

# WHEELED EXCAVATOR SERIES PW170ES-6

# KOMATSU



*The machine shown may vary according to territory specifications*

## active

Designed and manufactured in Europe, for European preferences and needs, the (PW170ES-6) delivers the ultimate balance of productivity, reliability, and operator comfort, Komatsu's on-board, patented HydraMind hydraulic system assists every operation with versatile machine performance criteria that's always perfectly matched to each task.

## HYDRAULIC EXCAVATOR PW170ES-6

**FLYWHEEL HORSEPOWER:** 91 KW (121 HP/123 PS) ISO 9249

**BUCKET CAPACITIES:** up to 1.14 m<sup>3</sup> SAE

**WEIGHT RANGE:** up to 18400 kg



# POWER S-6





Wheeled excavators need to be flexible, easy to use, and capable of travelling quickly and safely. From the sophisticated hydraulics of HydraMind to the performance of the transmission, the PW170ES-6 meets these requirements as one of the most advanced wheeled-excavators available today.

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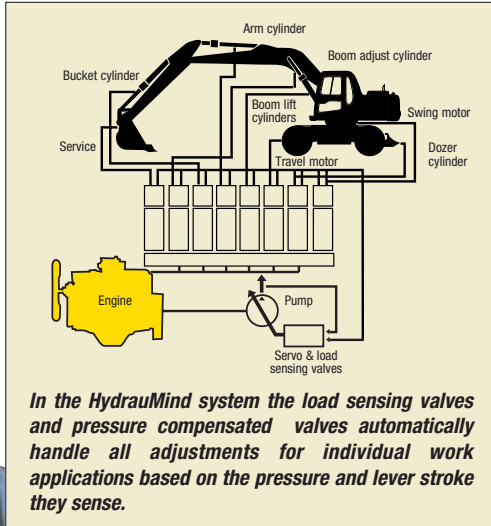


LIKE ALL DASH-6 WHEELED-EXCAVATORS,  
THE PW170ES-6 IS EQUIPPED WITH HYDRAUMIND,  
KOMATSU'S UNIQUE HYDRAULIC SYSTEM



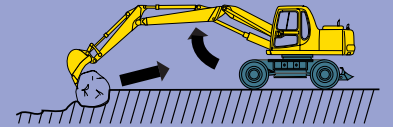


# What is HYDRAUMIND?

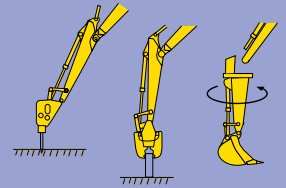


The PW170ES-6 is equipped with HydraMind, Komatsu's unique hydraulic system

HydraMind is one of the most sophisticated hydraulic systems currently available, and is unique to Komatsu. Komatsu hydraulics technology is truly world-class, with over 200 patents pending for HydraMind.



*Working through soft rock or pulling up boulders is easy because the system precisely controls boom raise, preventing the cutting edge from slipping.*



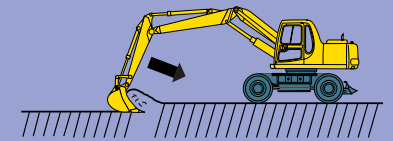
*The modular design concept of HydraMind makes it easy to add additional hydraulic circuits.*

## Benefits of the HYDRAUMIND

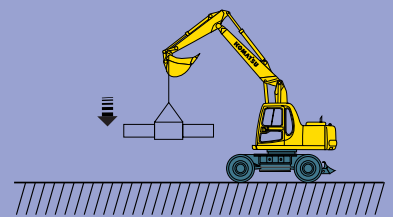
Power, versatility, maneuverability, controllability—you name it. Never has there been an excavator so easy to operate, so natural, so intuitive, so responsive.

**For example, when digging and the ground condition changes...** you don't have to think about changing lever strokes because HydraMind - instantly, silently and automatically sends just the right amount of oil to the cylinders, at just the right pressure to accommodate the change.

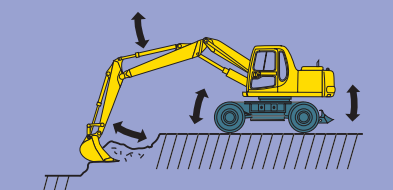
**When you move boom, arm and bucket at the same time...** all the equipment works naturally with the optimum combination of speed, and power as if it was a human hand.



*Fully loading buckets is easy, because during simultaneous operations the work equipment can move slowly under maximum power.*



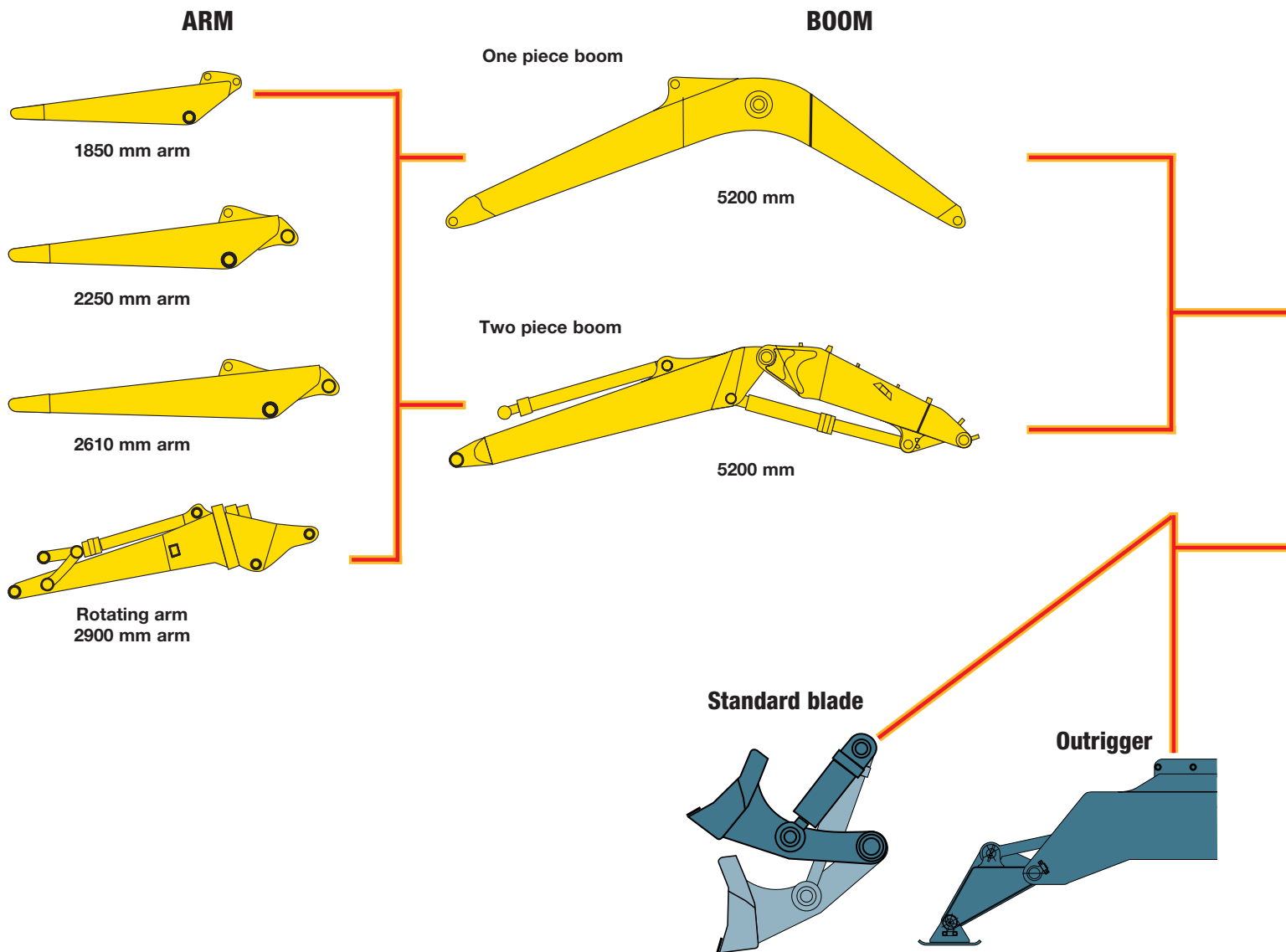
*Fine-control is quick and precise because the system keeps work equipment speed constant, no matter what size the load.*



*Chassis shake is reduced during simultaneous operations because the work load causes no sudden changes in the work equipment speed.*



# FLEXIBILITY



## Additional hydraulic circuits

A 2-way additional hydraulic circuit, electrically controlled from the wrist control levers, is fitted as standard.

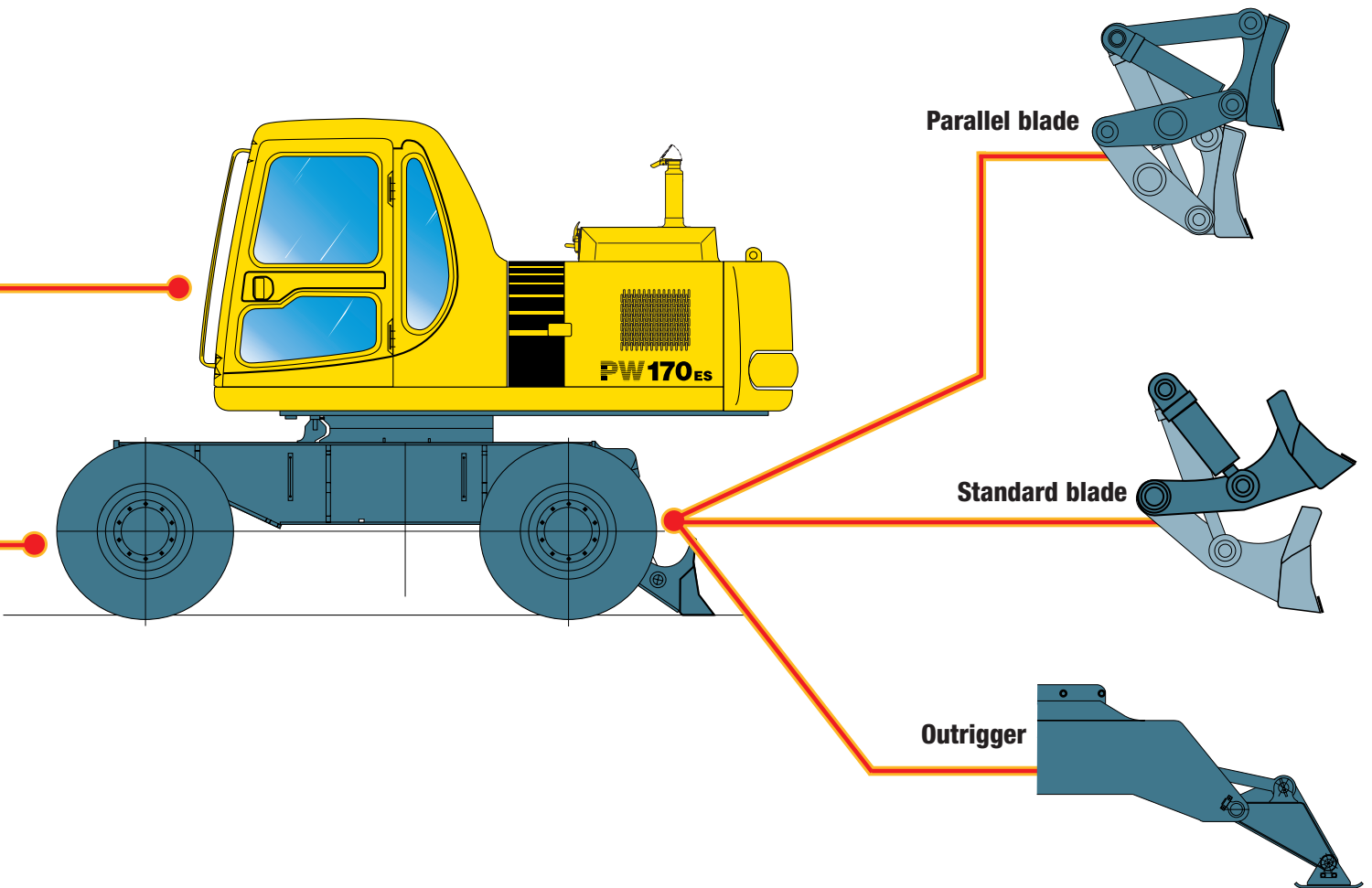


## Outriggers

Independently controlled outriggers are optionally available on both the front and rear of the machine. The cylinder protections are standard on the outriggers.



