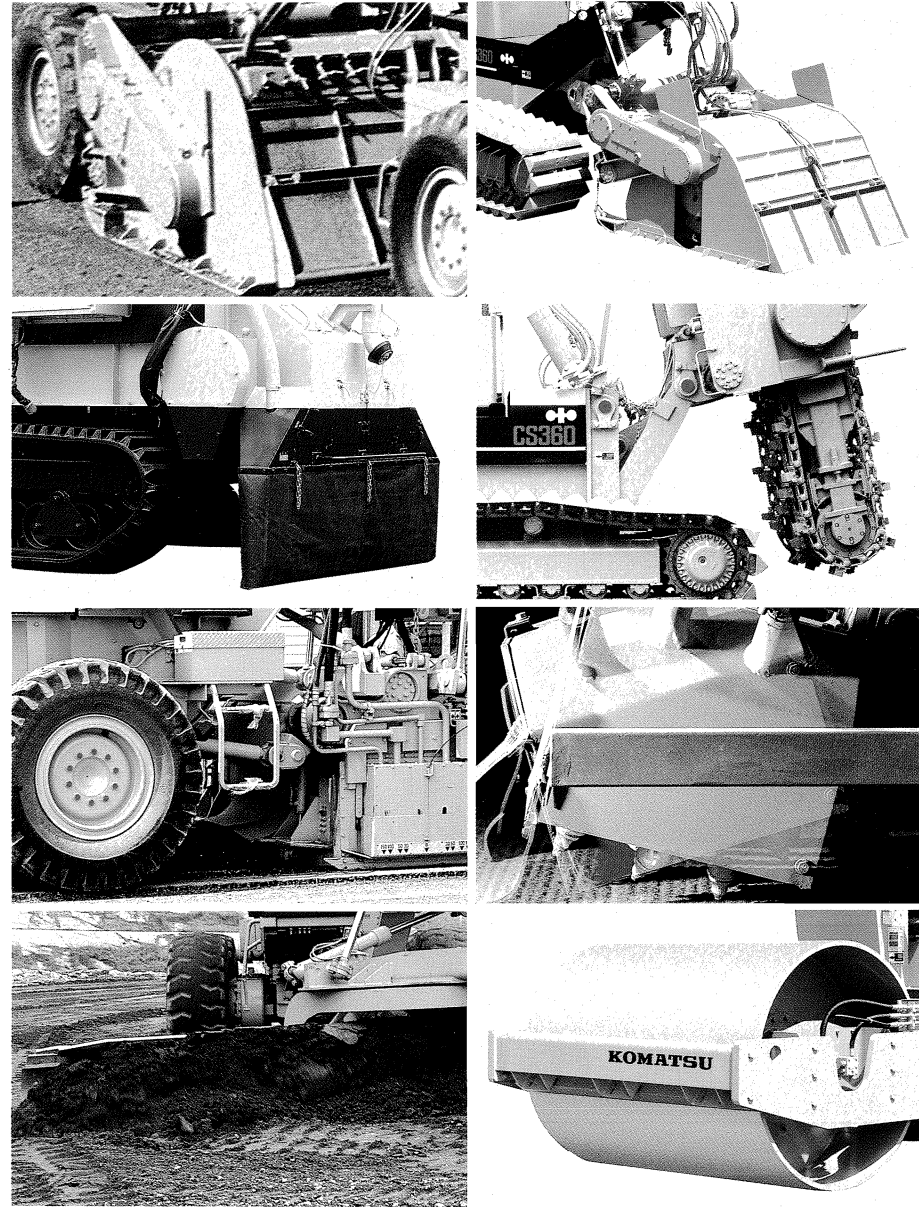


KOMATSU ROAD MAINTENANCE EQUIPMENT



ROAD MAINTENANCE EQUIPMENT



This brochure may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items that you may require. Materials and specifications are subject to change without notice.

KOMATSU

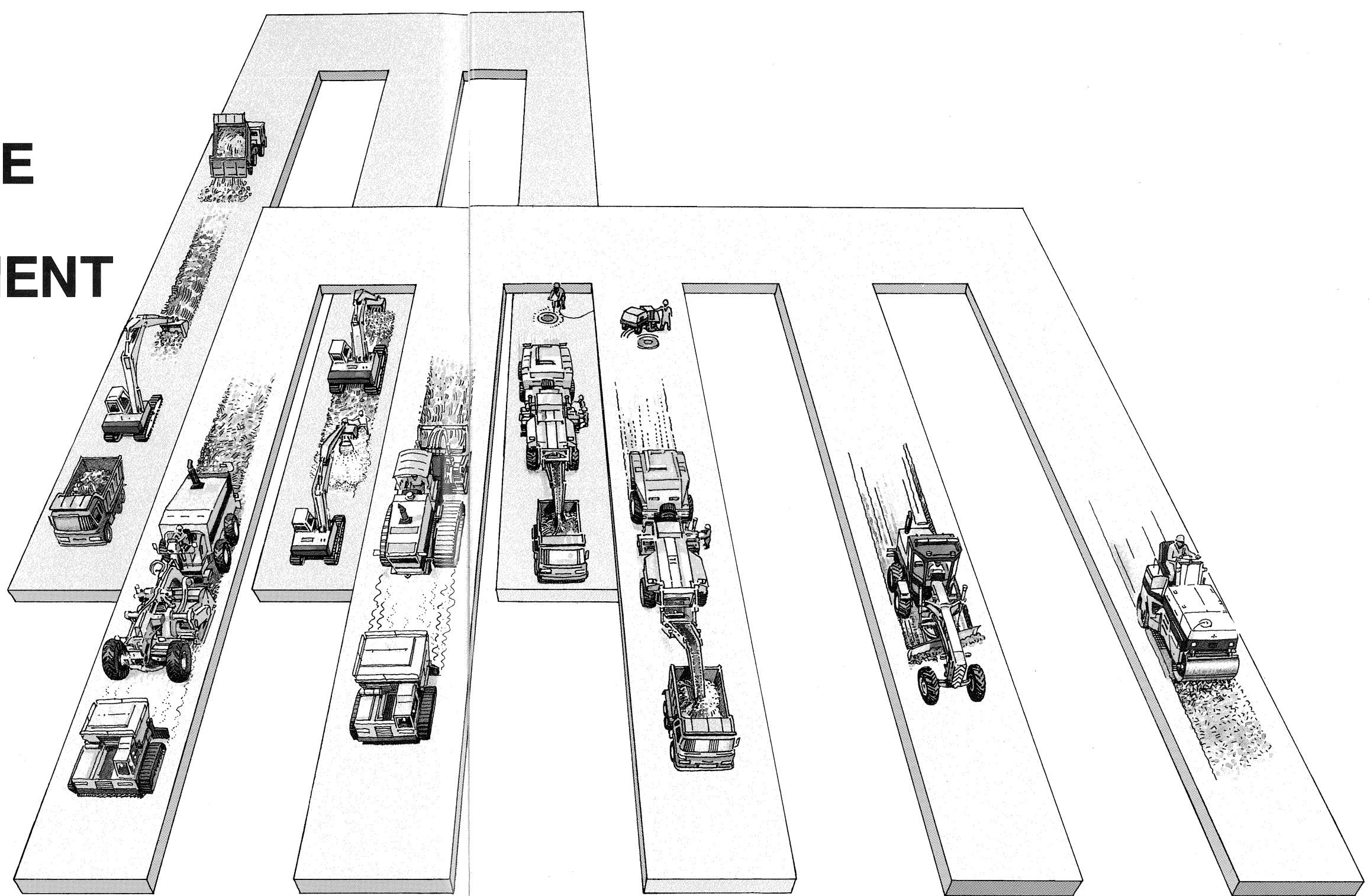
KOMATSU

When it comes to road repair and maintenance, all roads lead to Komatsu.

