



Highway & Airport  
Paving Equipment

Concrete Batching  
& Mixing Plants

Canal Construction  
Equipment

Trenching  
Equipment

# PS1200

Base & Concrete Placer Spreader



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# INTRODUCTION



G&Z's PS1200 is the first fresh look at placer spreader design in more than forty years. The innovative PS1200 design features a powerful and highly productive roll-in / roll-out concrete receiving belt supported by a telescopic tractor frame that allows the PS1200 to be transported in a single load without disassembly. The conveyor is powerful enough and the receiving skip is low enough to receive material from just about any truck / trailer used in the industry to haul concrete including articulated off-road trucks. The PS1200 offers high production concrete placing and spreading solutions at widths out to 41 ft. (12.5 m) while including unparalleled maneuverability, ease of width change and low maintenance the industry has come to expect from G&Z equipment.

The modular and patented Strike-off / Spreader Plow System offers many advantages over other industry options. For transport, the module retracts against the back of the tractor frame and does not require removal for transport. The Strike-off is robust enough to push material back to the paver while the spreader plow can move more concrete faster than an auger without the inherent restrictions of an auger. The Strike-off / Spreader Plow Module can also be detached quickly from the tractor and relocated to the opposite side without the aid of a crane to relocate the feed side of the machine.

Operator visibility of the dumping and spreading operation of the PS1200 couldn't be better. An optional remote operator platform is available on the PS1200 bolster overlooking the conveyor skip / dumping operation while providing an excellent view of the spreading operation. The PS1200 Control Console is relocatable anywhere along the hand railing of the platform to match the operator's preference.

Innovation, productivity, versatility, power, ease of maintenance and use are all synonymous for G&Z's PS1200 design offering years of profitable use.



# TELESCOPIC TRACTOR FRAME



The PS1200's heavy duty tractor frame with 7'-0" (2.13 m) telescopic ability capable of 18'-0" to 25'-0" (5.50 m to 7.60 m) spreading widths. With extensions, spreading widths of up to 41'-0" (12.5 m) are possible. Its narrow profile design requires only 25" (635 mm) of trackline. A telescopic hose/cable tray is provided for paving widths from 18'-0" to 29'-0" (5.50 m to 8.80 m). Extensions are available for narrower working widths.

The PS1200 is available in both a three and four track configuration. On the two track side of the PS1200 pivoting bolsters allow tracks to swing outboard for transport and inboard for crossing narrow bridges. A powerful 275 HP (202 kW), six cylinder, water cooled diesel engine provides ample power in all working conditions. The engine is housed in a specially insulated fiberglass enclosure with a pusher fan and engine muffler to optimize access for service and minimize operators exposure to heat and noise.



# ROLL-IN / ROLL-OUT CONVEYOR



The "No Stall / No Slip" head pulley is equipped with two powerful "in the pulley" hydraulic motors. The conveyor skip is supported by dual hydraulic jacks to adjust for haul road elevation variations. As an option, the skip angle can be hydraulically adjusted (patented) to allow for haul angle variations. The conveyor belt does not need to stop to allow trucks to pass. The last 3 to 4 cubic yards (2.290 to 3.050 cubic meters) of material can be left on conveyor as it rolls in and discharges, reducing cycle times. The conveyor strikes off and spreads the top of the concrete pile as it rolls in. The conveyor rolls in or out in under 7 seconds. The drive pulley is provided with urethane primary and secondary belt scrapers. The drop-in conveyor rollers (CEMA E) with lifetime sealed and lubricated bearings are provided for ease of maintenance. Variable speed nom. 64" (1,625 mm) belt, allows operator variable control of material trajectory.

# GUILLOTINE SIDEFORMS



The Guillotine Sideforms with integral mud guards hydraulically telescope from 0 to 18" (0-457 mm) or optionally to 24" (610 mm) with sideform extensions. As an option, the sideforms can be supplied to hydraulically wing open and close for quick morning starts and for adjusting strike-off width on the fly where steel mats are wider than intended. The mudguards are reversible allowing rapid relocation of the strike-off when concrete feed side change is required. The mudguards can be folded in if the strike-off is removed for transport.