The PW170ES-6 can be specified with an enormous range of work-equipment and undercarriage attachments to meet the needs of almost any application.



### Toolbox

Tough, secure tool boxes, integrated in the mud guards are fitted on both sides of the undercarriage. An optional tool rack is available for both tool boxes.



### Dozer blade

A radial blade is available with standard cylinder protectors for both the front and rear of the machine. A parallel blade is also available as an option but only for the rear of the machine.



# EASY OPERATION

## Working Mode Selection

Five working modes are designed to deliver optimal overall machine performance for heavy-duty, general, finishing, lifting and breaker operations. When selected, the mode governs the most efficient combination of engine speed, pump speed and system pressure for the task.

The G/O mode has proven to be exceptional as a general running mode, delivering substantial savings in fuel, based on a measure of tonnes excavated/litre of fuel.

Working Mode	Application	Advantage
H/O	for heavy operations such as hard digging and loading	<ul style="list-style-type: none"> <li>• Maximum production and power</li> <li>• Fast cycle times</li> <li>• Power Max/Swift Slow Down modes available</li> </ul>
G/O	for general operations with exceptional fuel economy	<ul style="list-style-type: none"> <li>• Good cycle times</li> <li>• Exceptional fuel economy</li> <li>• Power Max/Swift Slow Down modes available</li> </ul>
F/O	for finishing operations that require fine control with task-matched work equipment speeds	<ul style="list-style-type: none"> <li>• Smooth finishing capability</li> <li>• Arm at half-speed</li> </ul>
L/O	for precise, powerful lifting operations	<ul style="list-style-type: none"> <li>• Increased, continuous relief pressure</li> <li>• Reduced speed</li> <li>• Fine precision control</li> </ul>
B/O	for powerful breaker operations	<ul style="list-style-type: none"> <li>• Optimal pressure and flow</li> <li>• Optimum engine rpms</li> </ul>

## Power Max/Swift Slow Down

Power Max can be selected by depressing a joystick button for an instant burst of power to help break through tough digging situations.

Swift Slow Down joystick activated to diminish all work equipment speeds to half, allowing finishing and delicate operations to be carried out with ultimate precision.

Selection	Application	Result
Power up	Tough Digging Operations	Increase implement force by 9% for 8.5 seconds
Speed down	Delicate Operations	Speed is reduced by 1/2. Increase implement force by 9% as long as joystick button is pressed.



The new “Active” logo with the green “+” confirms that the machine has all of the popular Komatsu “Active” attributes, plus a generous new offering of on-board operator comforts for a better, more productive work environment.

**active**



As well as operating the standard work equipment movements, the RH wrist control lever is also used to operate the undercarriage attachments. When used in conjunction with the selection switch on the control panel, full independent control of outriggers and dozer blade is immediately available. This feature, together with the automatic axle lock, enables the machine to be moved, stabilised and operated extremely quickly.

**Clamshell / Breaker control**

Clockwise clamshell rotation. Also used for breaker operation when B.O. mode is selected.

**Clamshell control**

Anti-clock wise clamshell rotation.



**Undercarriage attachment control**

After a single touch, the lever can be used to precisely operate the selected undercarriage attachment.

**Boom control**

After operating the undercarriage attachments, a single touch reverts the lever into standard boom operation.

From the consistent weighting of the steering to the predictable and precise operation of the travel and brake pedals, the operator will always feel in complete control during travelling.

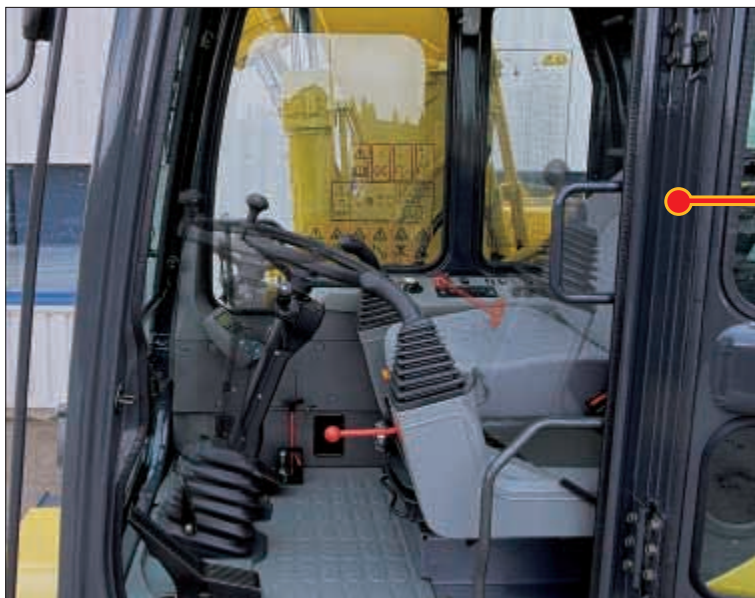
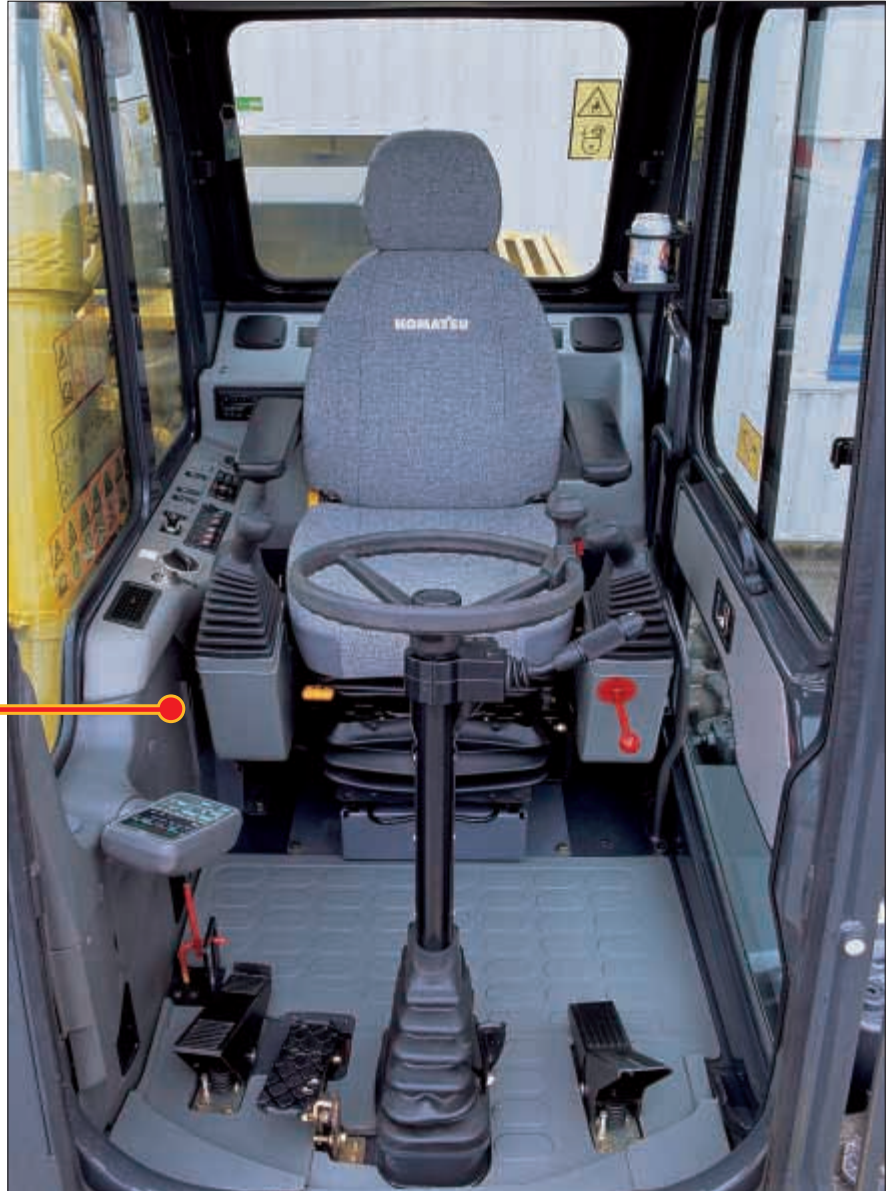


# COMFORT AND SAFETY

All sources of operator fatigue have been carefully considered during the design process. The result is a cab offering unparalleled space and ergonomics, combined with exceptionally low vibration and noise.

## Outstanding space and comfort

The cab offers unparalleled space for the operator, with generous leg and headroom as well as ample space to store personal belongings behind the seat. The multi-adjustable seat and controls can be set to create the ideal individual working and driving positions for any operator.



## Safe and easy cab access

Entering the cab could not have been made easier; wide steps are perfectly positioned in relation to the large handrails on both sides of the cab door. The tilting steering column and lifting wrist control console further aid access, and once seated the wheel can be firmly locked into any position.



## Ergonomic controls

All controls, from the light action wrist control levers to the adjustable monitor panel, have been designed with operator ergonomics in mind. Minor controls are easily visible and operated on the inclined control panel.



## Superb visibility

Excellent all-round visibility is provided by large panoramic windows and a wide opening roof hatch. Front visibility is further improved by the use of the Komatsu patented wiper system. When not in use the wiper parks on the cab frame itself with no contact with the front window. As well as giving excellent visibility, this systems avoids the need to disconnect the wiper before lifting the front window.

Plexiglas roof with sun visor. The standard new plexiglas roof with sun visor gives the operator a better view of overhead obstacles and machine operations. It also allows more natural light to illuminate the cab's interior.