ROAD SUBGRADE RECYCLING AND ASPHALT-PAVEMENT PROFILING EQUIPMENT

Increased traffic loads have combined with the passage of time to cause today's roads to deteriorate rapidly. More than ever, maintaining them requires a great deal of time and labor. Vacillation and postponements can only hasten the death of these vital arteries of a nation's growth and progress. That's why you should look to Komatsu.

With our performance-proven, productive road maintenance equipment, we can help you put all those roads back into smooth, working order.



Wheel stabilizer

The GS360 Wheel Stabilizer is recommended for harder ground or road subbase improvement work that has been made either by hydraulic excavators or by brute force. The max. digging depth is 400 mm (15.7").

Lime spreader

In conventional operations, lime or other soil stabilizing agents or soil improvement are spread over the ground manually or through the use of hydraulic excavators. Komatsu's CL60 Lime Spreader does it all—faster and more efficiently.

Crawler stabilizer

This is Komatsu's efficient alternative to conventional road subbase rehabilitation/improvement methods, especially where the ground is soft, owing to the use of hydraulic excavators or intensive, physical labor. A single passage of the crawler stabilizer effectively crumbles old pavements; a stabilizing agent is mixed, and the crushed materials are then used as the subbase material for the new pavement. Two digging depths are available. The CS360SD can dig down to 1.2 meters (3'11"), the CS360 down to 0.7 meters (2'4"), and the CS210 down to 0.6 meters (2').

Road cutters

Usually, uneven road surfaces and ruts are removed by road cutters. In this case, the dirt is removed manually. Komatsu's GC380F, which comes with a feeder, effectively scrapes jutting road surfaces and automatically loads the waste into a dump truck. Another advantage is that an operator of less experience alone can control this machine with the equal skill of two veteran operators. As for difficult-to-reach areas, usually accessed manually, the equipment to use is Komatsu's compact GC50 Road Cutter.

Motor Graders

Komatsu provides an opulent range of motor graders in various sizes depending on specific grading requirements.

Vibratory rollers

Komatsu also offers a wide range of vibratory rollers in various configurations depending on specific compaction requirements.

SUBGRADE RECYCLING EQUIPMENT

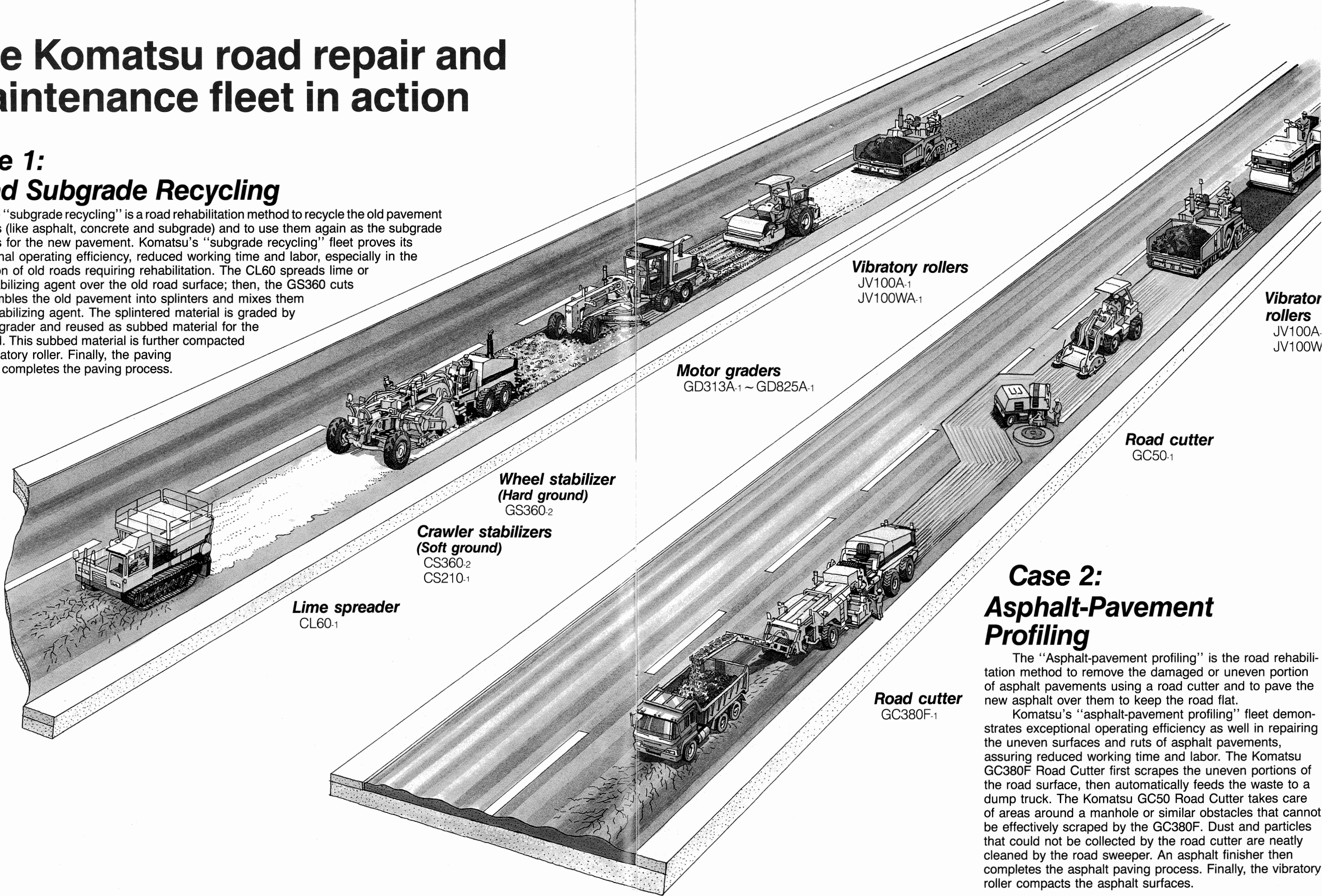
ASPHALT-PAVEMENT PROFILING EQUIPMENT

OTHER ROAD MAINTENANCE EQUIPMENT

The Komatsu road repair and maintenance fleet in action

Case 1: Road Subgrade Recycling

The "subgrade recycling" is a road rehabilitation method to recycle the old pavement materials (like asphalt, concrete and subgrade) and to use them again as the subgrade materials for the new pavement. Komatsu's "subgrade recycling" fleet proves its exceptional operating efficiency, reduced working time and labor, especially in the demolition of old roads requiring rehabilitation. The CL60 spreads lime or other stabilizing agent over the old road surface; then, the GS360 cuts and crumbles the old pavement into splinters and mixes them with a stabilizing agent. The splintered material is graded by a motor grader and reused as subbed material for the new road. This subbed material is further compacted by a vibratory roller. Finally, the paving machine completes the paving process.