# STRIKE-OFF / SPREADER



The Strike-off / Spreader Plow System features a patented modular design. As an option, the robust Strike-off is designed for pushing material back to the paver. It is tall enough to prevent spread material from boiling over the top. The Strike-off support columns have 24" (610 mm) of vertical hydraulic adjustment at either end of the Strike-off. Additional height adjustment can be made by adjusting tractor height. There is no need to take tractor off-line if minor strike-off adjustment is required. The heavy duty Strike-off crown section is controlled remotely by operator. As an option, the Strike-off is available with telescopic members.

# CROWNING CAPABILITY



The Strike-off has the ability to crown at the centerline or off centerline with the optional hydraulically powered 6'-0" (1.8 m) crowning section for up to a maximum of 4" (100 mm) crown height. The crown section is capable of inverting as well. The Strike-off crown section includes a scale and hydraulic controls that are remotely controlled by the operator.

# RAPID BELT RELOCATION

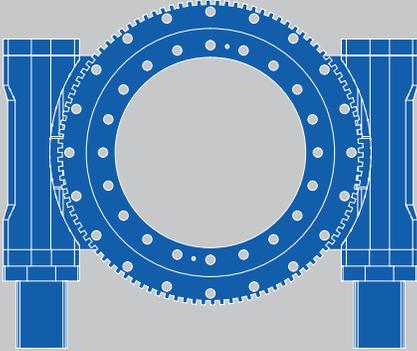


Working in conjunction with the tractor's ability to quickly counter-rotate within its width, the patented Rapid Belt Relocation system allows rapid change of the PS1200's feed side. The PS1200's Strike-Off / Spreader Plow module mounts in less than 2 hours on the front or back of the tractor for right or left hand feeding. With the patented Belt Relocation system, no crane is required.



# AccuSTEER

## SLEW DRIVE TRACK CONTROL



As an option, the PS1200 can be equipped with G&Z's patented AccuSteer: Slew Drive Track Control System. The AccuSteer system uses slew drives which are mounted on top of the crawler track yokes to steer the tracks. They eliminate the need to re-pin steering cylinders and reset the steering transducer when changing the swing leg angle / crawler track position. The AccuSteer slew drives are powered with dual hydraulic motor driven hourglass worm gears giving enormous power and gear life to the gearbox. The AccuSteer system allows the operator to independently rotate each crawler track 320 degrees providing unparalleled placer maneuverability on site, rapid swing leg relocation for paving and transport, and speeds width change. This option includes the required heavier duty jacking columns and reinforced track yokes.



## CONTROL SYSTEM



Networked Microprocessor Control System runs all the machine's control system including: proportional manual and automatic elevation and steering controls, elevation control on all four corners of tractor, self-diagnostic capability, anti-twist control, triple cross control, counter rotation capability, 90 degree steering mode on four track version, remote engine low idle switch, constant system monitoring of all sensors, and strike-off height, skip height and angle controls.

## 90 DEGREE STEERING



Optional 90 Degree Steering allows the four crawler tracks to be turned perpendicular to the paving direction with a flip of a switch. There is a limited steering range in this mode. 90 Degree Steering reduces the size of hand pours, dramatically increasing on site placer maneuverability and helps speed width change and self-loading for transport.

# UNSURPASSED OPERATOR VISIBILITY



As an option, an additional operation platform with telescopic access walkway can be located on the bolster over the top of the conveyor skip for optimum view of all the machine's dumping and spreading functions. Control Console can be relocated anywhere along the Operator Platform to match operator's preference.

# COUNTER ROTATION



The standard PS1200 can be manually or automatically steered by varying the speed of the tracks on one side of the machine in relationship to the other. One side of the machine may be operated independently from the other allowing the placer operator tremendous flexibility for maneuvering in tight confines including counter rotation capability.

# GRADE & STEERING CONTROL



Electronic, no contact type, moisture proof, and proportional Sauer Danfoss (SD) steering and elevation sensors, as well as G&Z's own proprietary software provides precise steering and elevation accuracy and self-diagnostic capability.