## Flexible axle locking

The oscillating front axle has 3 operating modes, which can be selected from the right hand control panel:

### Free

The axle remains free during all operations.

### Automatic

The axle remains locked at rest and is automatically released when the travel pedal is depressed, providing quick, safe site operation.

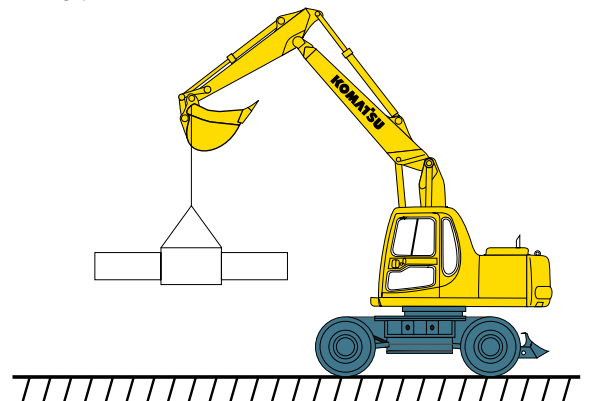
### Locked

The axle is permanently locked allowing loads to be safely carried during low-speed travel.



## Safe and precise lifting

The machine is equipped with boom safety valves and overload caution as standard. This, combined with the control of HydraMind and the power of the lifting mode, gives incredibly safe and precise lifting performance.



# SERVICEABILITY

Rapid and effective servicing and diagnostics are essential for machine availability and reduced servicing costs.

## Komatsu service support

Full service support is available through the Komatsu distributor network, backed-up by excellent parts availability from the Komatsu European parts distribution centre.



## Self-diagnostics

The monitor panel incorporates a sophisticated diagnostic system. If a serious fault develops the operator is warned immediately, whereas more minor problems are stored in the memory to be checked by service staff later. The memory can be extremely useful for service staff to diagnose intermittent problems. Diagnosis is further assisted by using the facility to display the operating condition of the machine, for example engine speed and pump pressures.

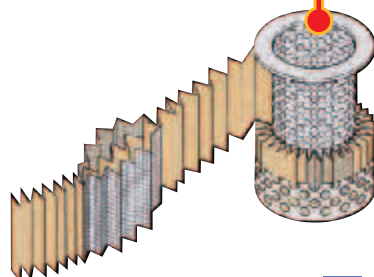


## Accessible service locations

The operator and service staff can safely climb onto the machine using the large handrails and access all service locations easily through the wide opening doors and hoods. Service details include centralised greasing points and full guarding of the turbo-charger, fan and ancillary drive belts.

## Extended hydraulic oil change intervals

The introduction of a new hybrid filter has extended the filter change interval to 500 hours and the oil itself now only needs to be replaced every 5000 hours. To ensure that these new intervals are followed, a new oil-change indicator function has been incorporated into the monitor panel. This warns the operator when a pre-set number of operating hours has elapsed and displays the telephone number of the nearest Komatsu service centre.





## ENGINE

**Type** ..... 4 cylinder, direct injection diesel, turbocharged, air-air intercooler

**Model** ..... Komatsu SAA4D102-E2

**Power** ..... ISO 9249 (Net) 91 kW (121 HP/123 PS) at 2200 rpm

**Bore x stroke** ..... 102 mm x 120 mm

**Piston displacement** ..... 3.92 litre

## ELECTRICAL SYSTEM

**Alternator** ..... 24 Volt 45 ampere

**Batteries** ..... 2 x 12 Volt – 95AH

**Starter motor** ..... 24 Volt 5.5 kW

## HYDRAULIC SYSTEMS

**Type** ..... HydraMind. Closed-centre system with load sensing and pressure compensation valves.

**Additional circuits** ..... Additional double-acting circuit fitted as standard. Depending on specification upto 2 additional circuits can be installed.

**Main pump** ..... Variable displacement piston pumps supplying boom, arm, bucket, swing and travel circuits.

**Maximum pump flow** ..... 299 litre/min

**Maximum pressures**

**Standard** ..... 325 kg/cm<sup>2</sup>

**Power Max** ..... 355 kg/cm<sup>2</sup>

**Pilot circuit** ..... 33 kg/cm<sup>2</sup>

## STEERING SYSTEM

**Type** ..... Hydraulically supplied from a separate gear pump and controlled through an orbital valve.

**Maximum pressure** ..... 150 kg/cm<sup>2</sup>

**Minimum turning radius** ... 7200 mm (to centre of outer wheel)

## TRANSMISSION

**Type** ..... Fully automatic transmission with permanent 4 wheel drive

**Travel motors** ..... 2 variable displacement axial piston motors

**Maximum pressure** ..... 355 kg/cm<sup>2</sup>

**Travel modes** ..... 3 travel modes:

**Hi mode** ..... 0 to 30.0 km/h

**Mi mode** ..... 0 to 10.0 km/h

**Lo mode** ..... 0 to 3.5 km/h

A maximum speed restriction of 20 kph is available as an option

**Maximum tractive effort** ... 9500kg (in medium and high mode) 30 km/h  
8400kg (in medium and high mode) 20 km/h  
9500kg (in medium and high mode) 20 km/h (Optional)

**Axle oscillation** ..... 7° Oscillation. Lockable in any position from the operator cab

## BRAKE SYSTEM

**Type** ..... Dual circuit hydraulic braking system supplied from a separate gear pump

**Service brakes** ..... Pedal actuated wet multi-disc brakes integrated into axle hubs

**Parking brake** ..... Electrically actuated wet multi-disc “pressure off” brake integrated into transmission

**Maximum pressure** ..... 150 kg/cm<sup>2</sup>

## SWING SYSTEM

**Type** ..... Axial piston motor driving through planetary double reduction gearbox

**Swing lock** ..... Electrically actuated wet multi-disc brake integrated into swing drive. An additional mechanical pin can be engaged from inside the operator cab

**Swing speed** ..... 0 to 12 rpm

## ENVIRONMENT

**Noise levels**

**LWA External noise** ..... 100dB(A) (95/27/EC -dynamic value)

**LPA Operator ear noise** ..... 79dB(A) (ISO 6396 -dynamic value)

**Blue angel certified**

**Meets EC stage II exhaust emission regulations**

## SERVICE / REFILL CAPACITIES

**Fuel tank** ..... 250 ltr

**Radiator** ..... 20 ltr

**Engine** ..... 16 ltr

**Swing drive** ..... 4 ltr

**Hydraulic tank** ..... 135 ltr

**Transmission/clutch** ..... 1.1 ltr / 0.5 ltr

**Front differential** ..... 15 ltr

**Rear differential** ..... 20 ltr

**Front axle hub** ..... 2.5 ltr

**Rear axle hub** ..... 2.7 ltr

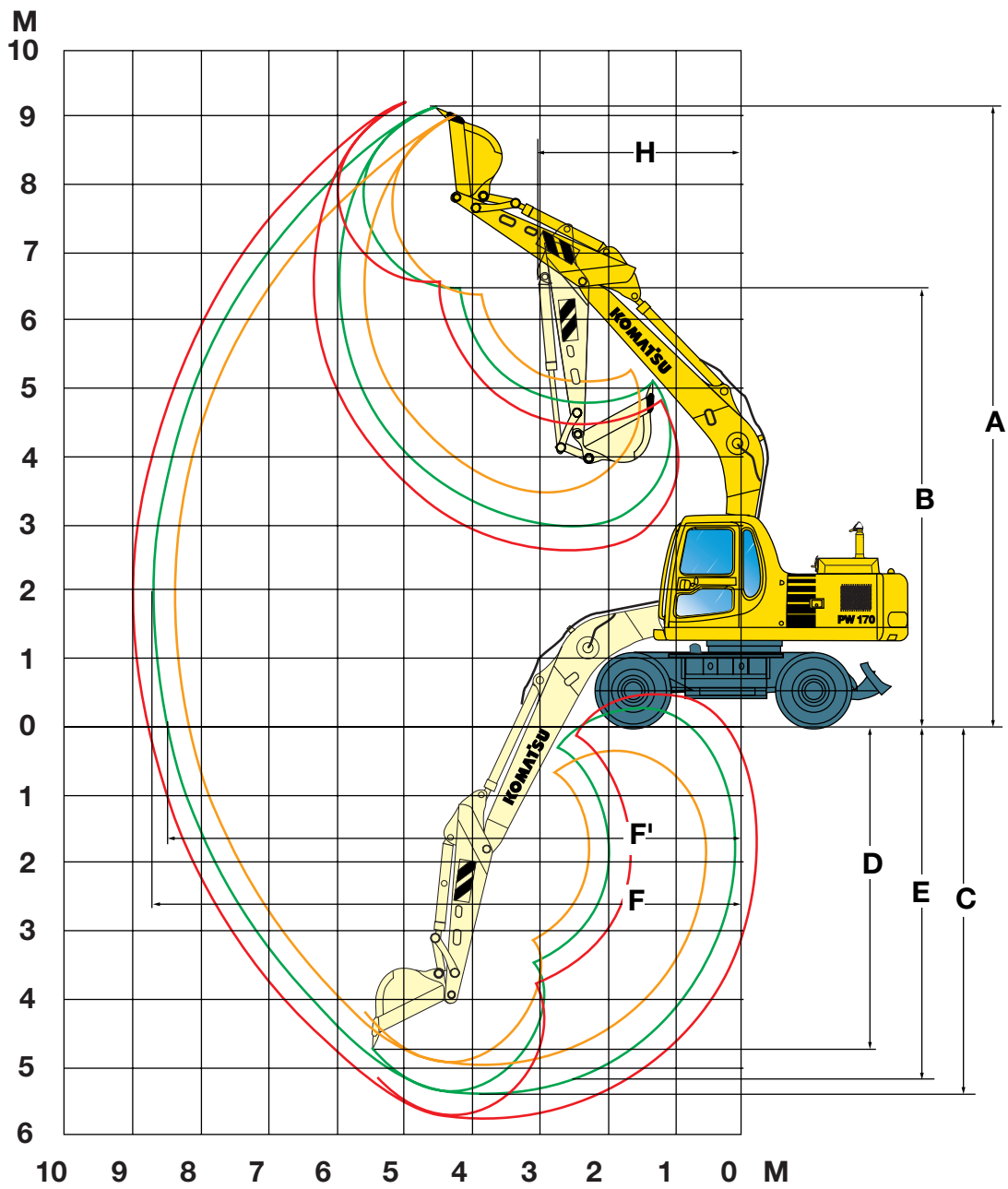
## OPERATING WEIGHT\*

**Arm length** ..... 2.25 m

**Rotating arm length** ..... 2.9 m

Undercarriage type	Operating weight 2-piece boom	Operating weight 1-piece boom	Operating weight rotating arm/2PB
Rear blade	16300 kg	16050 kg	–
Rear outrigger	16450 kg	16200 kg	–
Four outrigger	17300 kg	17050 kg	18400 kg
Front outrigger + blade	17140 kg	16890 kg	18240 kg

