

**Highway & Airport
Paving Equipment**

Concrete Batching
& Mixing Plants

Canal Construction
Equipment

Trenching
Equipment



S600

Multi-Purpose Slipform Paver



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GZ 007789

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INTRODUCTION



The G&Z S600 Slipform Paver is designed around a multi-purpose tractor frame that makes it ideal for city street, secondary roads, highway and airport paving as well as a wide range of other applications such as barrier walls, off-set paving and zero or minimum clearance paving. The S600's design has redefined what mobility means for a small paver without sacrificing the same performance advantages contractors have come to expect from G&Z's large and mid-size paver. Utilizing G&Z's time tested and rugged paving kit design, the S600 is capable of achieving excellent ride numbers on the toughest IRI and zero blanking band projects.

The S600 features a double telescopic tractor frame, access walkway, and hose hinge system for a nominal working range of 8' to 22' (2.44 m to 6.71 m) the widest range in the industry. With the use of bolt-in tractor frame extensions, the S600 tractor can be used to pave out to 29'-5" (9 m) without a Dowel Bar Insertter (DBI)*. The versatility of the S600 tractor allows the contractor to quickly switch between applications and paving widths. The tractor components including center module, bolsters, and jacking columns are designed with universal bolting patterns offering a wide range of three and

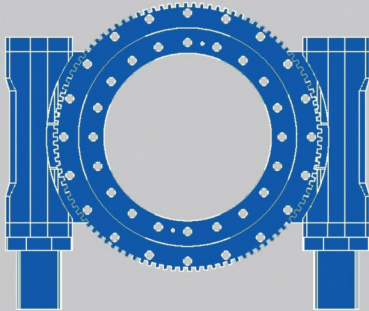
four track tractor configurations with or without swing legs. The S600 is the narrowest profile machine on the market. In standard paving mode, there is less than 2' (610 mm) from edge of pavement to widest point on the paver with sensor support arms removed. The paving kit, front tie bar inserters and many of the other optional attachments on the S600 are interchangeable with other G&Z paver models, giving the contractor a highly utilized fleet of paving equipment.



* With hydraulic vibrators, the S600 can pave out to 22' (6.71 m) with a DBI. With electric vibrators, the S600 can pave out to 26' (8 m) with a DBI.

AccuSTEER

SLEW DRIVE TRACK CONTROL



As an option, the S600 can be equipped with G&Z's new and 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 in lieu of conventional steering cylinders. They eliminate the need to re-pin steering cylinders and reset the steering transducer when changing the swing leg/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 paver 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. These jacking columns have 42" (1.1m) of hydraulic lift and 36" (915mm) of mechanical bolting adjustment.



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ENGINEERING THE S600

The S600 has been designed by G&Z's world class team of engineers. With extensive input from its customers, G&Z has designed a multi-purpose slipform paver that redefines paver mobility, utility, and productivity. Manufactured in G&Z's Ripon, California U.S.A. facility, the S600's development has been closely monitored by G&Z's service team experts to ensure customer satisfaction and optimal paving results.

The S600 is all about making the paving contractor more competitive. With an S600, it is no longer necessary to keep both a traditional slipform paver and a smaller utility paver on-site. The S600 has not only been design to excel in mainline paving but can rapidly reconfigure to accommodate barrier molds, offset / zero clearance paving, and many other configurations required. The S600 is a complete paving system.

90 DEGREE STEERING

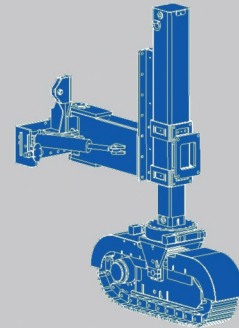


When the S600 is equipped with the optional AccuSteer System, the operator can remotely rotate the crawler tracks 90 degrees to the direction of travel and steer the machine sideways. A wide range of steering angles is possible with the Slew Drive Control. No switching of hoses is required on the crawler tracks. This feature greatly enhances job site maneuverability in the tightest of confines and minimizes the size of hand pours.

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SMARTLEG SWING LEG SYSTEM



The S600 is also available with G&Z's new and patented SmartLeg: Swing Leg System. Working in tandem with the AccuSteer steering system, the SmartLeg System allows the operator to adjust the bolster swing leg angle on the fly by means of a hydraulic cylinder and bolster angle transducer which relocates the crawler track while automatically keeping the crawler track straight ahead. This system allows the contractor to maneuver around track line obstacles (e.g. fire hydrants, airport runway lights, light poles, etc.) on the fly without the need of stopping to make a bolster swing leg mechanical adjustment or resetting the steering transducer.

COUNTER ROTATION



When the S600 is equipped with the optional AccuSteer System, the operator can quickly re-orientate the S600 crawlers into the counter-rotate position and rotate the machine 360 degrees in a small amount of space. Counter Rotate is one of the many pre-programmed steering modes of the S600 along with crab and coordinated steer, front and rear only steer.