Hydraulic jacks are provided on each corner of the machine for elevation control. Jacks and supports are relocatable along the terminal frames to optimize track location.

Two steering sensors mounted on sensor support brackets with graduated scale adjustment are provided to steer the machine in relationship to one of the grade wires. One sensor is provided for forward travel and the other for reverse. Four Elevation sensors are provided with sensor support brackets. One for each corner of the machine

# NoLine

## STRINGLESS PAVING PREPARATION KIT



The PS1200 is available with G&Z's NoLine: Stringless Paving Preparation Kit. NoLine integrates the use of stringless technology directly into the PS1200 Operator Console. Stringless paving technology is gaining wide spread market acceptance. As the bidding table gets more competitive, the need for innovative solutions to reduce job site costs is increasing. With the use of stringless technology, the contractor saves money on surveying, stake driving, and string set up making them more competitive in the market.



## TRANSPORTING THE PS1200



The PS1200 is designed to be transported in a single load. The PS1200 can self-load by walking over the top of the deck of a special trailer or self-load by straddling a trailer. With optional rotary actuator steering, the four track PS1200 can walk and steer on a trailer with a removable gooseneck. To reduce weight for interstate transport, the Strike-off / Spreader Plow module as well as the conveyor can be removed.

With the Strike-off left in the normal working position, the transport width of the Placer Spreader can be reduced to under 14'-0" (4.260 m). With the strike-off moved to the transport position against the tractor frame, the transport width of the Placer Spreader can be reduced to less than 12'-0" (3.50 m). The machine can self-load with the provided jacks and telescopic loading supports to allow a trailer to back under the machine.



## OTHER OPTIONAL EQUIPMENT

- Fine width adjustment for Strike-off terminal ends
- Hydraulic hinge provided on the conveyor frame between the skip and incline section to allow the angle of the skip to be hydraulically adjusted up or down (within a limited range) to accommodate an uneven haul road **without** adversely affecting belt tension
- “In the Planetary” bent axis hydraulic piston motor drives in lieu of standard bent axis drives provided in the crawler tracks
- Air pressurized water system with 200 Gallon (757 L) water reservoir
- High pressure water sprayer
- G&Z self-level (anti-twist) and cross-slope control system
- Conveyor / Tractor Frame / Strike-off extensions to allow for wider spreading widths
- AC and DC night lighting system
- Cold morning start kit
- Urethane track pads