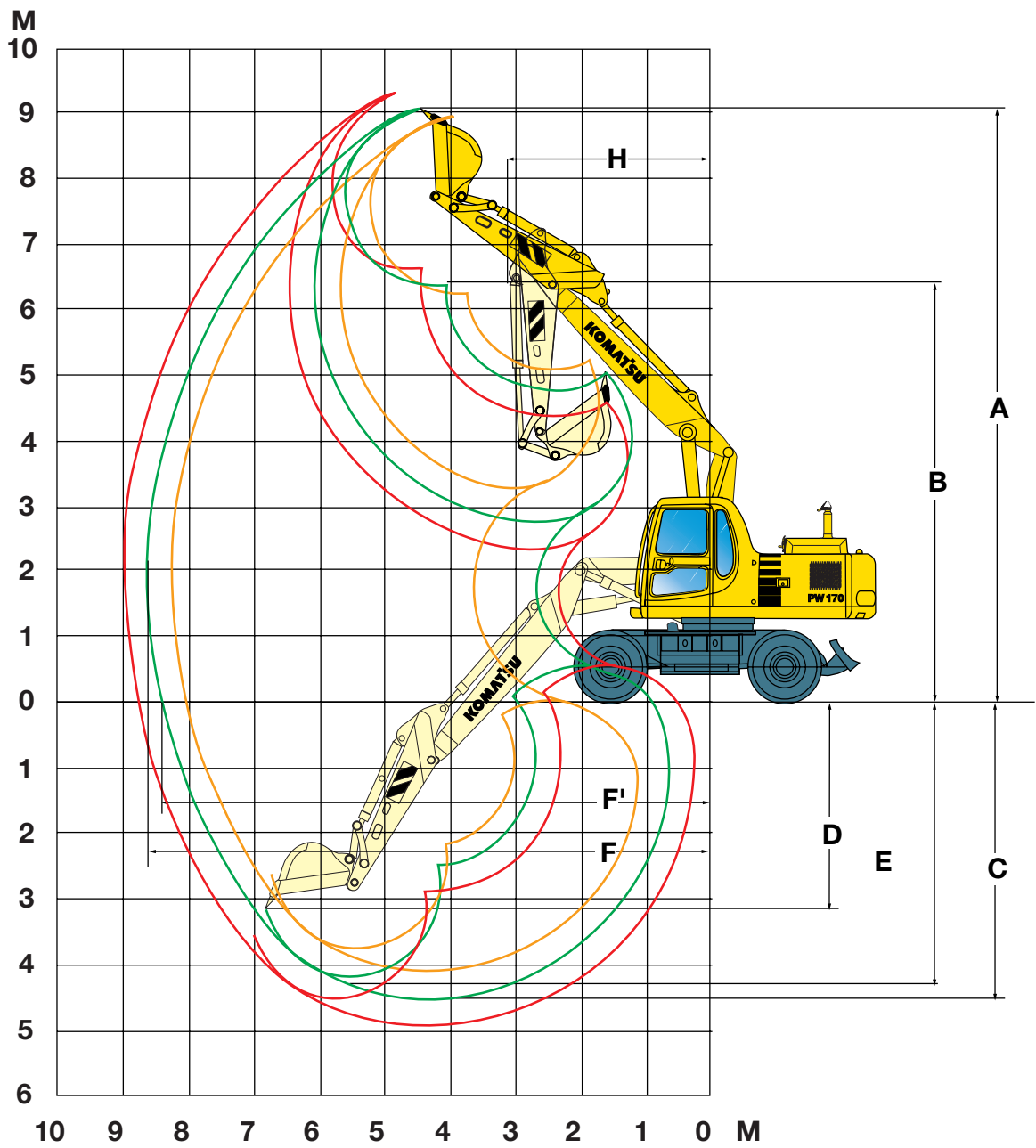
\* Operating weight without bucket.



### MONO BOOM

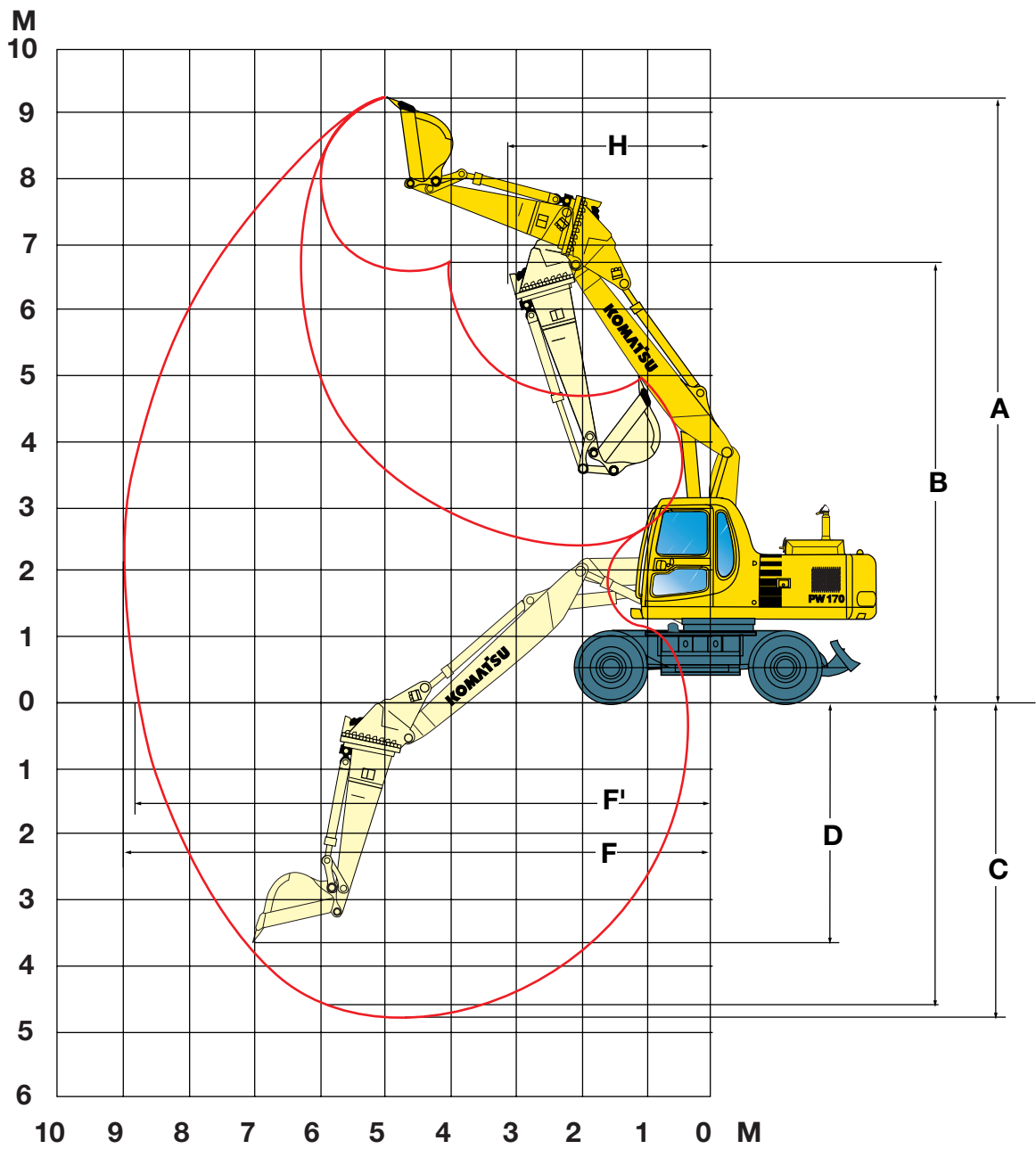
	1850 mm	2250 mm	2610 mm
Arm length	1850 mm	2250 mm	2610 mm
A Max. digging height	9046 mm	9125 mm	9202 mm
B Max. dumping height	6369 mm	6470 mm	6565 mm
C Max. digging depth	4958 mm	5364 mm	5718 mm
D Max. vertical wall digging depth	4145 mm	4681 mm	5480 mm
E Max. digging depth of cut for 8° level	4716 mm	5151 mm	5484 mm
F Max. digging reach	8347 mm	8680 mm	8965 mm
F' Max. digging reach at ground level	8131 mm	8461 mm	8753 mm
H Min. swing radius	3047 mm	3047 mm	3047 mm





### TWO-PIECE BOOM

	1850 mm	2250 mm	2610 mm
Arm length	1850 mm	2250 mm	2610 mm
A Max. digging height	8919 mm	9051 mm	9392 mm
B Max. dumping height	6233 mm	6388 mm	6624 mm
C Max. digging depth	4812 mm	5212 mm	5614 mm
D Max. vertical wall digging depth	4140 mm	4547 mm	4948 mm
E Max. digging depth of cut for 8° level	4696 mm	5103 mm	5510 mm
F Max. digging reach	8272 mm	8633 mm	9017 mm
F' Max. digging reach at ground level	8052 mm	8412 mm	8886 mm
H Min. swing radius	3183 mm	3183 mm	3183 mm



### TWO-PIECE BOOM + ROTATING ARM

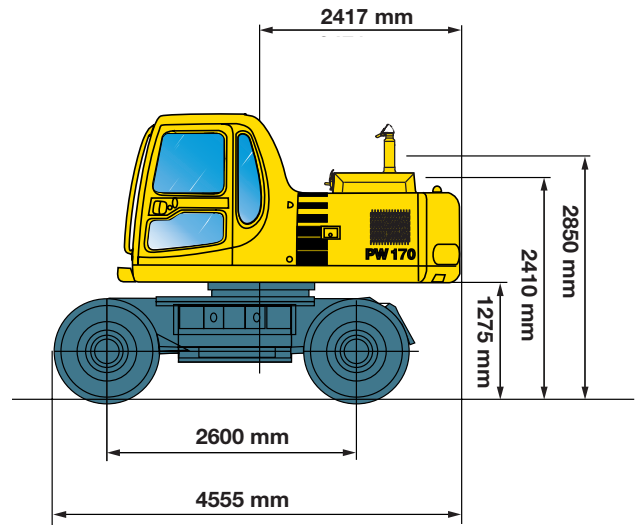
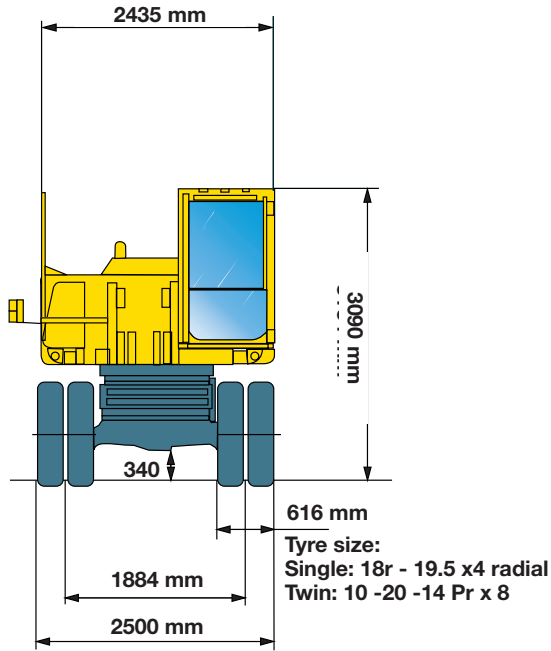
Arm length	2900 mm
A Max. digging height	9189 mm
B Max. dumping height	6695 mm
C Max. digging depth	5683 mm
D Max. vertical wall digging depth	4859 mm
E Max. digging depth of cut for 8° level	5581 mm
F Max. digging reach	9065 mm
F' Max. digging reach at ground level	8847 mm
H Min. swing radius	3224 mm