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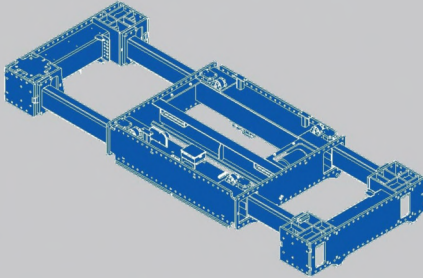
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VARIWIDTH

TRACTOR FRAME WIDTH CHANGE SYSTEM



The new and patented VariWidth: Tractor Frame Width Change System allows the double telescopic tractor frame to change width in a matter of minutes with the help of rollers and optional hydraulic clamping puck system eliminating all clamping bolts to hold the male extension tubes in position. To change the tractor frame width, the operator simply flips a switch to release the pucks from one side of the machine and walks the machine in or out using the 90° steering mode. All of the hydraulic hoses and electrical cables between the power unit and the bolsters are contained in the hose management hinge system. With G&Z's innovative bolster swing leg hinge design the need to relocate the holding turnbuckles or optional SmartLeg hydraulic cylinder during a major tractor frame width change is eliminated. With no bolts to loosen, hoses to add or remove, or supports to be added under the tractor, the VariWidth System is a huge time saver.



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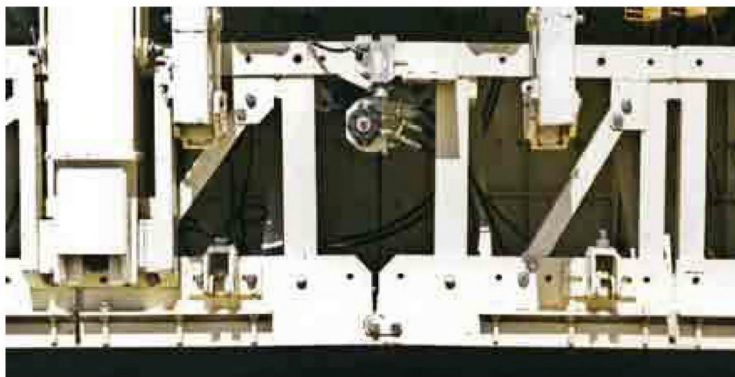
PAVING KIT



G&Z's Paving Kit includes a deep section, latticework frame that is rigid enough to easily span the S600 design width and achieve excellent smoothness results on projects with strict smoothness requirements. It can be provided with one or more crowning sections. The ends of each paving kit section are manufactured with thick plate bolting connections that are milled square and flat. The bolt holes are precision drilled on a mill to ensure sections can be interchanged and easily lined up. The Paving Kit design requires fewer bolts per section allowing for rapid paving width changes. At most widths, no shims are needed to level the bottom of the paving pan. As an option, the Paving Kit can be provided with bolt-on pan skins so if worn or damaged in the future, the pans skins can be quickly repaired or replaced at minimum cost.

When supplied with intermediate kit hangers, The Paving Kit can be mounted in multiple locations under the S600 Tractor and can be quickly and easily mounted or removed from the tractor. Each paving kit truss section is provided with a front and rear tool bar or bolt strip so bolt-on items may be relocated easily in small increments.

CROWN SECTION



The paving kit optional Crowning Section is provided with a hydraulic motor driven, dual screw jack system that holds the crown position without drift. There is no structural connection required between the crown section and the tractor frame. A digital readout of the crown angle is provided at the operator console. Computerized Crown / Transition Control system is also available as an option.

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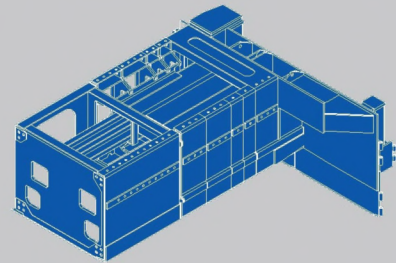
Optional TeleEnds Shown Above

SPLIT GUILLOTINE SIDEFORMS



As an option, the standard Guillotine Sideforms with 0-18" (0 - 457 mm) of hydraulic adjustment can be supplied "split" where the front and rear portions of the Guillotine Sideforms are designed to operate independently. The rear portion can be winged out as much as 15 degrees with powerful hydraulic cylinders to allow the sideforms to clear and back over the previously poured slab. This feature also allows easy access to the edge overbuild device for cleaning. The sideform open / close cylinders are powerful enough to close the sideform against plastic concrete. Split Guillotine sideforms also make it easier and practical to pave into a previously poured slab such as a bridge deck or taxiway. The paving kit terminal end sections are also provided with removable shim packs for Fine (minor) Width Adjustments to yield the specified slab width reducing concrete losses.

