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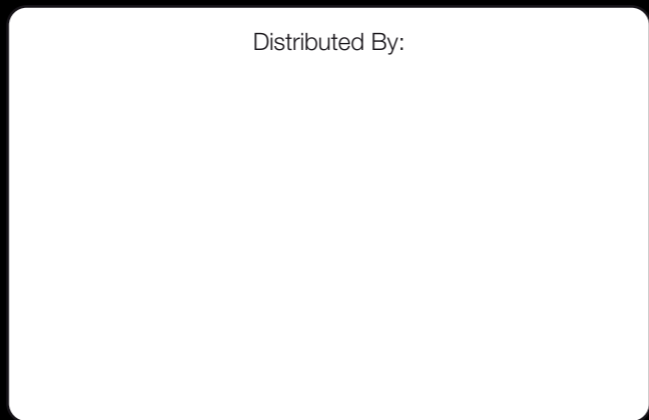
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**ARTICULATED  
DUMP TRUCK**

**PAD450Z**

**CORPORATE OVERVIEW**

POWERPLUS GROUP INC., USA, a leading global manufacturer of a comprehensive range of construction equipment, is part of Worldwide Techno-Equipment Group (1973) Pte Ltd. Established since 1973, POWERPLUS GROUP has evolved into a world-renowned organization that offers machinery unparalleled in price, quality and performance.

POWERPLUS machinery is manufactured with enhanced capacities to exceed even the most stringent international standards of quality and safety. With the aim of producing machinery that is able to withstand even the most extreme climatic conditions and rugged terrains, POWERPLUS Research & Development team which has its Headquarters in the United States, has been the backbone behind all its innovative engineering solutions.

Optimizing the best of technology from the United States, Europe and Japan, POWERPLUS machinery is configured to its ideal technical capabilities. A multinational team of engineers analyzes the data collected from our network of distributors worldwide and are on the constant lookout for ways to maximize the life-span of POWERPLUS machinery.

Today the Company's clientele spans over 100 countries across 6 continents.

At the forefront of setting quality standards, every POWERPLUS machine undergoes a technical review after 2 years and is tested rigorously before a new model is churned out of its production facility.

With an emphasis on delivering value and excellent after-sales service to our customers, the POWERPLUS experience outshines and outclasses its competitors in all aspects.



**ERGONOMICALLY DESIGNED FOR COMFORT AND INCREASED PRODUCTIVITY**

POWERPLUS Dump Truck cabins are shock and noise resistant to reduce operator fatigue. They also come equipped with an adjustable suspension seat, MP3 player and air-conditioning for prolonged working comfort.

What's more, a streamlined dashboard and wide operational view provides both ease of use and improved safety when in operation.



**ENGINEERED FOR OPTIMAL DURABILITY**



**• CUMMINS ENGINE**

The industry-proven, high-performance CUMMINS QSZ14 engine is well-known for its reliability, dependability and fuel efficiency. It is the engine choice in the construction and mining equipment industry.



**• ALLISON TRANSMISSION**

Allison's 4000 Series is built for productivity and reliability to deliver both performance and fuel efficiency.



**• MERITOR AXLE**

Wet brakes axle deliver industry leading braking performance, low operating costs and ultimate durability



**• MAIN FRAME**

Strengthened chassis frame built to increase durability.





**• ERGONOMIC CABIN**

Well organized instrument panel, adjustable steering wheel, suspension seat and high capacity all-climate air conditioner provide convenience and comfort to the operator. With effective sound insulation, the spacious ROPS/FOPS cab has low internal noise levels for high productivity.



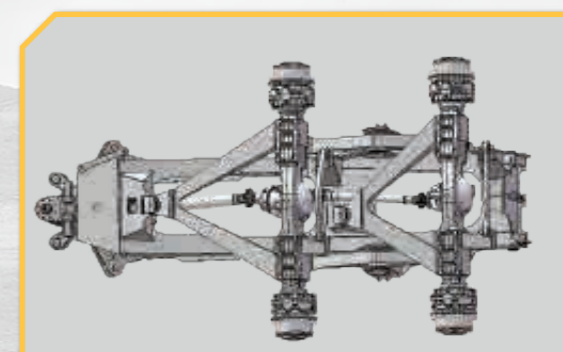
**• CARGO BODY**

The sloping body design further enhances stability and ensures fast and easy dumping in even the most demanding conditions. Clean dumping and increased productivity comes with our standard exhaust heating.



**• CENTRAL LUBRICATION**

SKF automatic lubrication systems provide proper, precise lubricant replenishment to all required points, enabling a range of benefits in the process.



**• SUSPENSION**

Front hydro-pneumatic suspension and maintenance-free bogey rear suspension assures a comfortable ride even over rough terrain and ensures maximum productivity.



**• MERITOR AXLE**

MERITOR heavy duty lubricated axles improves stability and provides equal weight distribution to accommodate all job applications.



**• FRAME**

Heavy-duty A-frame, rigid front and rear frames have been designed for severe off-road operations and durability.



**• MULTI-ANGLE ARTICULATED FRAME**

The articulated joint in the POWERPLUS PAD450Z is a robust structure connecting front and rear chassis. It allows 3-dimensional, multi-angle movement and power transmission at the same time, thus offering superb maneuverability on rough terrains.