Vibratory rollers
JV100A-1
JV100WA-1

Motor graders
GD313A-1 ~ GD825A-1

**Wheel stabilizer
(Hard ground)**
GS360-2

**Crawler stabilizers
(Soft ground)**
CS360-2
CS210-1

Lime spreader
CL60-1

Road cutter
GC50-1

Road cutter
GC380F-1

Vibrator rollers
JV100A-1
JV100W

Case 2: Asphalt-Pavement Profiling

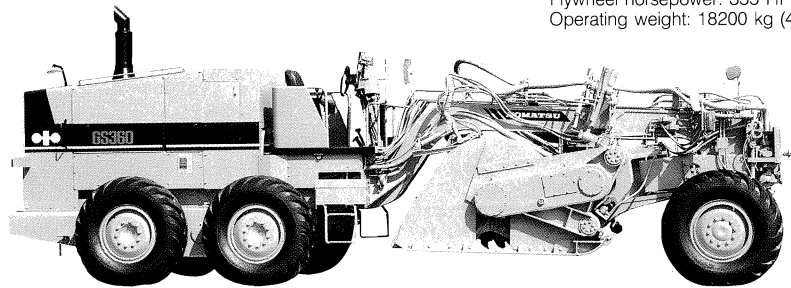
The "Asphalt-pavement profiling" is the road rehabilitation method to remove the damaged or uneven portion of asphalt pavements using a road cutter and to pave the new asphalt over them to keep the road flat.

Komatsu's "asphalt-pavement profiling" fleet demonstrates exceptional operating efficiency as well in repairing the uneven surfaces and ruts of asphalt pavements, assuring reduced working time and labor. The Komatsu GC380F Road Cutter first scrapes the uneven portions of the road surface, then automatically feeds the waste to a dump truck. The Komatsu GC50 Road Cutter takes care of areas around a manhole or similar obstacles that cannot be effectively scraped by the GC380F. Dust and particles that could not be collected by the road cutter are neatly cleaned by the road sweeper. An asphalt finisher then completes the asphalt paving process. Finally, the vibratory roller compacts the asphalt surfaces.

Wheel Stabilizer—GS360-2

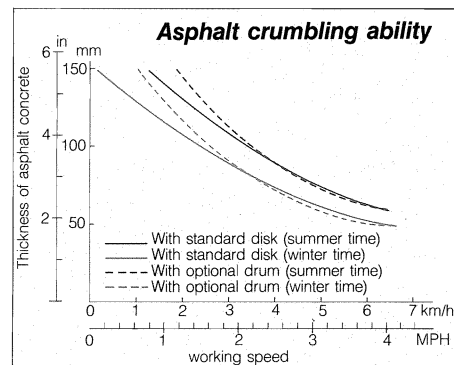
GS360-2

Max. mixing depth: 400 mm (15.7")
 Mixing width: 1975 mm (6'6")
 Flywheel horsepower: 355 HP (265 kW)/2000 RPM
 Operating weight: 18200 kg (40,120 lb)

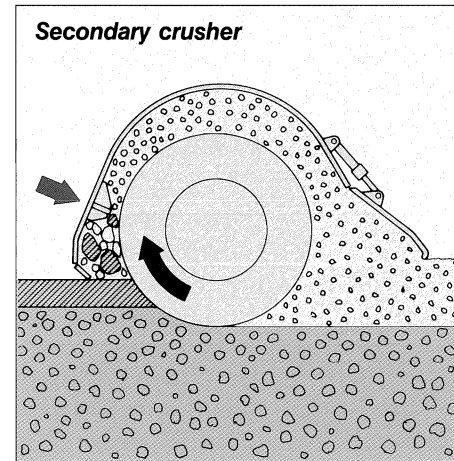


The GS360 Wheel Stabilizer is designed to put old, damaged roads back into tiptop shape. It is also useful for soil improvement tasks in farmland or around housing developments. When it comes to reducing working time and costs, the GS360 is the answer for any type of road/soil subbed rehabilitation.

Exceptional productivity: The powerful digging force easily breaks down asphalt pavements up to 150 mm (5.9") thick, and digs down to 400 mm (15.7") to perform simultaneous crumbling and mixing operations. The optional rotor enables digging/mixing operation even down to a depth of 700 mm (2'4"). This is ideal for rehabilitating old subbases because the worn-out asphalt surface is mixed with the old subbase materials and a stabilizing agent can be added at the same time.



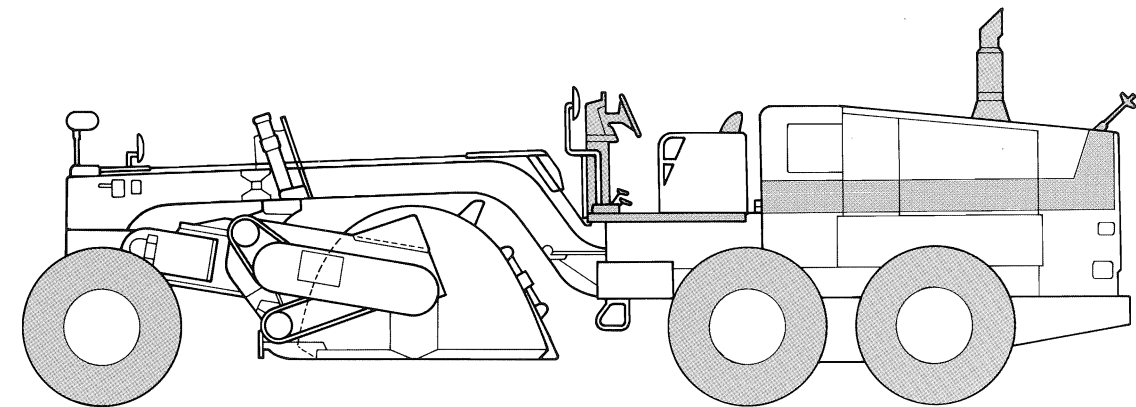
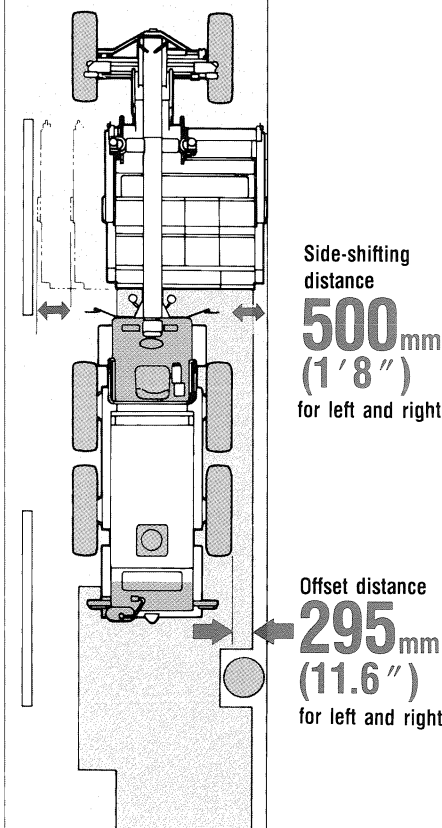
Uniform crumbling and mixing: The left and right rotor lifts are independently controllable, enabling to tilt the rotor toward left or right hand. When the rotor is tilted, the first and second crumbling/mixing operations can be accomplished smoothly with the same precision. Moreover, the secondary crusher, which employs the powerful up-cut method and unique bit arrangement, demonstrates the outstanding crumbling/mixing performance.



Rotor offset of 295 mm (11.6") to the left and right: The rotor unit can be side-shifted by up to 500 mm (1'8") to the left or right. In other words, this means that the rotor can be offset 295 mm (11.6") beyond the outer edge of the tires, thus helping minimize difficult-to-reach areas when digging around utility poles and manholes.



