



POWERPLUS®
POWERPLUS GROUP INC., USA



OVER

48

YEARS OF TRUST



EXCAVATOR

PP150E-XI • PP180E-XI • PP220E-XI • PP235E-XI • PP300E-XI • PP350E-XI
PP380E-XI • PP400E-XI • PP520E-XI • PP550E-XI • PP800E-XI • PP880E-XI

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.



VALUE-ADDED MACHINES WITH MAXIMIZED DURABILITY

Designed to last, POWERPLUS Excavators are manufactured with high international standards that are built to withstand harsh working conditions. Years of experience in components integration has given us the capability to architect our range of POWERPLUS Excavators to comply with different operation requirements.

Upon careful selection of premium parts and components from all over the world, this powerful workhorse is engineered to maximize the capacity of every mechanism for optimal performance with high efficiency.

CONDUCTIVE WORKING ENVIRONMENT FOR OPERATOR'S COMFORT AND INCREASED PRODUCTIVITY

- Wide operational view with improved visibility for precise execution of works.
- Ergonomic cabin with personalized amenities including POWERPLUS adjustable suspension seat, MP3 player and air-conditioning.
- Noise and shock reduction cabin for better comfort and reduced operator's fatigue.
- Streamline dashboard for easy control and machine operation.



PERKS FOR END-USERS

- Option of Cummins or Isuzu engine with excellent fuel economy and energy savings.
- Robust undercarriage designed for longer life expectancy and ease of maintenance.
- Reinforced X-shaped crawler chassis that promotes machine stability and sturdiness over rough terrains.
- Highly efficient Kawasaki hydraulic pump, valve and swing motor for optimal machine productivity.



MINIMIZED ENVIRONMENTAL IMPACT

- Excavator manufactured according to International safety and environmental standards.
- Fuel efficiency and control system for low emission levels.
- Up to 90% of recyclable parts and quality parts for longer lifespan.



OPERATOR'S COMFORT

- Pilot control system for precise operations
- Ergonomically designed air-conditioned cabin
- Low-noise and reduced vibration cabin for minimal fatigue
- Easy-to-control levers and panels
- POWERPLUS suspension seat

EASY ACCESS TO COMPARTMENTS FOR MACHINE MAINTENANCE

- Easily accessible components for cleaning and inspection
- Simple replacement procedures for filter and oil elements
- Simplified service routine with reduced service time and work hazards

KAWASAKI PUMP

- Enhanced digging force
- Higher pressure rating and increased power density
- High efficiency and large self-priming capability
- Improved resistance against wear and tear, promoting longer lifespan
- Optimum design of the valve plate and casing rigidity result in lower noise
- Reduced energy and pressure loss
- World-renowned brand with quality assurance



ATTACHMENTS

- Italian technology heat-treated bucket teeth and edges
- Customized solutions to your job requirements
- High adaptability to different attachments

X-FRAME DESIGN UNDERCARRIAGE

- Customized and fabricated to ensure stability and durability even in the harshest environments to prevent damage from foreign objects

CUMMINS, ISUZU & MITSUBISHI ENGINES

- Powerful with high fuel efficiency
- Structurally reinforced to resist bending and torsion while reducing noise output
- Special edge-molded design to eliminate possible leakage and reduce oil consumption
- Reduced environmental impact and carbon footprint
- Comes with international warranty for minimized downtime



*Illustration and statements made are based on standard operations which include optional specifications and attachments.



LEGENDARY DEPENDABILITY AND WORLD CLASS SUPPORT

In every corner of the globe and every construction zone, chances are you will find Cummins, Isuzu, and Mitsubishi engines hard at work.

These engines bring toughness and reliability to every equipment. It is designed to minimize downtime for maximum productivity.



KAWASAKI PUMP Swash plate type axial piston pumps**HIGH POWER DENSITY**

A lighter and more compact machine with higher pressure rating and increased power density (output power/mass) is obtained by adopting a half log type wash plate.

In particular, the double pump with its tandem arrangement has eliminated the need for a power divider, which results in an increased transmission efficiency.