# DIMENSIONS & UNDERCARRIAGE

**PW170ES-6**

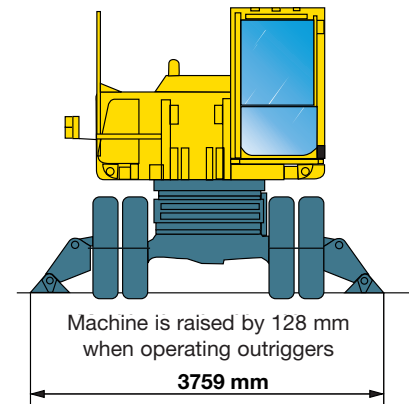
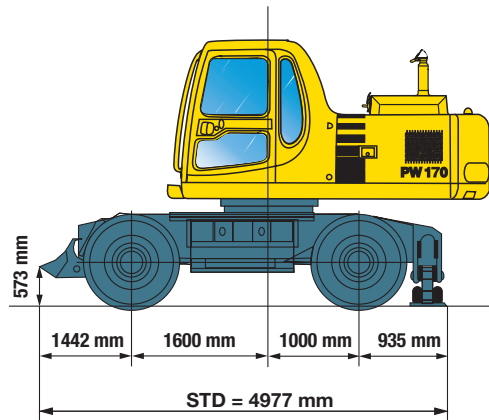
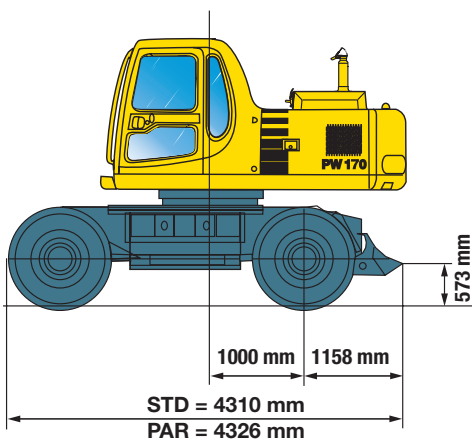
STD = Standard radial blade  
PAR = Parallel blade



**Rear blade**

**Front blade / Rear outrigger**

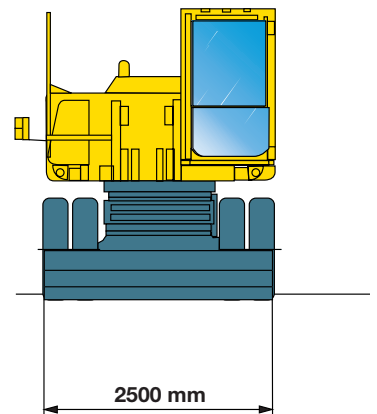
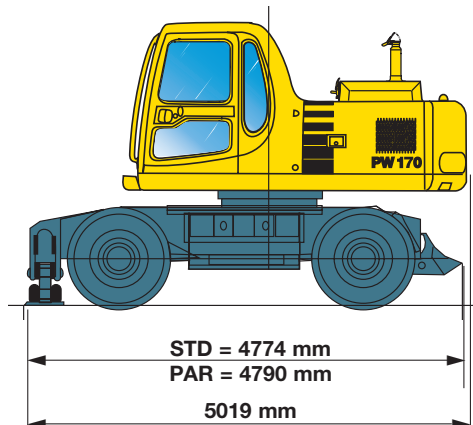
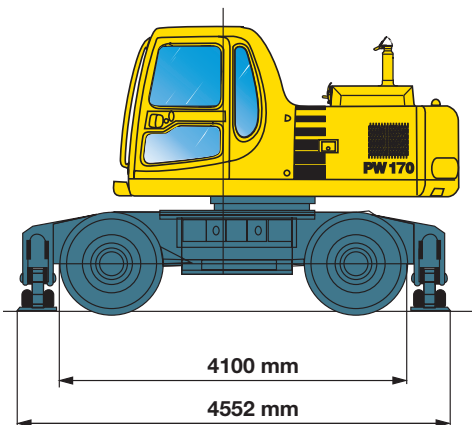
**Undercarriage with outriggers out**



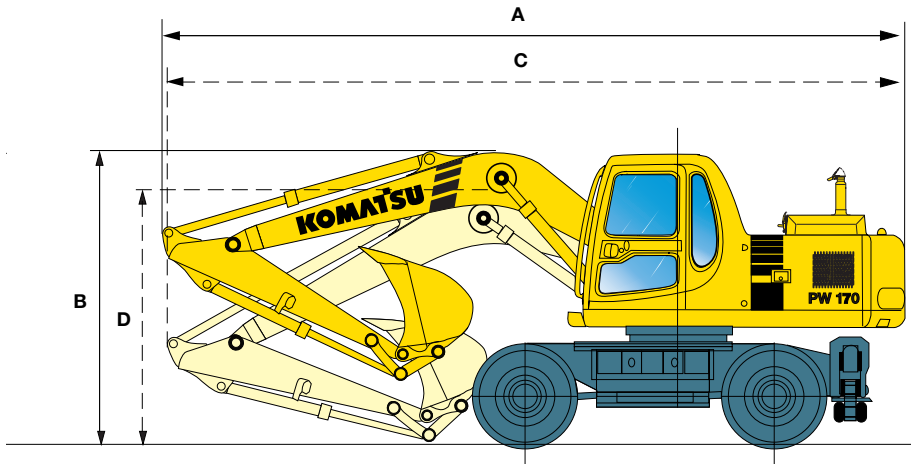
**Four outriggers**

**Front outrigger / Rear blade**

**Undercarriage with blade**



### MONO BOOM



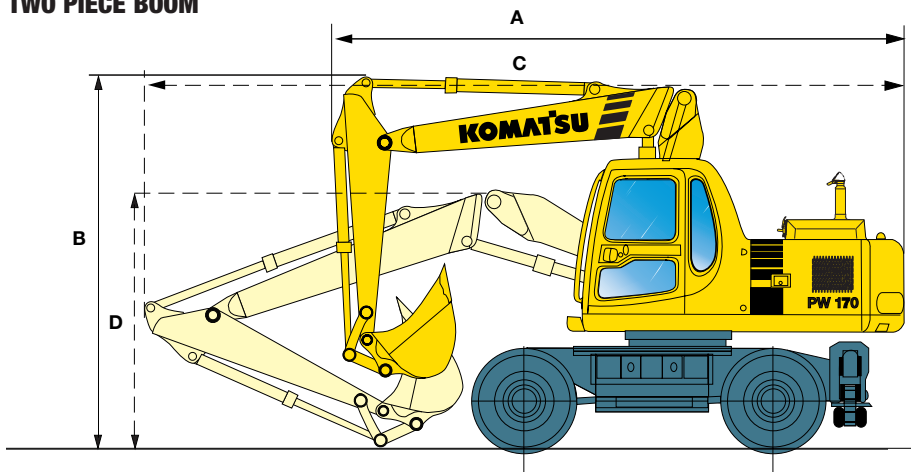
#### DRIVING POSITION

#### TRANSPORT POSITION

ARM	A	B	C	D
1850	8624 mm	3374* mm	8609 mm	3127* mm
2250	8572 mm	3312* mm	8529 mm	3010* mm
2610	8563 mm	3141* mm	8467 mm	2902* mm

\* Dimensions are to piping

### TWO PIECE BOOM



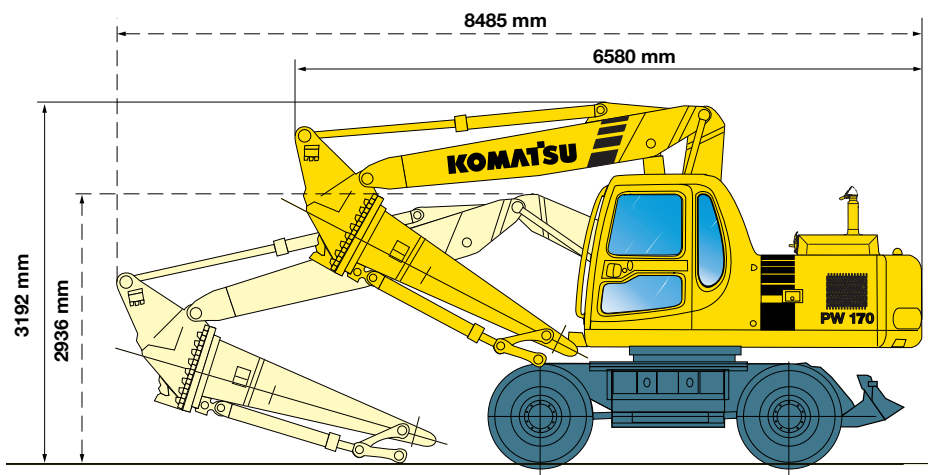
#### DRIVING POSITION

#### TRANSPORT POSITION

ARM	A	B	C	D
1850	5827 mm	3995 mm	8611 mm	3038* mm
2250	6550 mm	3995 mm	8545 mm	3030* mm
2610	6960 mm	3960 mm	8515 mm	2844* mm

\* Dimensions are to piping

### TWO PIECE BOOM + ROTATING ARM



Transportation dimensions for rotating arm are without bucket.