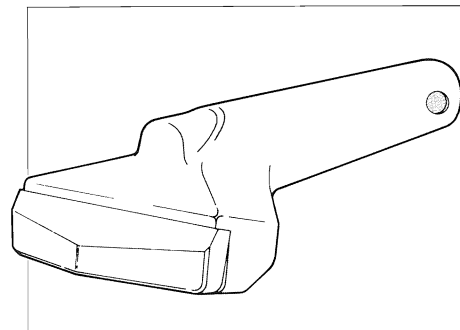
Rotor offset and side-shifting



Stable rotor operation: The tandem drive wheels and central placement of the rotor assure that, even on rough and tough roads, there is very little vertical movement of the rotor, and traction remains powerful, securing constant cutting depth. Additionally, the condition of the road immediately after cutting can be easily seen from the operator's seat, thus quickly allowing the operator to adjust the machine's speed to cope with any change in road and operating conditions.

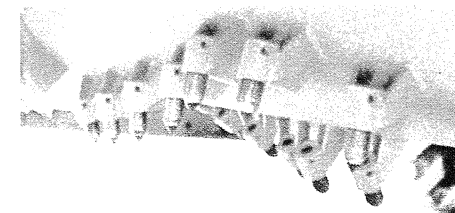
On-the-field rotor disc replacement: The cutting blades of the bits are made of an extremely hard alloy. Including the side bits and ten discs in the rotor, there is a total of 52 bits. The discs can be easily

assembled and disassembled with a few bolts. For extra convenience, the bits are tapered and are attached by being hammered into place, thus facilitating replacement.

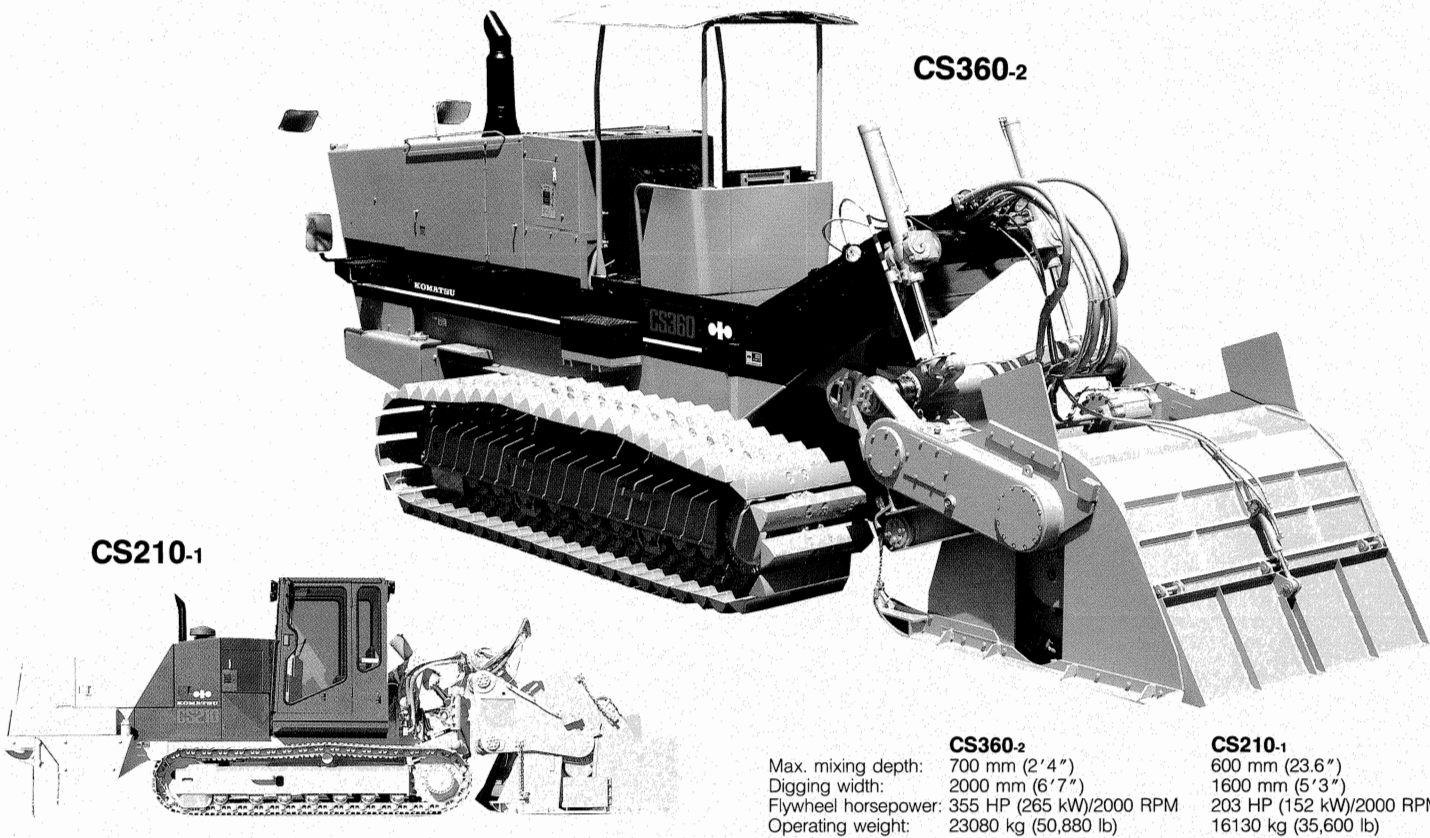


A variety of attachments:

- Soil stabilizer
- Digging depth: 700 mm (2'4") rotor for soil stabilizing.
- Soft rock crusher (drum type rotor and conical bits are used)
- Wide tires, 17.5-25-12PR (G-2)



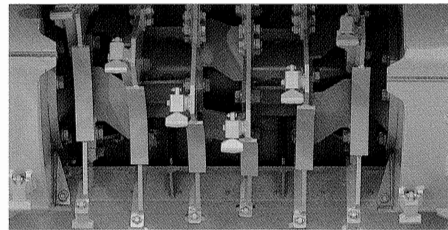
Crawler Stabilizers—CS360-2/CS210-1



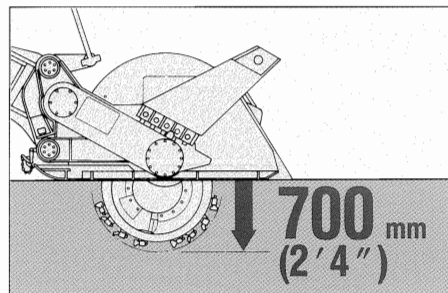
	CS360-2	CS210-1
Max. mixing depth:	700 mm (2'4")	600 mm (23.6")
Digging width:	2000 mm (6'7")	1600 mm (5'3")
Flywheel horsepower:	355 HP (265 kW)/2000 RPM	203 HP (152 kW)/2000 RPM
Operating weight:	23080 kg (50,880 lb)	16130 kg (35,600 lb)

Komatsu's sophisticated crawler stabilizer crumbles old pavements and mixes the resulting splinters with lime or other stabilizing agent, simultaneously. When it comes to road rehabilitation or soil improvement work, it is truly a paragon of efficiency. High traveling stability is assured by superb machine weight balance and crawlers equipped with swamp shoes. This enables the machine to operate even on soft-terrain, ensuring constant digging/mixing depth.

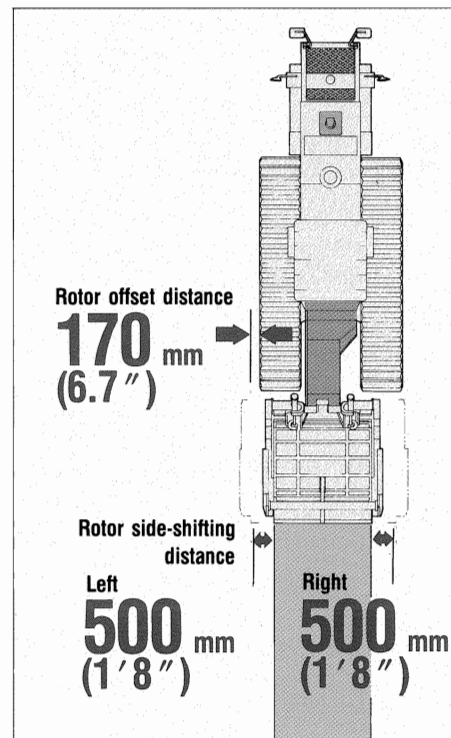
High mixing performance: Powerful up-cut method, ideal bit alignment and the optimal rotor speed are combined to provide exceptional mixing performance. Komatsu's original secondary crushing mechanism enables the machine to demonstrate high mixing performance even when working in clay soil conditions.