HIGH EFFICIENCY AND LARGE SELF-PRIMING CAPABILITY

The spherical valve plate and improved hydraulic balance provides stable cylinder rotation, thus achieving higher efficiency even in a low-pressure and low-speed operating range.

LONG LIFE

Higher life expectancy with the adoption of main bearings of large capacity and the piston-return mechanism that compensates and reduces the wearing damage to the shoe.

LOW NOISE

Reduced collision and noise level through optimum design of the valve plate and the casing rigidity.

WIDE RANGE OF CONTROLS

The pump can be controlled in various kinds of control methods and is capable of responding to either mechanical, hydraulic or electrical input.





TRAVEL MOTOR

- Hydraulically balanced piston motor ensures a consistent supply of high-pressure and operation performance
- An offset type speed design ensures reliable changeover of the displacement
- Floating seals prevent foreign materials like dust or water from entering the motor
- Heavy duty bearings are used in the motor for longer lifespan
- Auto-brake system enhances safety operation
- Motor offers a built-in double counter balance valve and shock-less crossover relief valve, providing speed control and braking with minimum shock
- Case rotation type gear reducer has improved durability and reliability due to high precision parts and an equally loaded design



HIGH-STRENGTH FRAME

- Sealed lubricated track, proven to reduce wear and tear
- Heavy excavator elongated base support
- Slope track frame design allow debris to flow down easily
- Robust X-shaped slope type track frame





SUPERIOR VISIBILITY

The ergonomic cabin design provides a wide and clear operational view for the operator to control the mighty workhorse with confidence. Blind spots are also minimized, enabling the operator to maintain a high level of concentration while conducting the job in an effective manner.

COMPLETE CONTROL

Extra leg room, adjustable suspension seat, streamline dashboard and user-friendly control levers are designed to suit the human movement. The operator is able to maneuver the machine with excellent bucket visibility, enabling the most delicate finishes to be performed in the harshest conditions with maximum productivity.

WELL-DESERVED COMFORT

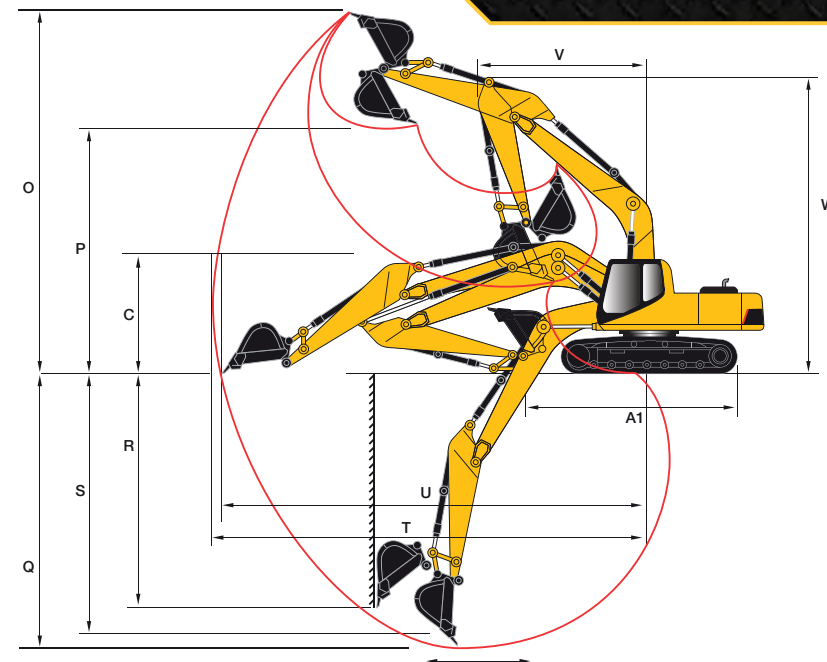
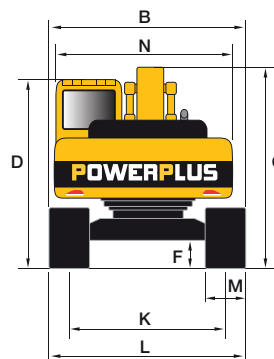
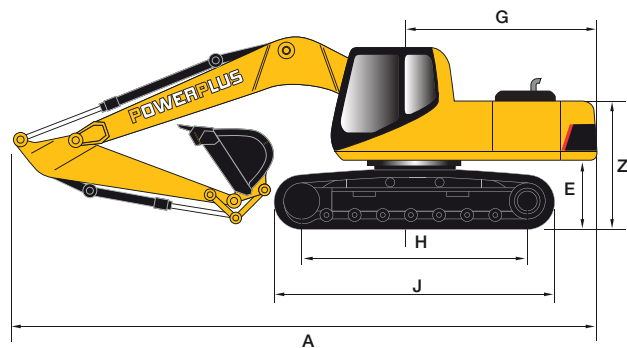
Reinforced structure, coupled with a well-cooled and low-noise designed cabin provides a conducive environment for the operator with maximum comfort and reduced fatigue for the long hours of work. A safe working cabin is POWERPLUS's way of ensuring maximum efficiency while delivering optimal results.



