufacturing facility with the biggest Transmission Test Bench in the Industry.
- + **Advanced Technical Analysis:** Collect and analyze samples of load spectrum and performance parameters, and use Finite Element Method (FEM) analysis and motion simulation to optimize products performance.



SD22 UNDERCARRIAGE SYSTEM

All the undercarriage components for SD22 Dozer are IN-HOUSE Manufactured by Shantui, One of **the largest manufacturers for crawler chassis in the world** and the **No. 1 brand in China**.

- + Heat Treated - Heavy Duty Steel plates used.
- + Highly rigid steel with abrasion and impact resistant, well forged for long life-expectation.
- + Modular design with least welded components, for extended life and serviceability.
- + **7 x 2** Wear Resistant Track Rollers & **41 x 2** - Thickened Track Shoes - Increasing the Load distribution on the moving wear and tear parts effectively.
- + Long Track Grounding Length of **3050 mm** combined with the Widest Track shoe of **660mm** → Making SD22 E/F develop the **Highest Traction Force**.
- + Highest Track Grounding area of **38,317 cm²**, helps to generate a low Grounding pressure of **64 Kpa**, and increase stability and performance on sloped and swamp grounds.



SD 22 S (WETLAND BULLDOZER) LGP - BEST SUITED FOR SOFT-TERRAINS.

Wider tracks and blades help distribute the weight and prevent them from sinking into the ground and getting stuck while operating.

// Prevents The Dozer From Getting Stuck In Wet Conditions. //

UNDERCARRIAGE

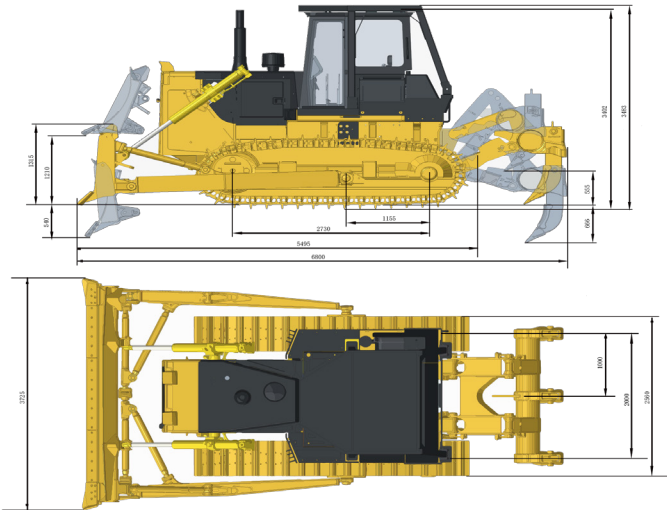
- + 'Wide-track' Broader track gauge of **2250 mm** → Perfect for muddy, swamp-like conditions and soft-terrains.
- + Wider Track shoe of **910 mm** width → Wide-track dozers also perform well on slopes; their wider undercarriage and tracks increase stability and balance on sloped ground.
- + Higher Track grounding Area of **71,476 cm²** → Leading to better traction in wet earth.
- + Low Ground Pressure of only **36 kPa** pressure, gives the dozer its Floatation Abilities, making Shantui SD22 S the best-in-class Mid-size dozer in the market.



SPECIFICATION OF SD22

ENGINE		SD22E	SD22F	SD22S
Engine		Cummins NT855-C280S10		
Emission		China-I		
Rated revolution		1800rpm		
Gross power		175kW(235hp) @1800rpm		
Net power		162kW(220hp) @1800rpm		
Number of cylinder-bore×stroke		6-140X152mm		
Displacement		14.01L		
Max. torque		1080N.m@1300rpm		
Cooling system		Mechanic fan		
Drive System		SD22E	SD22F	SD22S
Drive system		Manufactured by SHANTUI, with high working efficiency, low breakdown rate; torqflow transmission, 3 gears forward and 3 gears backward.		
Traveling Speed	Forward	F1:3.6km/h R2:6.5km/h F3:11.2km/h		
	Backward	R1:4.3km/h R2:7.7km/h R3:13.2km/h		
Max. theoretical traction force		450kN		
Torque converter		3-element, single stage, 1-phase		
Transmission		Planetary gear and torqflow transmission hydraulically actuated, forced lubrication		
Central drive		Spiral bevel gear, single-stage speed reduction, splash lubrication		
Steering clutch		Wet multiple disc, disc spring loaded, hydraulically actuated, hand operated, interconnected with steering brake.		
Brake		Wet, contracting band, foot operated with hydraulic booster		
Final drive		Spur gear, double reduction ,splash lubrication		
CHASSIS SYSTEM		SD22E	SD22F	SD22S
Type		Swing type of sprayed beam, suspended structure of equalizer bar		
Track shoe type		Single grouser	Wetland type	
Track gauge		2000mm	2000mm	2250m
Width of track shoe		560/610/660mm	610/660mm	910
Track grounding length		3050mm	2430 mm	3480
Track grounding area		38317cm²	40935cm²	71476cm²
Number of track shoe		41pcs/side	38pcs/side	45pcs/side
Grounding pressure (Standard configuration)		66kPa	64kPa	36kPa
Number of carried roller, pcs/side		2 pcs/side	2 pcs/side	2 pcs/side
Number of track roller, pcs/side		7pcs/side	6 pcs/side	8 pcs/side
Pitch		206mm	206mm	206mm
VOLUME		SD22E	SD22F	SD22S
Fuel capacity		450L		
Coolant liquid capacity		79L		
Engine oil capacity		45L		
Transmission		122L		
Drive axle		110L		
Final drive		82L/side		

OPERATING WEIGHT		SD22E	SD22F	SD22S
Operating weight (standard)		24600kg	24700kg	25700kg
Blade type		Straight-tilt/Angle/Semi-U/U		Straight-tilt
Blade capacity		4.6/3.4/5.8/6.7m³		5.2m³
DIMENSION		SD22E	SD22F	SD22S
A. Machine height (without ROPS)		3402mm		
B. Track grouser height		72mm		123mm
C. Ground clearance		405mm		513mm
D. Machine length(without draw bar)		5712mm	5462mm	6257mm
E. Machine length (with draw bar)		5495mm	5495mm	6290mm
F. Max. lifting height of blade		1210mm		1330mm
G. Max. digging depth of blade		540mm		550mm
H. Digging angle of blade		55°±3°		
I. Blade width		3725/4365/3800/3725mm		4365mm
J. Blade height		1315/1055/1343/1374mm		1248mm
O. Width from end of left track shoe to end of right track shio (standard)		3000mm		3800mm
PARAMETER OF RIPPER				
Type	Three-shank ripper		Single shank ripper	
Weight	2600kg		2450kg	



02/2024 THE SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. THE PICTURES MAY INCLUDE OPTIONS. THE ACTUAL COLOR & APPEARANCE OF THE PRODUCT MAY DIFFER FROM WHAT IS SHOWN.