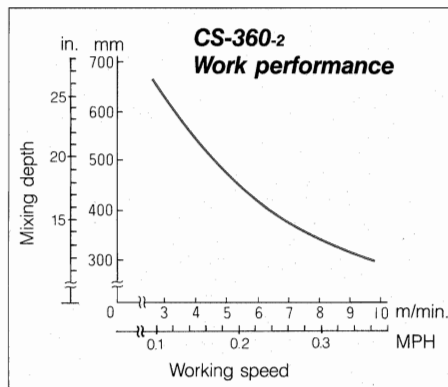
Large digging depth: The CS360 with the standard stabilizer can dig down to 700mm (2'4"), enabling good soil/subbase improvement along with its exceptional mixing performance.



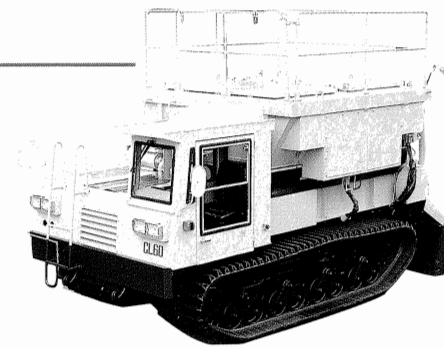
Rotor offset of 500 mm (1'8") to left and right: This offset mechanism makes it possible to extend the rotor 170 mm (6.7") beyond the outer edge of the left track, making it easier to reach otherwise difficult-to-reach areas such as those around utility poles and manholes.



Great productivity: The high-power Komatsu diesel engine provides a massive output of 355 HP (265 kW) and a large torque, making it easy to perform mixing operations at a high working speed.

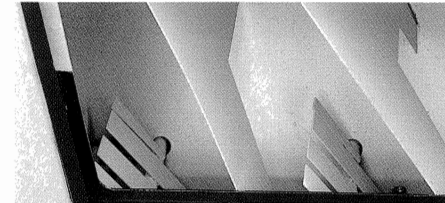


Lime Spreader—CL60-1



Spreading capacity: 5 ~ 100 kg/m² (9 ~ 184 lb/sq.yd)
Spreading width: Max. 2400 mm (7'10")
Hopper capacity: 5.0 m³ (6.54 cu.yd)
Flywheel horsepower: 131 HP (98 kW)/2500 RPM.
Operating weight: 9000 kg (19,840 lb)
Ground pressure: 0.32 kg/cm² (4.55 PSI/31.6 kPa)

Variable type butterfly valve

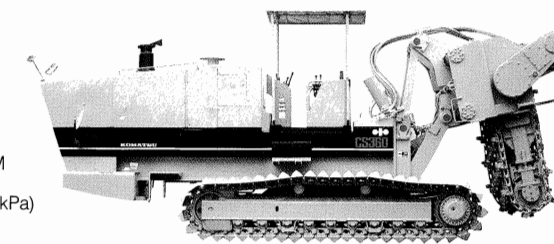


The Komatsu CL60 Lime Spreader is designed as auxiliary equipment for stabilizers. It can effectively spread a large volume (5 ~ 100 kg/m² or 9 ~ 184 lb/sq.yd) of stabilizing agents like lime, thus greatly enhancing the operating efficiency of a following stabilizer. In fact, this unit alone performs work normally requiring approx. five men to accomplish.

Effective spreading: The two independently operable gates provided at the rear of the hopper allow spreading width adjustment, depending on working conditions. With stepless adjustment of travel speed, belt feeder revolutions and gate-opening height, the CL60 can achieve constant spreading thickness and precision with the aid of the variable butterfly valves installed at the bottom of the hopper shooter.

Easy operation: A single travel lever provides forward, reverse and turning operations. With the lock mechanism, the CL60 can be freely locked to obtain constant working (spreading) speed.

Super-Deep Crawler Stabilizer—CS360SD-2



Max. mixing depth:	1200 mm (3'11")
Max. cutting width:	2000 mm (6'7")
Flywheel horsepower:	355 HP (265 kW)/2000 RPM
Operating weight:	25000 kg (55,120 lb)
Ground pressure:	0.37 kg/cm ² (5.26 PSI/36.3 kPa)

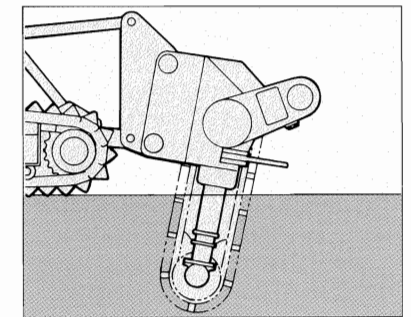
The super-deep crawler stabilizer crumbles old pavements and mixes the resulting splinters with lime or other stabilizing agent, simultaneously. When it comes to road rehabilitation work or soil improvement, it is truly a paragon of efficiency. High traveling stability is assured by superb machine weight balance and crawlers equipped with swamp shoes. This enables the machine to operate even on soft-terrain, ensuring constant digging/mixing depth.

High mixing performance: Powerful up-cut method, ideal bit alignment and the optimal rotor speed are combined to provide exceptional mixing performance. Komatsu's original secondary crushing mechanism enables the machine to demonstrate high mixing performance even when working in clay soil conditions.

Rotor shift of 650 mm (2'2") to left and right: This offset mechanism makes it possible to extend the rotor 140 mm (5.5") beyond the outer edge of the track, making

it easier to reach otherwise difficult-to-reach areas such as those road shoulders and side ditches.

Max. digging depth of 1200 mm (3'11"): The CS360SD with the special-deep stabilizer can dig down to 1200 mm (3'11"), enabling good soil/subbase improvement along with its exceptional mixing performance (max. mixing depth: 1000 mm (3'3")).

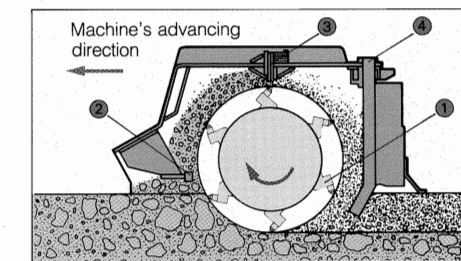


Stone Crusher—BF60-1



Working width: 2060 mm (6'9")
Working depth: 200 mm (8")
Flywheel horsepower: 180 HP (135 kW)/1850 RPM
Operating weight: 27250 kg (60,090 lb)
Ground pressure: 0.45 kg/cm² (6.40 PSI/44.1 kPa)

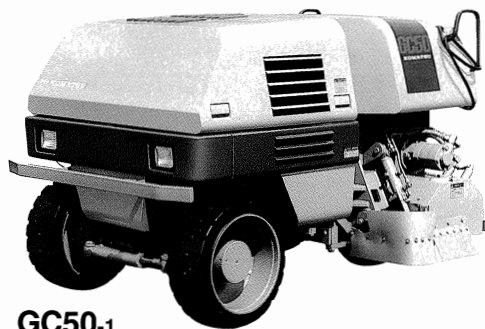
- ① Conical bit
- ② Rebound plate
- ③ Splintering plate
- ④ Selection plate



Ideal subbed construction: The powerful rotor directly crumbles large stones contained in the soil into small pieces. The splintered stones are laid in such a way that finer granules are gathered in the upper layer with larger gravels remaining in the lower layer; this produces the ideal subbed configuration.