IMPROVED CONTROL SYSTEM

The high-output engine with intercooler features an ESS (Engine Speed Sensing) system and total horsepower control system that ensures the most efficient usage of the engine at all times. Engine complies with Tier II & Tier III (European) Regulations depending on the market requirements.

The new monitor is equipped with an intelligent computer CPU control system. With this latest addition, switching between the various operating modes is made very convenient. P for "Priority" mode allows users to work fast and hard; while E for "Fuel Economy" mode, has four options — E0, E1, E2, E3, to best meet the users' operational habits to optimize fuel economy.



DIMENSIONS			PP150E-XI	PP180E-XI	PP220E-XI	PP235E-XI	PP300E-XI	PP350E-XI	PP380E-XI	PP400E-XI	PP520E-XI	PP550E-XI	PP800E-XI	PP880E-XI
A	Overall Length	mm	7580	7580	9560	9560	10000	11150	11080	11080	12180	11600	12170	13105
B	Overall Width	mm	2490	2490	2780	2980	3190	3190	3190	3190	3340	3340	4256	4256
C	Overall Height (To Top Of Boom)	mm	2780	2780	3040	3040	3325	3180	3180	3180	3640	3640	5050	5270
D	Overall Height (To Top Of Cab)	mm	2815	2815	3120	3120	3220	3280	3280	3280	3280	3280	3530	3530
E	Counterweight Ground Clearance	mm	870	870	1065	1065	1080	1210	1210	1210	1300	1300	1551	1600
F	Minimum Ground Clearance	mm	430	430	466	446	520	498	498	495	720	720	898	898
G	Rear Swing Radius	mm	2155	2155	2720	2720	2910	3420	3420	3420	3845	3845	4000	4500
H	Track Ground Length	mm	2750	3000	3260	3445	3715	3700	4030	4030	4360	4360	4720	4720
J	Track Length	mm	3485	3735	4060	4260	4625	4622	4950	4955	5390	5390	5957	5957
K	Track Gauge	mm	1960	2000	2180	2380	2590	2590	2590	2590	2740	2740	3350	3350
L	Track Width	mm	2460	2500	2780	2980	3190	3190	3190	3190	3340	3340	4000	4000
M	Track Shoe Width	mm	500	500	600	600	600	600	600	600	600	600	650	650
N	Turntable Width	mm	2490	2490	2700	2700	2700	2995	2995	2995	3045	3045	3995	3995
V	Minimum Swing Radius	mm	2495	2495	3630	3630	3975	4265	4265	4265	4825	4825	5200	5070
W	Maximum Height At Min Swing Radius	mm	6430	6430	7670	7670	7835	8500	8500	8500	9250	9250	9180	9890
Z	Height Of Counterweight	mm	1935	1935	2120	2120	2120	2265	2265	2265	2360	2860	2900	2900
A1	Ground Length (Transportation)	mm	4410	4410	4850	4850	5360	5950	5750	5920	6820	6520	7300	7395
Boom Length		mm	4600	4600	5700	5700	5850	6470	6470	6470	7060	6560	6600	7100
Arm Length		mm	2500	2500	2900	2900	3050	3185	3185	2900	2900	2550	3020	3020
WORKING RANGE														
O	Maximum Digging Height	mm	8630	8630	9275	9275	9310	10200	10200	9800	10760	10000	11165	11673
P	Maximum Dumping Height	mm	6180	6180	6560	6560	6440	7135	7135	6830	7400	6660	7040	7642
Q	Maximum Digging Depth	mm	5500	5500	6515	6515	6875	7370	7370	6890	7320	6260	7190	6868
R	Maximum Vertical Digging Depth	mm	4940	4940	5915	5915	5860	6380	6380	6100	6695	5620	6800	5727
S	Maximum Digging Depth For 2.5m	mm	5285	5285	6380	6380	6680	7190	7190	6800	7150	6070	7040	6710
T	Maximum Digging Reach	mm	8305	8305	9865	9865	10170	11100	11100	10800	11660	10580	11750	12064
U	Maximum Digging Reach At Ground Level	mm	8180	8180	9680	9680	9990	10910	10910	10600	11440	10360	11450	11762