———— = Driving

----- = Transport

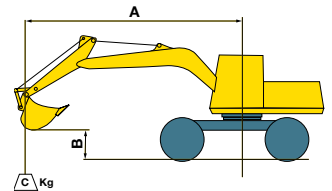


# LIFTING CAPACITIES

# PW170ES-6

	A	⊗		7.5 m		6.0 m		4.5 m		3.0 m		
		B	⊗		⊗		⊗		⊗		⊗	
			⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
<b>ONE-PIECE BOOM</b> 	7.5 m	kg	*4300	*4300								
	4.5 m	kg	*3450	2050		*4350	2650	*5000	4400			
	1.5 m	kg	*3750	1650		*5250	2350	*7150	3650			
	-1.5 m	kg	*4550	1950		*5300	2250	*7350	3400	*9450	6550	
	7.5 m	kg	*4300	*4300								
	6.0 m	kg	*3650	*3650								
	4.5 m	kg	*3450	*3450		*4350	*4350	*5000	*5000			
	3.0 m	kg	*3500	3450		*4750	*4750	*6100	*6100			
	1.5 m	kg	*3750	3300		*5250	4600	*7150	*7150			
	0.0 m	kg	4250	3400		*5500	4500	*7600	7200			
	-1.5 m	kg	*4550	3850		*5300	4450	*7350	7150	*9450	*9450	
-3.0 m	kg	*4450	*4450				*6200	*6200	*8700	*8700		
	7.5 m	kg	*4300	*4300								
	4.5 m	kg	*3450	*3200		*4350	*4050	*5000	*5000			
	1.5 m	kg	*3750	*2650		*5250	3750	*7150	5850			
	-1.5 m	kg	*4550	3100		*5300	3600	*7350	5600	*9450	*9450	
	7.5 m	kg	*4300	*4300								
	6.0 m	kg	*3650	*3650								
	4.5 m	kg	*3450	*3450		*4350	*4350	*5000	*5000			
	3.0 m	kg	*3500	*3500		*4750	*4750	*6100	*6100			
	1.5 m	kg	*3750	3450		*5250	4850	*7150	*7150			
	0.0 m	kg	*4250	*3600		*5500	4750	*7600	*7600			
	-1.5 m	kg	*4550	*4050		*5300	4700	*7350	*7350	*9450	*9450	
-3.0 m	kg	*4450	*4450				*8200	*8200	*8700	*8700		

Arm length 1850 mm



When removing bucket, linkage or cylinder, lifting capacities can be increased by their respective weights

A – Reach from swing center

B – Bucket hook height

C – Lifting capacities, including bucket (550 kg), linkage (84 kg) and bucket cylinder (92 kg)

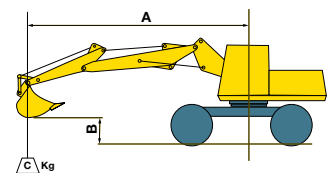
⊗ – Rating over rear

⊗ – Rating over side or 360 degrees

⊗ – Rating at maximum reach

<b>TWO-PIECE BOOM</b> 	7.5 m	kg	*4250	3850				*4850	4450		
	6.0 m	kg	*3550	*2450			*4700	2650	*4600	4500	
	4.5 m	kg	*3350	1950			*4950	2600	*5500	4300	
	3.0 m	kg	*3300	1700			*5450	2500	*7050	3950	
	1.5 m	kg	*3500	1650			5550	2350	*8550	3650	
	0.0 m	kg	*3850	1700			5450	2300	9050	3500	
	-1.5 m	kg	*4600	1950			5450	2250	9050	3500	*9050
-3.0 m	kg									6750	
	7.5 m	kg	*4250	*4250				*4850	*4850		
	6.0 m	kg	*3550	*3550			*4700	*4700	*4600	*4600	
	4.5 m	kg	*3350	*3350			*4950	*4950	*5500	*5500	
	3.0 m	kg	*3300	*3300			*5450	4800	*7050	*7050	
	1.5 m	kg	*3500	3250			5800	4650	*8550	7450	
	0.0 m	kg	*3850	3400			5700	4550	*9400	7300	
	-1.5 m	kg	*4600	3900			5700	4500	*9450	7250	*9050
-3.0 m	kg									*9050	
	7.5 m	kg	*4250	*4250				*4850	*4850		
	6.0 m	kg	*3550	*3550			*4700	*4050	*4600	*4600	
	4.5 m	kg	*3350	*3050			*4950	4000	*5500	*5500	
	3.0 m	kg	*3300	*2700			*5450	3900	*7050	6250	
	1.5 m	kg	*3500	*2600			*5950	3750	*8550	5850	
	0.0 m	kg	*3850	2750			*6550	3650	*9400	5700	
	-1.5 m	kg	*4600	3150			*6850	3650	*9450	5700	*9050
-3.0 m	kg							*8750	5700		
	7.5 m	kg	*4250	*4250				*4850	*4850		
	6.0 m	kg	*3550	*3550			*4700	*4700	*4600	*4600	
	4.5 m	kg	*3350	*3350			*4950	*4950	*5500	*5500	
	3.0 m	kg	*3300	*3300			*5450	5050	*7050	*7050	
	1.5 m	kg	*3500	3400			*5950	4900	*8550	7850	
	0.0 m	kg	*3850	3600			*6550	4800	*9400	7650	
	-1.5 m	kg	*2800	2800			*6850	4800	*9450	7650	*9050
-3.0 m	kg									*9050	

Arm length 1850 mm



When removing bucket, linkage or cylinder, lifting capacities can be increased by their respective weights

A – Reach from swing center

B – Bucket hook height

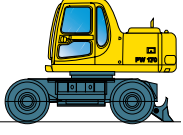
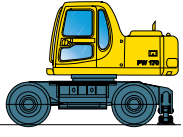
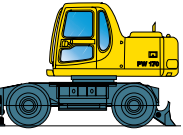
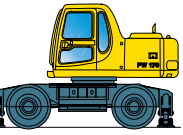
C – Lifting capacities, including bucket (550 kg), linkage (84 kg) and bucket cylinder (92 kg)

⊗ – Rating over rear

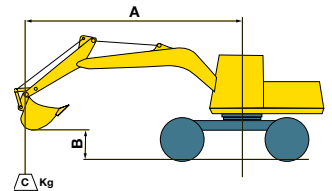
⊗ – Rating over side or 360 degrees

⊗ – Rating at maximum reach

- Notes:
1. Ratings are based on ISO 10567.
  2. Lifting capacities are given for a) 75% of tipping load  
b) rated hydraulic lift capacity 87% of max.
  3. Capacities marked with an asterisk (\*) are limited by hydraulic capacities.

	A	⊗		7.5 m		6.0 m		4.5 m		3.0 m	
		⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
B		⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	7.5 m	kg	*2400	*2400							
	6.0 m	kg	*2100	*2100		*3200	2700				
	4.5 m	kg	*2050	1850		*4000	2650	*4500	4450		
	3.0 m	kg	*2100	1550	*2550	1600	*4450	2500	*5650	4050	*8750 7750
	1.5 m	kg	*2300	1450	*3500	1550	*5000	2300	*6800	3650	
	0.0 m	kg	*2650	1500	*2700	1500	5350	2200	*7450	3400	*5700 *5700
	-1.5 m	kg	*3250	1700			5300	2150	*7400	3350	*9350 6400
	-3.0 m	kg	*4350	2150			*4450	2200	*6550	3400	*9400 6600
	7.5 m	kg	*2400	*2400							
	6.0 m	kg	*2100	*2100		*3200	*3200				
	4.5 m	kg	*2050	*2050		*4000	*4000	*4500	*4500		
	3.0 m	kg	*2100	*2100	*2550	*2550	*4450	*4450	*5650	*5650	*8750 *8750
	1.5 m	kg	*2300	*2300	*3500	3150	*5000	4800	*6800	*6800	
	0.0 m	kg	*2650	*2650	*2700	*2700	*5350	4450	*7450	7150	*5700 *5700
	-1.5 m	kg	*3250	*3250			*5300	4350	*7400	7050	*9350 *9350
	-3.0 m	kg	*4350	*4350			*4450	4450	*6550	*6550	*9400 *9400
	7.5 m	kg	*2400	*2400							
	6.0 m	kg	*2100	*2100		*3200	*3200				
	4.5 m	kg	*2050	*2050		*4000	*4000	*4500	*4500		
	3.0 m	kg	*2100	*2100	*2550	*2550	*4450	3900	*5650	*5650	*8750 *8750
	1.5 m	kg	*2300	*2300	*3500	2550	*5000	3700	*6800	5850	
	0.0 m	kg	*2650	2500	*2700	2500	*5350	3550	*7450	5600	*5700 *5700
	-1.5 m	kg	*3250	2750			*5300	3500	*7400	5500	*9350 *9350
	-3.0 m	kg	*4350	3500			*4450	3550	*6550	5550	*9400 *9400
	7.5 m	kg	*2400	*2400							
	6.0 m	kg	*2100	*2100		*3200	*3200				
	4.5 m	kg	*2050	*2050		*4000	*4000	*4500	*4500		
	3.0 m	kg	*2100	*2100	*2550	*2550	*4450	*4450	*5650	*5650	*8750 *8750
	1.5 m	kg	*2300	*2300	*3500	3300	*5000	4850	*6800	6800	
	0.0 m	kg	*2650	*2650	*2700	*2700	*5350	4700	*7450	*7450	*5700 *5700
	-1.5 m	kg	*3250	*3250			*5300	4600	*7400	*7400	*9350 *9350
	-3.0 m	kg	*4350	*4350			*4450	*4450	*6550	*6550	*9400 *9400

Arm length 2250 mm



When removing bucket, linkage or cylinder, lifting capacities can be increased by their respective weights

A – Reach from swing center

B – Bucket hook height

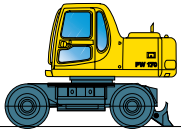
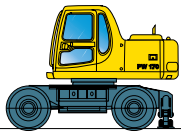
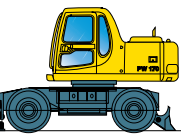
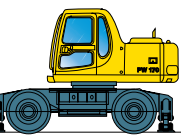
C – Lifting capacities, including bucket (550 kg), linkage (84 kg) and bucket cylinder (92 kg)

⊗ – Rating over rear

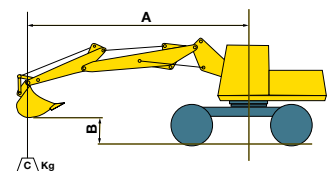
⊗ – Rating over side or 360 degrees

⊗ – Rating at maximum reach

ONE-PIECE BOOM

	7.5 m	kg	*2300	*2300							
	6.0 m	kg	*1950	*1950		*3800	2650				
	4.5 m	kg	*1900	1700		*4500	2800	*4950	4350		
	3.0 m	kg	1900	1500	*3250	1600	*5200	2450	*6500	4000	
	1.5 m	kg	*2050	1450	3750	1550	5550	2300	*8100	3650	
	0.0 m	kg	*2300	1500	*3050	1500	5400	2200	9000	3450	*5150 *5150
	-1.5 m	kg	*2800	1700			5350	2200	8950	3400	*9100 6550
	-3.0 m	kg							*8750	3500	
	7.5 m	kg	*2300	*2300							
	6.0 m	kg	*1950	*1950		*3800	*3800				
	4.5 m	kg	*1900	*1900		*4500	*4500	*4950	*4950		
	3.0 m	kg	*1900	*1900	*3250	3200	*5200	4750	*6500	*6500	
	1.5 m	kg	*2050	*2050	3950	3150	*5700	4600	*8100	7450	
	0.0 m	kg	*2300	*2300	*3050	*3050	5650	4450	*9100	7200	*5150 *5150
	-1.5 m	kg	*2800	*2800			5600	4450	9350	7150	*9100 *9100
	-3.0 m	kg							*8750	7250	
	7.5 m	kg	*2300	*2300							
	6.0 m	kg	*1950	*1950		*3800	*3800				
	4.5 m	kg	*1900	*1900		*4500	*4500	*4950	*4950		
	3.0 m	kg	*1900	*1900	*3250	2600	*5200	3850	*6500	6250	
	1.5 m	kg	*2050	*2050	*4050	2550	*5700	3700	*8100	5850	
	0.0 m	kg	*2300	*2300	*3050	2500	*6250	3550	*9100	5650	*5150 *5150
	-1.5 m	kg	*2800	2800			*6800	3550	*9400	5600	*9100 *9100
	-3.0 m	kg							*8750	5700	
	7.5 m	kg	*2300	*2300							
	6.0 m	kg	*1950	*1950		*3800	*3800				
	4.5 m	kg	*1900	*1900		*4500	*4500	*4950	*4950		
	3.0 m	kg	*1900	*1900	*3250	*3250	*5200	5000	*6500	*6500	
	1.5 m	kg	*2050	*2050	*4050	3350	*5700	4850	*8100	7850	
	0.0 m	kg	*2300	*2300	*3050	*3050	*6250	4700	*9100	7800	*5150 *5150
	-1.5 m	kg	*2800	2800			*6800	4700	*9400	7550	*9100 *9100
	-3.0 m	kg							*8750	7850	