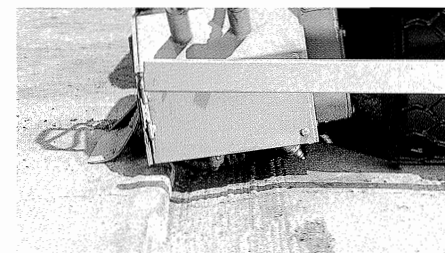
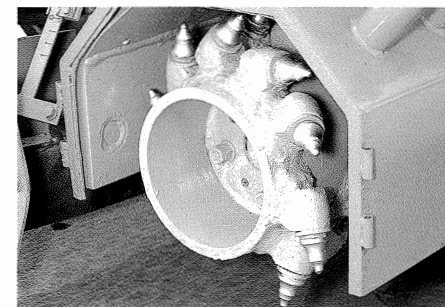
Effective, high-speed operation: When crushing stones, the hydrostatic drive transmission provides extra-low travel. During relocation or earth-moving operation, transmission is switched to direct-drive with the single touch of a button for shorter cycle time and higher degree of work efficiency.

Road Cutters— GC380F-1 and GC50-1

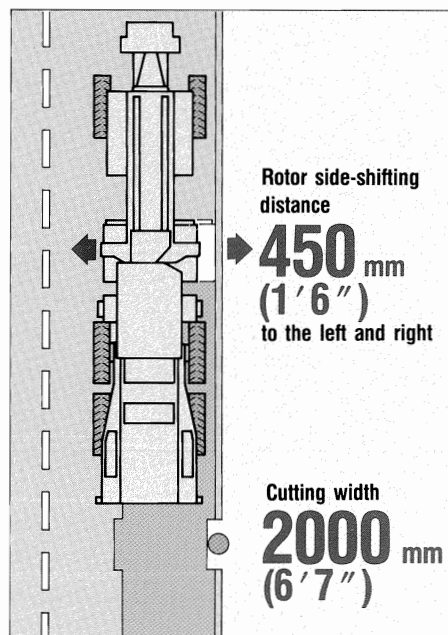


GC50-1

Cutting width: 300 mm (11.8")
Cutting depth: 100 mm (4")
Flywheel horsepower: 36.5 HP (27.2 kW)/2800 RPM
Operating weight: 2650 kg (5,840 lb)

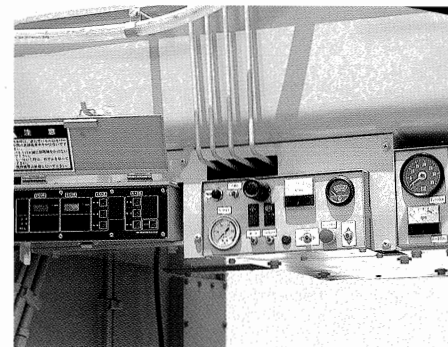


Thanks to the Komatsu GC380F and GC50 Road Cutters, maintaining asphalt pavements with undulating or rutted surfaces is now easier, more precise, more productive, and cost-efficient. The GC380F Road Cutter alone effectively cuts the road surface. The areas around manholes and other obstacles, where the GC380F cannot cut, is expertly handled by the compact GC50 Road Cutter which is equipped with articulation frames.



Long rotor side-shift: The rotor provides a great cutting width of 2000 mm (6'7") and can be side-shifted (450 mm or 1'6" to the left and right) very close to curbstones. This eliminates the need for manual cutting.

Automatic cutting control (ACC): Enables the adjustment of digging depth in increments of a millimeter, as well as assures precise cutting to the determined depth.



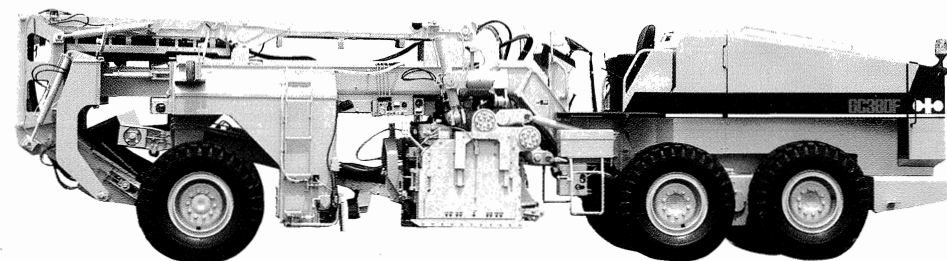
All controls in the hands of a single operator: The comprehensive control panel is installed on the left and right hands, respectively. All machine operations, including steering, can be controlled by a single operator.



Low-noise operation: Closed engine hood and suction-type radiator fan help reduce operating noise, making the machine ideal for urban road maintenance work.

GC380F-1

Superior working ability: The Komatsu S6D140 engine produces great power which provides exceptional cutting ability down to 150 mm (5.9"). It shortens work periods and reduces costs. Cold cutting in cold climates with a higher vehicle speed is also possible.



GC380F-1 (with feeder)

Cutting width: 2000 mm (6'7")
Cutting depth: 150 mm (5.9")
Flywheel horsepower: 375 HP (279 kW)/2000 RPM
Operating weight: 26880 kg (59,260 lb)

GC50-1

Effective cold-cut operation: Combination of the ample engine power of 36.5 HP (27.2 kW), ideal bit arrangement and rotor revolving speed enables the GC50 to cold-cut road surfaces.

Extra-small turning radius: The articulated frame design provides a tight cutting radius of 300 mm (1'). This makes the GC50 ideal for cutting around manholes or other areas where the large GC380 cannot function well. The articulated frame design also makes it possible to perform offset cutting operation.

Tiltable rotor: The cutting rotor tilts laterally, enabling to taper-cut the pavement edges after pipelaying and soil refilling have been completed.

Precise operation close to walls or curbstones: The cutting rotor is set on the rear right end of the machine. This design enables the machine to cut close to the wall or other obstacles. With the removal of the rotor cover, cutting range can be extended to the edge of a curbstone.

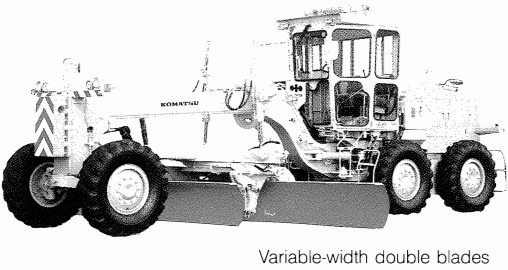
V-shape ditch digging: Replace the cutter equipment, and the GC50 can also dig a V-shape ditch in a straight or curved line.



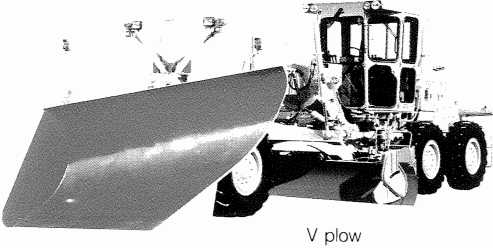
Motor Graders



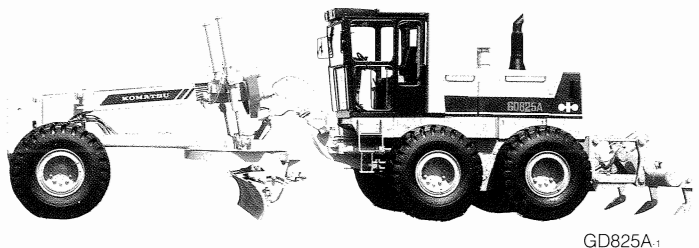
Komatsu provides a wide range of motor graders and related attachments for road repair and maintenance work. With the installation of the variable-width double blades, blade power-tilt, automatic blade controller, or other attachment, every Komatsu motor grader can meet your specific earth- and snow-moving requirements with maximum efficiency.