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Operating Weight	kg	13500	15100	21500	22000	27500	33000	35200	38000	50000	51500	71200	81500
Rated Bucket Capacity	m³	0.55	0.6	1.0	1.2	1.3	1.6	1.8	2.0	2.5	2.8	4.0	5.0
Maximum Digging Force	kN	100	100	157	159	172	227	227	256	276	298	365	405
Swing Speed	rpm	12	12	11.5	11	10.5	10.6	10.6	8.5	8.6	8.6	7.2	7.2
Maximum Gradeability	°	35	35	35	35	35	35	35	35	35	35	35	35
ENGINE													
Model		CUMMINS QSF3.8	CUMMINS QSF3.8	CUMMINS 6BTAA5.9 / CUMMINS QSB7.0 / MITSUBISHI 4M50	CUMMINS 6BTAA5.9 / CUMMINS QSB7.0	CUMMINS QSB7.0	CUMMINS 6LTAA8.9	CUMMINS 6LTAA8.9	ISUZU 6HK1X	CUMMINS QSM11	ISUZU 6WG1 / CUMMINS QSM11	CUMMINS QSX15	CUMMINS QSX15
Rated Power	hp	116	116	180 / 168 / 160	180 / 168	229	328	328	288	345 / 406	407 / 406	450	450
Rated Speed	rpm	2200	2200	2000	2000 / 1800	2050	2000	2000	2000	1800	1800	1800	1800
Displacement	L	3.8	3.8	5.9 / 6.7 / 4.89	5.9 / 6.7	6.7	8.9	8.9	7.79	10.8	10.8	15	15
No. of Cylinders		4	4	6 / 6 / 4	6	6	6	6	6	6	6	6	6
Emission		Euro III	Euro III	Euro II / III / III	Euro II / III	Euro III	Euro II	Euro II	Euro III	Euro II / III	Euro III / III	Euro III	Euro III
UNDERCARRIAGE													
Travel Speed (High/Low)	km/h	5.3 / 3.1	5.3 / 3.1	5.2 / 3.5	5.2 / 3.5	4.1 / 2.5	5.2 / 3.3	5.2 / 3.3	5.2 / 3.3	4.8 / 3.0	4.8 / 3.0	4.8 / 3.0	4.8 / 3.0
Ground Pressure	kPa	38	39	46.5	48.6	56	65	69.4	70.8	80.6	86	100	100
Track Rollers		7	7	7	8	7	7	9	9	9	9	8	8
Carrier Rollers		2	2	2	2	2	2	2	2	2	2	3	3
No. Of Tracks		45	45	45	47	48	45	48	48	50	50	48	48
HYDRAULIC SYSTEM													
Main Pump		POWERPLUS					KAWASAKI						
Maximum Flow	L/min	165 x 2	165 x 2	211 x 2	211 x 2	228 x 2	320 x 2	320 x 2	320 x 2	360 x 2	414 x 2	490 x 2	490 x 2
Working Pressure	MPa	37	37	37	34.3	37.3	37.3	37.3	37	37	37	31.4	33
REFILL SERVICE CAPACITY													
Fuel Tank	L	247	247	420	420	420	595	595	595	650	650	950	950
Hydraulic Tank	L	130	130	246	246	246	310	310	310	335	335	335	335
Engine Oil	L	17.6	17.6	20	20	20	47	47	47	47	47	45	45
Coolant	L	16.5	16.5	20	20	20	21.2	21.2	21.2	30.6	30.6	33.5	33.5
Final Drive	L	2.2	2.2	3.3	3.3	3.3	5.5	5.5	5.5	12.5	12.5	13	13
CABIN													
Type		An ergonomically designed sound proof cabin, enabling wide operational view, comes standard with designer upholstery, adjustable POWERPLUS mechanical suspension driver's seat, streamline dashboard, aircon and radio/mp3 player for extensive operations with well deserved comfort.											