Arm length 2250 mm



When removing bucket, linkage or cylinder, lifting capacities can be increased by their respective weights

A – Reach from swing center

B – Bucket hook height

C – Lifting capacities, including bucket (550 kg), linkage (84 kg) and bucket cylinder (92 kg)

⊗ – Rating over rear

⊗ – Rating over side or 360 degrees

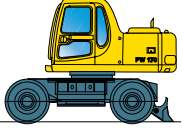
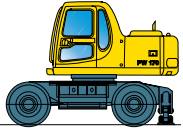
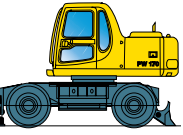
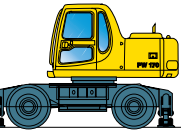
⊗ – Rating at maximum reach

Notes: 1. Ratings are based on ISO 10567.  
 2. Lifting capacities are given for a) 75% of tipping load  
 b) rated hydraulic lift capacity 87% of max.  
 3. Capacities marked with an asterisk (\*) are limited by hydraulic capacities.

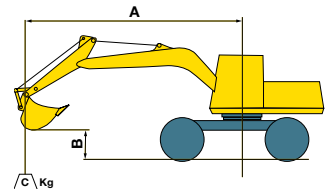


# LIFTING CAPACITIES

PW170ES-6

	A	⊗		7.5 m		6.0 m		4.5 m		3.0 m		
		B	⊗		⊗		⊗		⊗		⊗	
			⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	7.5 m	kg	*1900	*1900								
	6.0 m	kg	*1700	*1700		*3150	2700					
	4.5 m	kg	*1650	*1650		*3700	2650					
	3.0 m	kg	*1700	1450	*3100	1600	*4250	2500	*5300	4150	*7750	*7750
	1.5 m	kg	*1900	1350	3750	1550	*4850	2350	*6450	3650	*6750	*6750
	0.0 m	kg	*2200	1400	3700	1500	*5250	2200	*7300	3450	*6400	*6400
	-1.5 m	kg	*2750	1550			5250	2100	*7450	3300	*9100	6350
	-3.0 m	kg	*3900	1950			*4800	2150	*6800	3350	*9500	6500
	7.5 m	kg	*1900	*1900								
	6.0 m	kg	*1700	*1700		*3150	*3150					
	4.5 m	kg	*1650	*1650		*3700	*3700					
	3.0 m	kg	*1700	*1700	*3100	*3100	*4250	*4250	*5300	*5300	*7750	*7750
	1.5 m	kg	*1900	*1900	*3950	3150	*4850	4600	*6450	*6450	*6750	*6750
	0.0 m	kg	*2200	*2200	3850	3050	*5250	4450	*7300	7200	*6400	*6400
	-1.5 m	kg	*2750	*2750			*5350	4350	*7450	7050	*9100	*9100
	-3.0 m	kg	*3900	*3900			*4800	4400	*6800	*6800	*9950	*9950
	7.5 m	kg	*1900	*1900								
	6.0 m	kg	*1700	*1700		*3150	*3150					
	4.5 m	kg	*1650	*1650		*3700	*3700					
	3.0 m	kg	*1700	*1700	*3100	2600	*4250	3900	*5300	*5300	*7750	*7750
	1.5 m	kg	*1900	*1900	*3950	2550	*4850	3700	*6450	5850	*6750	*6750
	0.0 m	kg	*2200	*2200	*3900	2450	*5250	3550	*7300	5600	*6400	*6400
	-1.5 m	kg	*2750	2550			*5350	3450	*7450	5500	*9100	*9100
	-3.0 m	kg	*3900	3150			*4800	3500	*6800	5500	*9950	*9950
	7.5 m	kg	*1900	*1900								
	6.0 m	kg	*1700	*1700		*3150	*3150					
	4.5 m	kg	*1650	*1650		*3700	*3700					
	3.0 m	kg	*1700	*1700	*3100	*3100	*4250	*4250	*5300	*5300	*7750	*7750
	1.5 m	kg	*1900	*1900	*3950	3300	*4850	*4850	*6450	*6450	*6750	*6750
	0.0 m	kg	*2200	*2200	*3900	3250	*5250	4700	*7300	*7300	*6400	*6400
	-1.5 m	kg	*2750	*2750			*5350	4600	*7450	*7450	*9100	*9100
	-3.0 m	kg	*3900	*3900			*4800	4650	*6800	*6800	*9950	*9950

Arm length 2610 mm



When removing bucket, linkage or cylinder, lifting capacities can be increased by their respective weights

A – Reach from swing center

B – Bucket hook height

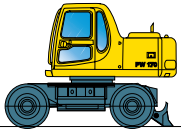
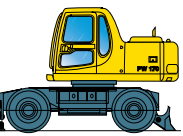
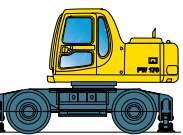
C – Lifting capacities, including bucket (550 kg), linkage (84 kg) and bucket cylinder (92 kg)

⊗ – Rating over rear

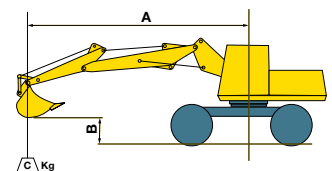
⊗ – Rating over side or 360 degrees

⊗ – Rating at maximum reach

ONE-PIECE BOOM

	7.5 m	kg	*1800	*1800								
	6.0 m	kg	*1550	*1550		*3500	2700					
	4.5 m	kg	*1500	*1500	*2250	1650	*4150	2650	*4450	4400		
	3.0 m	kg	*1550	1350	*3500	1600	*4900	2500	*6000	4050	*9100	7850
	1.5 m	kg	*1650	1300	3750	1550	*5500	2300	*7700	3650		
	0.0 m	kg	*1900	1350	3700	1500	5400	2200	*8900	3450	*5750	*5750
	-1.5 m	kg	*2350	1550			5300	2150	8900	3350	*8800	6500
	-3.0 m	kg					5400	2200	8950	3400	*13450	6700
	7.5 m	kg	*1800	*1800								
	6.0 m	kg	*1550	*1550		*3500	*3500					
	4.5 m	kg	*1500	*1500	*2250	*2250	*4150	*4150	*4450	*4450		
	3.0 m	kg	*1550	*1550	*3500	3200	*4900	4800	*6800	*6000	*9100	*9100
	1.5 m	kg	*1650	*1650	3950	3150	*5500	4600	*7700	7500		
	0.0 m	kg	*1900	*1900	3900	3100	5650	4450	*8900	7200	*5750	*5750
	-1.5 m	kg	*2350	*2350			5550	4400	9300	7100	*8800	*8800
	-3.0 m	kg					5650	4450	*9000	7200	*13450	*13450
	7.5 m	kg	*1800	*1800								
	6.0 m	kg	*1550	*1550		*3500	*3500					
	4.5 m	kg	*1500	*1500	*2250	*2250	*4150	4050	*4450	*4450		
	3.0 m	kg	*1550	*1550	*3500	2600	*4900	3900	*6000	6000	*9100	*9100
	1.5 m	kg	*1650	*1650	*4250	2550	*5500	3700	*7700	5900		
	0.0 m	kg	*1900	*1900	*4250	2540	*6100	3550	*8900	5650		
	-1.5 m	kg	*2350	*2350			*6650	3500	*9350	5550	*8800	*8800
	-3.0 m	kg					*6400	3550	*9000	5600	*13450	11850
	7.5 m	kg	*1800	*1800								
	6.0 m	kg	*1550	*1550		*3500	*3500					
	4.5 m	kg	*1500	*1500	*2250	*2250	*4150	*4150	*4450	*4450		
	3.0 m	kg	*1550	*1550	*3500	3400	*4900	*4900	*6000	*6000	*9100	*9100
	1.5 m	kg	*1850	*1850	*4250	3300	*5500	4850	*7700	*7700		
	0.0 m	kg	*1900	*1900	*4250	3250	*6100	4700	*8900	7600	*5750	*5750
	-1.5 m	kg	*2350	*2350			*6650	4650	*9350	7500	*8800	*8800
	-3.0 m	kg					*6400	4700	*9000	7600	*13450	*13450

Arm length 2610 mm



When removing bucket, linkage or cylinder, lifting capacities can be increased by their respective weights

A – Reach from swing center

B – Bucket hook height

C – Lifting capacities, including bucket (550 kg), linkage (84 kg) and bucket cylinder (92 kg)

⊗ – Rating over rear

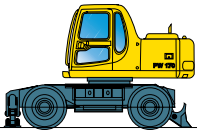
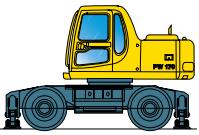
⊗ – Rating over side or 360 degrees

⊗ – Rating at maximum reach

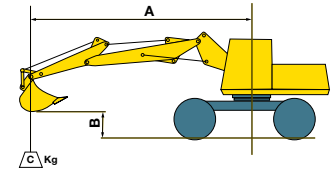
- Notes: 1. Ratings are based on ISO 10567.  
 2. Lifting capacities are given for a) 75% of tipping load  
 b) rated hydraulic lift capacity 87% of max.  
 3. Capacities marked with an asterisk (\*) are limited by hydraulic capacities.