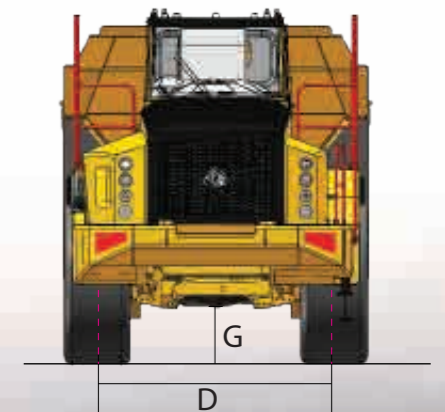
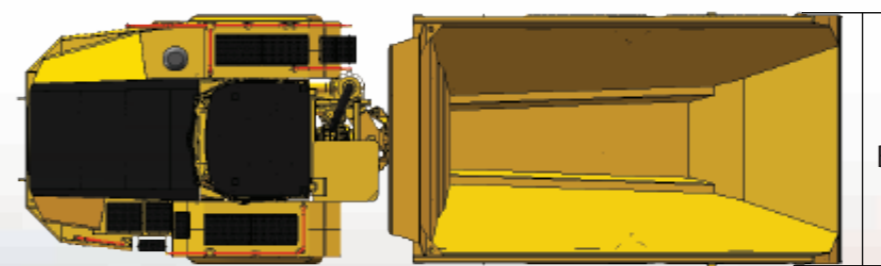
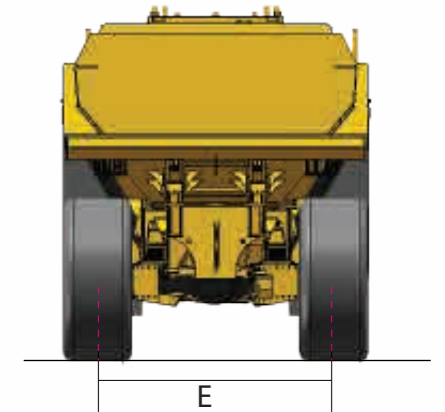
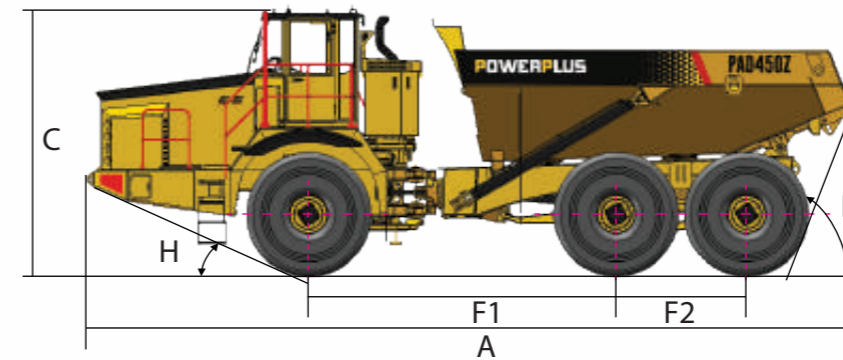
**• RADIAL TIRE**

Special mining tires with longitudinal and transverse groove design provides excellent comfort, grip and performance.

# PAD450Z

MAIN SPECIFICATIONS		
Kerb Mass	kg	34000
Maximum Laden Mass	kg	41000
GVM	kg	75000
Axle Drive		6 x 6
Overall Length	mm	11480
Overall Width	mm	3470
Overall Height	mm	4000
Main Frame	mm	Box section structure
Maximum Speed	km/h	55
Gradeability	%	45
Working Pressure	MPa	23
ENGINE		
Model		CUMMINS QSZ14
Rated Power	hp	540
Rated Speed	rpm	2000
Emission Standard		Euro III
Displacement	L	13.48
TRANSMISSION		
Model		ALLISON 4800RS
Gears		7 Forward, 1 Reverse
Type		Automatic
DUMP BODY		
Bottom Plate Thickness	mm	16
Front Plate Thickness	mm	12
Side Plate Thickness	mm	12
Capacity (Struck / Heaped)	m <sup>3</sup>	19.7 / 25.1
Dumping Angle	°	70
Shape		Dual-slope body
DUMPING SYSTEM		
Dumping Cylinders		Two double acting hydraulic cylinders

AXLE	
Make	MERITOR
Axles	Heavy duty wet brake axles
Final Drive	Planetary gears
WEIGHT DISTRIBUTION	
Empty Payload	
Front Axle	kg 18700
Rear & Mid Axle	kg 15300
Heavy Payload	
Front Axle	kg 22500
Rear & Mid Axle	kg 52500
SUSPENSION	
Front Suspension	Hydropneumatic suspension cylinder
Rear Suspension	A shape frame with balance beam, rubber spring shock absorption
STEERING SYSTEM	
Steering Type	Full hydraulic articulated frame steering
Emergency Steering	Full hydraulic manual control
Minimum Turning Radius	m Outer 9.0, Inner 4.5
BRAKE SYSTEM	
Service Brake	3 circuits hydraulic lubricated brake
Parking Brake	Hydraulic controlled, disk brake
Speed Retarder	Engine cylinder brake
SERVICE REFILL CAPACITIES	
Fuel Tank	L 545
Engine Oil	L 40
Transmission Oil	L 54
Differential & Final Drive Oil (Front, Middle, Rear)	L Front Axle: 42 Mid Axle: 42 Rear Axle: 42
Hydraulic Oil	L 300
TIRE	
Tire Size (Front / Rear)	29.5R25
Rims Size (Front / Rear)	25-25.00/3.5



NO.	DIMENSION		
A	External Length	mm	11480
B	External Width	mm	3470
C	External Height	mm	4000
D	Front Track	mm	2700
E	Rear Track	mm	2700
F1 + F2	Wheelbase	mm	4600 + 1950
G	Ground Clearance	mm	546
H	Approach Angle	°	24
I	Departure Angle	°	68