OPTIONAL

ENGINE

Pre-Heat Starter

HYDRAULIC SYSTEM

Customized Bucket Size

Extended Arm

Quick Coupler

CABIN

Glass Protection

Heater and Ventilation

Solar Film

UNDERCARRIAGE

Track Width

600/700/800 mm

SAFETY

Additional Lights

ROPS/FOPS Cabin

Rear View Camera

ATTACHMENTS

SHEAR

For cutting through
scrap materials



GRAPPLE

For material handling
and sorting of rocks, wood
and waste materials.



HYDRAULIC BREAKER

For demolishing
concrete structures
and rocks



ROCK BUCKET

For digging rubble,
tough rock and minerals
in mining applications

CLAMSHELL BUCKET

For dredging,
excavation
and moving
stockpiles



BUCKET CRUSHER

For crushing rubble and
rocks into usable material

*Availability of equipment may vary across different regions. Kindly consult your POWERPLUS territory sales personnel for details.

GLOBAL NETWORK DISTRIBUTION

POWERPLUS is committed to creating long-term value for its customers, partners and stakeholders. Our Service Centers are strategically located in major construction, industrial and manufacturing hubs in key regions around the world.

Given our years of experience in the industry, it is no doubt that our customers can always rely on us for the expertise, services and solutions we provide. Most importantly, you will find our after-sales service a satisfying experience at all our Service Centers worldwide.



DURABILITY, RELIABILITY & AFFORDABILITY

POWERPLUS Parts and Service Centers provides a convenient channel for you to order the original spare parts through a network of highly certified OEM manufacturers and an effective distribution of spare parts through our global network of vendors.

From determining the correct part number to locating and ordering, we are committed to working round-the-clock for timely solutions and delivery to ensure we serve our customers promptly and efficiently.

Coupled with affordable parts prices and high interchangeability across the POWERPLUS machinery range, we take pride in being able to offer value to our customers with cost-effective solutions. Most importantly, you are able to retain the machines with high residual value to enhance your return on investment.



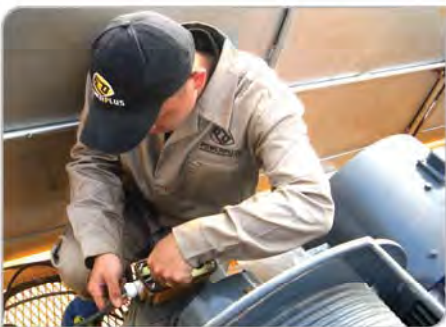
SERVICE

Delivering Unsurpassed Customer Service - Because You Matter.

Our dedicated team of customer service executives, skilled engineers and technicians are well-trained to ensure timely and propitious support throughout the customer life cycle. With a comprehensive dealer network coverage and service facilities support, POWERPLUS dedicated team of account managers and service teams from the Customer Service Charter are trained to respond to your queries and requests promptly and efficiently.

To deliver more, our service package includes educating our customers with training, maintenance and servicing to ensure customers are empowered to utilize the machines at its best; therefore optimizing the machine's performance and increasing uptime.

At POWERPLUS, we strive to build and maintain long-term relationships with each and every client based on trust, integrity and professionalism.



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