Variable-width double blades

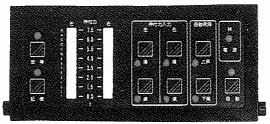


V plow

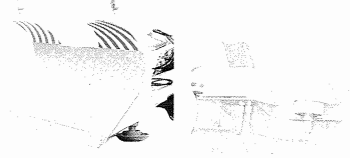


GD825A₁

Options for snow removal specifications



Automatic blade controller for snow removal



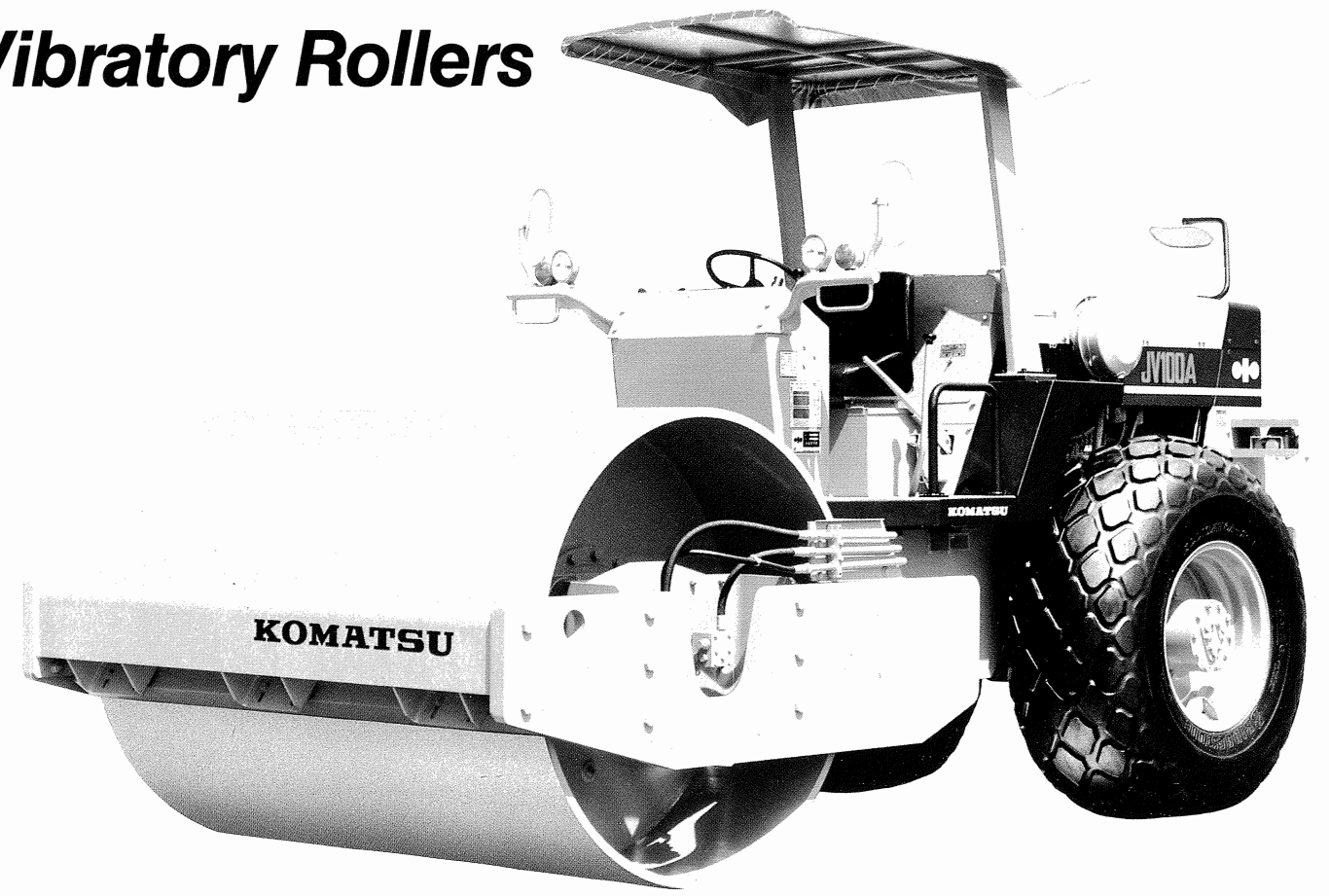
Angling plow



Blade accumulator

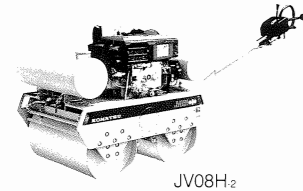
	Horsepower HP (kW)/RPM	Weight kg (lb)	Articulate angle Degree	Blade length mm (ft.in)
GD313A ₁	85 (63)/2500	7390 (16,290)	27	3125 (10'3")
GD461A ₁	113 (84)/2500	9050 (19,950)	27	3125 (10'3")
GD510R ₁	125 (93)/2500	10700 (23,560)	—	3710 (12'2")
GD511A ₁	135 (100)/2900	10800 (23,810)	27	3710 (12'2")
GD511R ₁	135 (100)/2900	10800 (23,810)	—	3710 (12'2")
GD521A ₁	135 (100)/2500	10800 (23,810)	27	3710 (12'2")
GD521R ₁	135 (100)/2500	10800 (23,810)	—	3710 (12'2")
GD523A ₁	135 (100)/2500	10800 (23,810)	27	3710 (12'2")
GD525A ₁	135 (100)/2500	12620 (27,820)	27	3710 (12'2")
GD611A ₁	155 (115)/2500	12500 (27,560)	26	3710 (12'2")
GD611R ₁	155 (115)/2500	12500 (27,560)	—	3710 (12'2")
GD621A ₁	155 (115)/2500	12700 (28,000)	26	3710 (12'2")
GD621R ₁	155 (115)/2500	12700 (28,000)	—	3710 (12'2")
GD623A ₁	155 (115)/2200	12700 (28,000)	26	3710 (12'2")
GD625A ₁	155 (115)/2200	13700 (30,200)	26	3710 (12'2")
GD661A ₁	180 (134)/2500	13300 (29,320)	26	3710 (12'2")
GD705A ₁	200 (149)/2000	17620 (38,850)	26	4320 (14'2")
GD725A ₁	200 (149)/2000	18500 (40,790)	26	4320 (14'2")
GD825A ₁	280 (209)/2100	25750 (56,770)	25	4930 (16'2")
GH320 ₂	315 (235)/2200	19600 (43,210)	—	4320 (14'2")

Vibratory Rollers

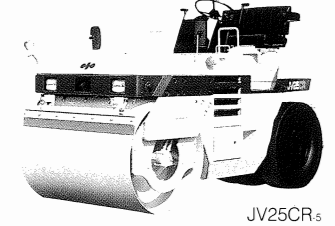


JV100A₁

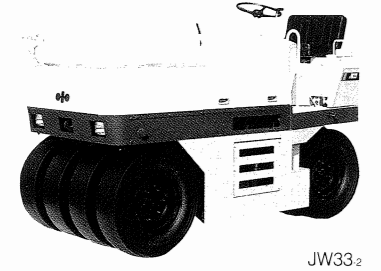
Komatsu also boasts a wide lineup of vibratory rollers including tire rollers, tandem steel-drum rollers, small hand-operated rollers and others, each one precisely meeting your diversified compaction requirements.