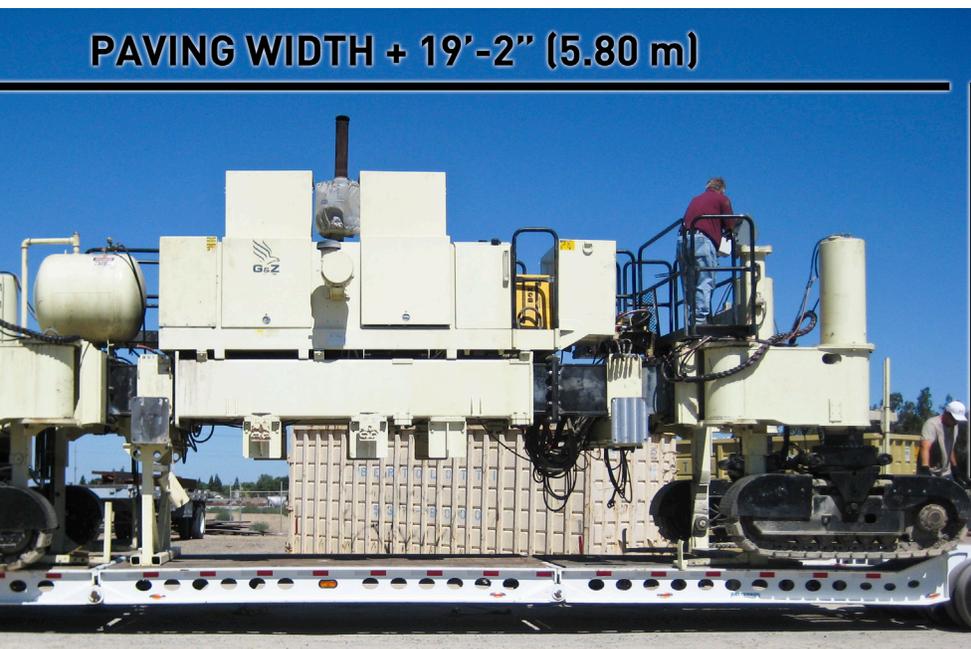
## CATERPILLAR C7



The fuel efficient Caterpillar C7 ACERT US Federal Tier 3 / European Stage IIIA six- cylinder Diesel Engine is ready to take on your toughest paving project. The C7 provides all of the performance, reliability, durability and long maintenance intervals that you would expect from a Caterpillar engine. Caterpillar Electronic Control Module manages all engine components for a completely integrated system.

The C7 engine radiator and integral heat exchanger are cooled with a pusher type fan to evacuate heat and noise from the enclosure. To further reduce noise and vibration on the operator, the engine with pump drive box are vibration isolated from the power unit module and the power unit module is vibration isolated from the tractor frame center module.

**PAVING WIDTH + 19'-2" (5.80 m)**



# PS1200 APPLICATIONS...



## INTERSTATE 80

**CONCRETE PLACING CO.**  
SALT LAKE CITY, UT, USA

**Project:**

2 mi (3.20 km) stretch of highway paving consisting of interchanges and bridge crossings.

**Equipment:**

S850, PS1200, & TC1500



## MCCARRAN AIRPORT

**ACME CONCRETE PAVING**  
LAS VEGAS, NV, USA

**Project:**

Concrete Runway 10,525' (3,208.0 m) long x 150' (45.70 m) wide, with lanes paved at 37.5' (11.40 m) wide, and 18" (460 mm) thick. Parallel Concrete Taxiway 11,000' (3,352.0 m) long x 100' (30.50 m) wide, with lanes paved at 33.40' (10.20 m) wide, and 18" (460 mm) thick.

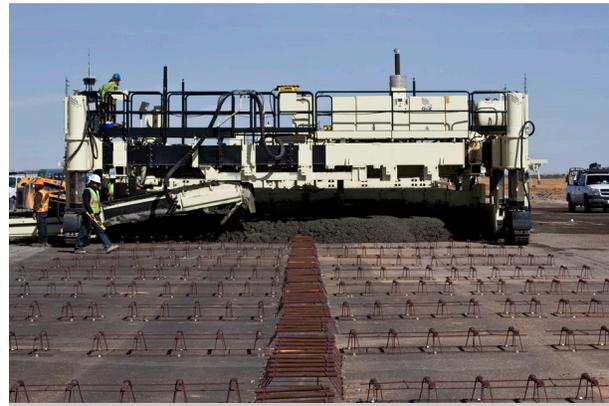
**Equipment:**

S1500, S850, PS1200, & TC1500





...AROUND THE WORLD



## SPACEPORT AMERICA

**DAVID MONTOYA CONSTRUCTION CO.**  
TRUTH OR CONSEQUENCES, NV, USA

**Project:**

Concrete Runway 10,000'-0" (3048.0 m) long x 200'-0" (60.960 m) wide, with lanes paved at 33'-3 3/5" (10.10 m) wide, 6" (150 mm) base, 4" (100 mm) asphalt layer, and 14" (355 mm) concrete slab.

**Equipment:**

G&Z Mobile Concrete Plant, S850 with Leica 3D Stringless Paving, PS1200, & TC1500



## PACIFIC HIGHWAY

**THIESS PTY LTD**  
NEW SOUTH WALES, AUSTRALIA

**Project:**

Base concrete is unreinforced plain concrete with sawn skewed transverse joints at 4.20 m (13'-9 3/5") spacing. Subbase paved at 150.0 mm thick x 10.10 m wide (5 9/10" x 33'-1 1/5"). Base paved at 300 mm thick x 8.0 m wide (12" x 26'-2 2/5"). Pavement texture design for low noise transverse tining. Total length of project is 32.7 km (20.3 mi) of dual carriageway with concrete shoulders

**Equipment:**

S1500, PS1200, & TC1500

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