# LIFTING CAPACITIES

**PW170ES-6**

	A	⊗		7.5 m		6.0 m		4.5 m		3.0 m		
		⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	
<b>ROTATING ARM</b> 	7.5 m	kg	*1350	*1350								
	6.0 m	kg	*1200	*1200		*2800	*2800					
	4.5 m	kg	*1150	*1150	*1650	*1650	*3600	*3600				
	3.0 m	kg	*1200	*1200	*2750	2350	*4300	3600	*5200	*5200	*7650	*7650
	1.5 m	kg	*1350	*1350	*3450	2250	*4950	3300	*6850	5400	*9100	*9100
	0.0 m	kg	*1600	*1600	*3400	2150	*5450	3100	*8050	5000	*7800	*7800
	-1.5 m	kg	*2100	*2100			*6000	3050	*8650	4850	*9950	*9950
	-3.0 m	kg	*3250	2800			*6050	3100	*8450	4950	*12850	*10650
<b>ROTATING ARM</b> 	7.5 m	kg	*1350	*1350								
	6.0 m	kg	*1200	*1200		*2800	*2800					
	4.5 m	kg	*1150	*1150	*1650	*1650	*3600	*3600				
	3.0 m	kg	*1200	*1200	*2750	*2750	*4300	*4300	*5200	*5200	*7650	*7650
	1.5 m	kg	*1350	*1350	*3450	3050	*4950	4450	*6850	*6850	*9100	*9100
	0.0 m	kg	*1600	*1600	*3400	2950	*5450	4250	*8050	6950	*7800	*7800
	-1.5 m	kg	*2100	*2100			*6000	4150	*8650	6800	*9950	*9950
	-3.0 m	kg	*3250	*3250			*6050	4250	*8450	8900	*12850	*12850

Rotating arm 2900 mm



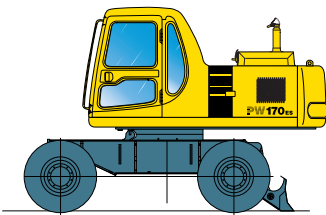
When removing bucket, linkage or cylinder, lifting capacities can be increased by their respective weights

# COMPONENTS DIMENSIONS AND WEIGHTS

**PW170ES-6**

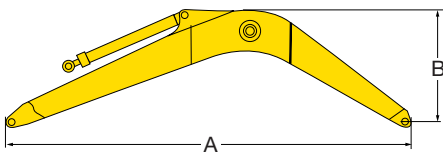
(APPROXIMATE WEIGHTS)

## BASIC MACHINE



Tyre size	Weight			
	Rear blade	Rear outrigger	Rear blade + front outrigger	Front + rear outrigger
10.00 - 20 14 PR x 8	14000 kg	14110 kg	14800 kg	15000 kg

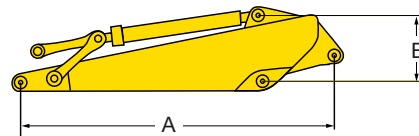
## MONOBLOCK BOOM WITH ARM CYLINDER



A	B	Weight
5310 mm	1413 mm	1330 kg

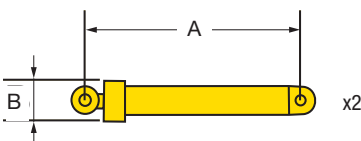
(includes arm cylinder)

## ARM WITH BUCKET CYLINDER AND LINKAGE



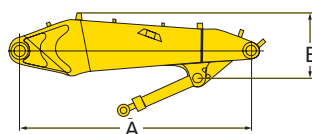
Arm length	1850 mm	2250 mm	2610 mm	Rotating arm
A	2760 mm	3160 mm	3510 mm	3800 mm
B	690 mm	770 mm	710 mm	1126 mm
Weight	550 kg	630 kg	680 kg	1100 kg

## BOOM CYLINDER



	Two piece boom	Monoblock
A	1675 mm	1760 mm
B	185 mm	176 mm
Weight (each)	145 kg	140 kg

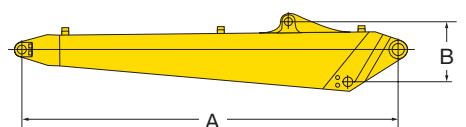
## FIRST BOOM



A	B	Weight
2104 mm	780 mm	650 kg

(includes boom adjust cylinder)

## SECOND BOOM WITH ARM CYLINDER



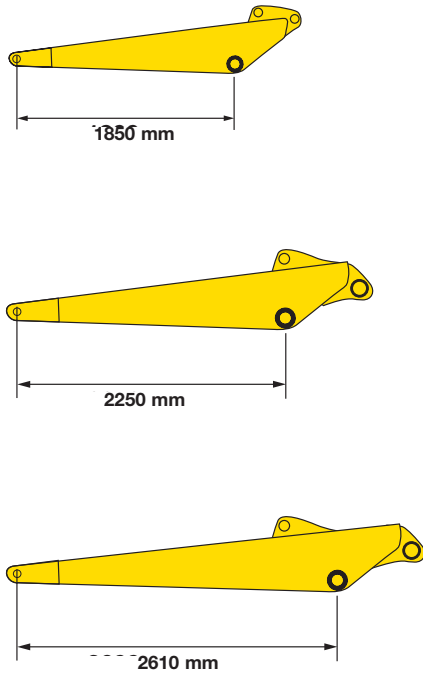
A	B	Weight
3800 mm	780 mm	920 kg

(includes arm cylinder)

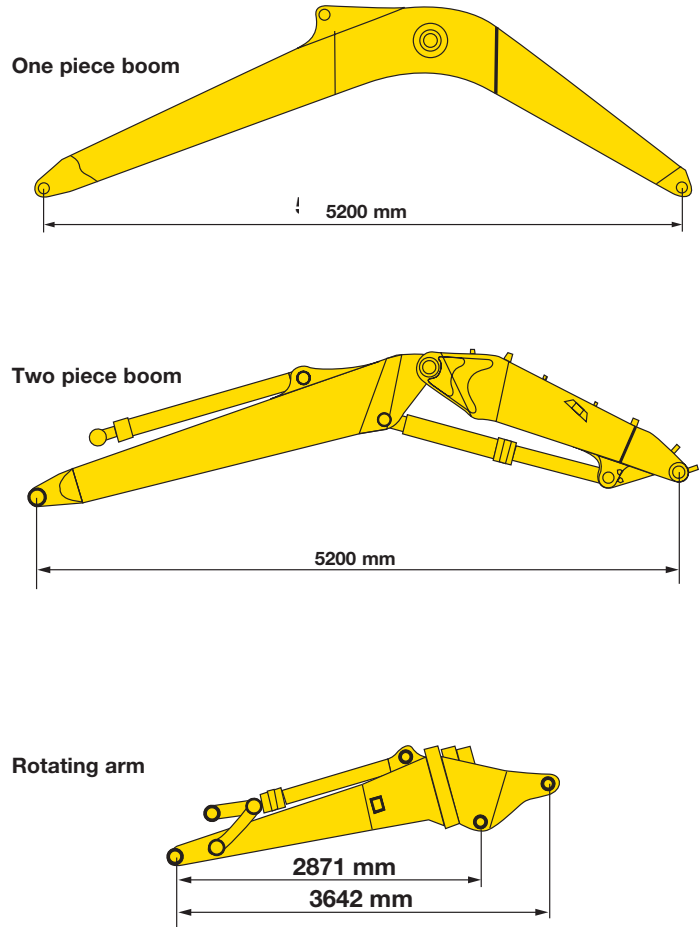


Specifications and equipments may vary according to regional availability

## ARM



## BOOM



## BUCKET AND ARM COMBINATION

Bucket capacity (heaped)		Width without side cutters	Weight	Max. density (tonne/m <sup>3</sup> )			
SAE, PCSA	CECE			1850 mm arm	2250 mm arm	2610 mm arm	Rotating arm
0.27	0.25	450	300	○	○	○	○
0.41	0.37	600	420	○	○	○	○
0.48	0.44	700	445	○	○	○	○
0.55	0.50	800	460	○	○	○	○
0.62	0.57	900	495	○	○	○	□
0.69	0.63	1000	530	○	○	○	△
0.76	0.69	1100	550	○	○	□	△
0.83	0.76	1200	575	○	□	□	△
0.90	0.82	1300	605	□	□	□	-
0.97	0.89	1400	630	□	□	△	-
1.14	1.04	1400	675	□	△	-	-

A wide variety of buckets & attachments is available. Contact your local dealer for more information.

○ : material weight up to 1.8 t/m<sup>3</sup>  
 □ : material weight up to 1.5 t/m<sup>3</sup>  
 △ : material weight up to 1.2 t/m<sup>3</sup>  
 - : do not use

## BUCKET AND ARM FORCE

Arm length	1850 mm	2250 mm	2610 mm	Rotating arm
Bucket Force	10450 kg	10450 kg	10450 kg	10450 kg
Bucket Force, 'Power max'	11527 kg	11527 kg	11527 kg	11527 kg
Arm Force	10231 kg	8135 kg	7083 kg	6417 kg
Arm Force, 'Power Max'	11152 kg	8910 kg	7720 kg	7000 kg

# HYDRAULIC WHEELED EXCAVATOR PW170ES-6



## STANDARD EQUIPMENT

Standard and optional equipment may vary. Consult your Komatsu dealer for more information.

- Additional Hydraulic circuit suitable for breaker and clamshell (HCU)
- Air cleaner, double element type with auto dust evacuator and dust indicator
- Alternator, 24 volt, 45 Amp.
- Auto decelerator
- Automatic engine warm-up system
- Automatic de aeration for fuel line
- Batteries (2 x 12 volt, 95 Ah)
- Boom cylinder safety valve
- Cab: all-weather sound suppression type with safety glass windows, pull-up type front window with lock device, removable lower windshield, lockable door, floor mat, windshield wiper with intermittent feature, cigarette lighter and ashtray
- Control levers (adjustable wrist control with PPC system)
- Cooling fan: suction
- Drive system: hydrostatic
- Dual circuit hydraulic brakes with wet multi disc service brakes
- Engine key stop
- Engine overheat prevention system
- Engine: SAA4D102-E2 direct injection turbo charged diesel
- Fuel control dial
- Fully adjustable suspension seat
- Fully auto. 3 speed transmission
- General toolkit
- Heater
- Hydraulic multidisc parking brake incorporated into transmission
- Instrument panel: Electronic Monitor and Control Console
- New designed twin toolbox
- Refueling pump
- Rain visor
- Horn, electric
- Hydraulics: Pump & Engine Mutual Control System (PEMC) and Electronic HydraMind)
- Orbitol type hydraulic
- Overload warning device
- Power Max and Swift slow down function
- Radiator & oil cooler with dust net
- Rearview mirrors (RH & LH)
- See through roof
- Starting motor: 24 volt, 5.5 kW direct electric
- Steering acting on front wheels
- Stereo radio-cassette prep.
- Vandalism protection locks
- 5 Working mode selection system

## OPTIONAL EQUIPMENT

- Long tool rack
- Additional R.H. boom working lamp
- Air conditioning
- Arm cylinder safety valve
- Bio degradable oil
- Cold weather battery
- Clamshell grip
- Adjust cylinder safety valve
- Additional cab roof lights
- Engine room lamp
- Front or rear radial blade
- Front-rear outriggers
- Heated air suspension seat
- Lower wiper
- Mono boom
- Rear parallel blade
- Rotating arm
- Rotating beacon preparation
- Single wide tyres (18R 19,5 x 4)
- Transmission guard
- Two piece boom
- Wide range of Komatsu buckets
- 1,8 arm, 2,2 arm, 2,6 arm
- 2 or 4 outriggers
- Radio cassette
- Roof window guard

**KOMATSU**

**Komatsu Europe  
International N.V.**

Mechelsesteenweg 586  
B 1800 VILVOORDE (BELGIUM)

Tel. (32)2/255 24 11  
Fax (32)2/252 19 81