JV08H₂

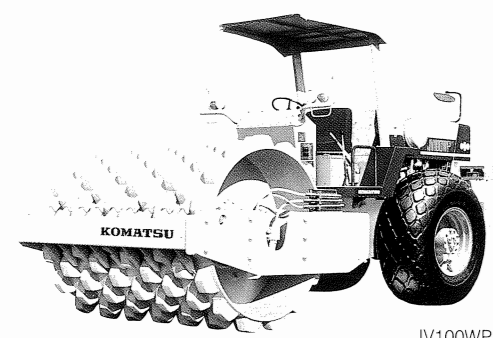


JV25CR₅



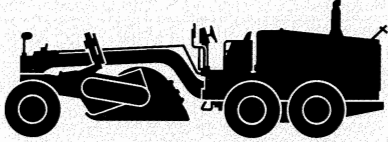
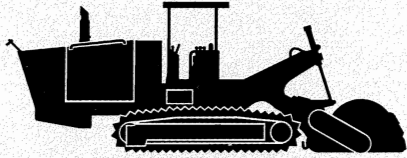
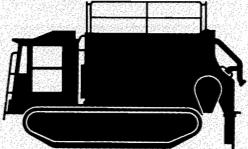
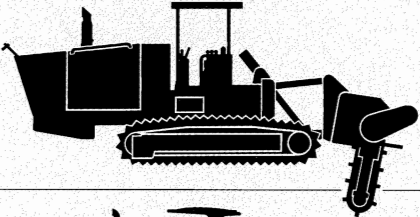
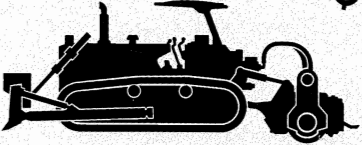
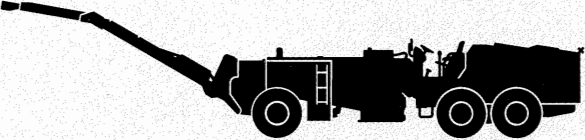
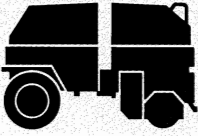

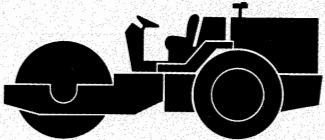
JW33₂

	Horsepower HP (kW)/RPM	Weight kg (lb)	Centrifugal force kg (lb)		Compacting width mm (ft.in)	Wheel type	
			Front	Rear		Front	Rear
JV06H ₂	5.4 (4.0)/2000	600 (1,320)	850 (1,870)	850 (1,870)	600 (2')	Roller	Roller
JV06HM ₂	5.4 (4.0)/2000	580 (1,280)	850 (1,870)	850 (1,870)	600 (2')	Roller	Roller
JV08H ₂	6.2 (4.6)/2000	750 (1,650)	1000 (2,200)	1000 (2,200)	700 (2'4")	Roller	Roller
JV08HM ₂	6.2 (4.6)/2000	730 (1,610)	1000 (2,200)	1000 (2,200)	700 (2'4")	Roller	Roller
JV25CR ₅	21.7 (16.2)/2600	2600 (5,730)	2500 (5,510)	—	1200 (3'2")	Roller	Tire
JV32W ₂	17 (12.5)/2300	3000 (6,610)	2000 (4,410)	—	1000 (3'3")	Roller	Roller
JV40W ₂	28 (20.6)/2700	4000 (8,820)	2500 (5,510)	2500 (5,510)	1300 (4'3")	Roller	Roller
JV40CW ₂	28 (20.6)/2700	3750 (8,270)	3500 (7,720)	—	1300 (4'3")	Roller	Tire
JV40C ₂	28 (20.6)/2700	3700 (8,160)	3500 (7,720)	—	1300 (4'3")	Roller	Tire
JV40CR ₂	28 (20.6)/2700	3750 (8,820)	4200 (9,260)	—	1350 (4'5")	Roller	Tire
JV100A ₁	130 (97)/2400	9600 (21,160)	20000 (44,090)	—	2130 (7')	Roller	Tire
JV100WP ₁	130 (97)/2400	11490 (25,330)	23700 (52,250)	—	2130 (7')	Pad-foot	Tire
JV100WA ₁	130 (97)/2400	10590 (23,345)	23700 (52,250)	—	2130 (7')	Roller	Tire
Tire Roller JW33 ₂	25.1(18.8)/2500	3300 (7,270)	—	—	1270 (4'2")	Tire	Tire



JV100WP₁

Komatsu's Recommendations for Subgrade Recycling/Asphalt-Pavement Profiling Requirements

Products	Applications	Road construction and maintenance			Land reclamation and maintenance				Farmland development and maintenance			Others		Major advantages of Komatsu's new methods
		Constructing subgrade and roadbed	Repairing subgrade and roadbed	Repairing road surface	Cutting asphalt pavement	Improvement of foundation in housing land	Improvement of foundation in industrial land	Improvement of reclaimed land	Improvement of ground in golf courses	Crushing the stone in farmland	Crushing the stone in pasturage	Crushing the coral	Taper cutting the asphalt pavement edge	
Wheel stabilizers GS360-2 	Subgrade recycling (Depth: 0.4~0.7 m/ 1'4"~2'4")	●	●									●		<ul style="list-style-type: none"> Construction cost can be reduced by approx. 40% since transportation of new road subgrade materials is unnecessary.
Crawler stabilizers CS210-1/CS360-2 	Subgrade recycling and soil quality improvement in soft terrain (Depth: 0~0.7 m/0~2'4")	●	●			●	●	●	●					<ul style="list-style-type: none"> Subgrade recycling operation is possible in the terrain where wheel-type machines cannot get into. Superb mixing accuracy and labor-savings
Lime Spreader CL60-1 	Spreading stabilizing agents for subgrade recycling and soil quality improvement	●	●			●	●	●	●					<ul style="list-style-type: none"> Releasing workers from hard, grueling jobs. Excellent spreading accuracy (± 10%) for drastic labor-savings.
Super-Deep Crawler Stabilizer CS360SD-2 	Soil quality improvement in soft terrain (Depth: 1.2 m/3'11")					●	●	●						<ul style="list-style-type: none"> Deeper mixing depth can be achieved. Excellent mixing accuracy for labor-savings.
Stone Crusher BF60-1 	Crushing stones									●	●	●		<ul style="list-style-type: none"> Smashing large stones to improve particle distribution. High operating efficiency.
Road Cutter GC380F-1 	Asphalt-pavement profiling (large-scale cutting operation)				●									<ul style="list-style-type: none"> High cutting accuracy and efficiency. Continuous loading into a dump truck is possible with the use of the feeder equipment.
Road Cutter GC50-1 	Asphalt-pavement profiling for the area that could not be cut by a large road cutter (small-scale cutting operation) and taper cutting				●							●		<ul style="list-style-type: none"> Releasing workers from grueling jobs. Good cutting accuracy and efficiency.
Motor Graders GD313A-1~ GD825A-1 	Grading	●	●	●		●	●	●					●	
Vibratory Rollers JV100A-1/JV100WA-1/ JW100WP-1 	General soil compaction	●	●			●	●	●						<ul style="list-style-type: none"> Greater compacting depth than tire rollers can be obtained for higher efficiency. Smashing and compaction of soft rocks are also possible.