TELEENDS TELESCOPIC PAVING KIT END SECTIONS



The optional and patented TeleEnds: Telescopic Paving Kit End Sections provide the contractor the ability to perform paving kit width changes rapidly, without the use of cranes, and with only a one or two-person crew. Each TeleEnd gives the contractor 3' (915mm) per side (or 6' [1.83m] for both sides) of quick width change capability. A width change which could typically take a three to four person crew 6 to 10 hours can now be performed by a one or two person crew in less than two hours. For a width change involving a single spacer less than one hour.



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NoLINE

STRINGLESSPAVING PREPARATION KIT



The S600 features G&Z's NoLine: Stringless Paving Preparation Kit. NoLine integrates the use of stringless technology directly into the S600 Operator Console and provides telescopic mounts for the total station prisms. 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.

INTUITIVE OPERATOR CONTROLS



G&Z's Next Generation Plus 1 Operator Control System incorporates user friendly operator features and state of the art networked controllers allowing extensive monitoring and diagnostic capability including remote diagnostics. The Operator Console features intuitively organized switches which are labeled with standard ISO symbols making this a durable, easy to use, multi-lingual user interface.

OPERATOR SAFETY AND VISIBILITY

The S600 features superb operator visibility and ease of operation. The operator can easily see all around the machine including under foot into the concrete liquification hopper. A telescopic access walkway offers not only safe access but excellent visibility for the operator. The Operator Console is easily relocated anywhere along the operator platform hand railing to optimize visibility and to meet operator preference. The S600 is provided with emergency stops on all four corners of the machine with magnetic holders to allow them to be relocated.



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TRIPLE CROSS SLOPE CONTROL



As an option, the S600 can be supplied with G&Z's patented "Triple Cross Slope Control System" which allows the paver steering and elevation to be controlled with reference to a single stringline located on one side of the paver or without stringline if the paver can take its grade and steering reference off an accurately placed slab. The Cross Slope System also includes automatic "slope transition adjustment" over a pre-programmed distance. The G&Z Triple Cross slope control system has been used successfully at widths up to 26' (8m) depending on the smoothness specification. As a part of the Triple Cross Slope control system you gain the Anti-Torsion Control feature which protects the tractor frame from undesirable torsion introduced into the frame when walking over uneven ground. The cross slope sensors located on each bolster maintain the bolsters in the same plane by activating the four S600 hydraulic jacking columns.



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LCD MULTI-FUNCTION COLOR DISPLAY



The S600 LCD display includes the latest in LCD technology such as high resolution and anti-glare color screen, sensor controlled backlighting ensuring optimal legibility under all ambient light conditions, and CAN, RS-232, and USB interfaces, for all control system updates and diagnostics. Monitoring paver performance has never been easier. The S600 display gives an all-in-one overview of the pavers extensive systems including electronic monitoring of all hydraulic pump pressure and filter conditions (clog monitoring with alarm), and fuel level.

The multi-touch display has been programmed to automatically control the machine into 90 degree mode, counter rotation, and transport mode. All the operator has to do is follow the simple step by step process on the display. The S600 display saves the contractor time by automating these highly used configurations. The display offers multiple real time status updates. Machine configuration is selected via graphics on the display.

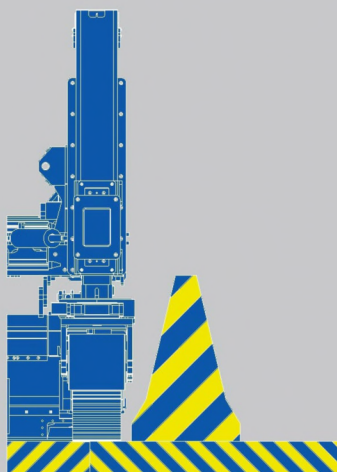


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NARROWPROFILE

2'-0" (610 MM) FROM EDGE
OF PAVEMENT TO WIDEST
POINT ON THE PAVER.



The S600 is the narrowest profile machine on the market. In standard paving mode there is only 2' (610 mm) from edge of pavement to widest point on the paver with sensor support arms removed. The narrow profile design allows the contractor to pave closer to utility poles, trees, barrier walls and other obstructions.



SPREADER PLOW



The powerful G&Z Spreader Plow System can move more concrete faster than a spreader auger system. The use of a spreader plow system eliminates the need for gearboxes and center hanger bearings associated with augers which impede the flow of fresh concrete into the corners of the liquification hopper and across the front of the machine. The plow system costs only a fraction of what an auger system costs to operate because no wearing parts running in the concrete.

The spreader plow system offers easy width changes. The track sections are held together by two line-up pins and held together by a single bolt. Each section is light enough for one man to lift.

EDGE OVERBUILD / INTEGRAL CURB



The terminal pan sections on the Paving Kit are provided with edge overbuild adjustment to help compensate for edge slump. The terminal pans can be substituted with other optional integral curb and gutter mold cross sections.

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TRAILING FINISHING PAN



As an option, the S600 can be fitted with G&Z's proven trailing finishing pan system. Mounted off the rear of the Paving Kit under the optional rear access walkway, the 48" (1.2m) trailing finishing pan with fixed edger pans provides a proven method of finishing pavement surface and edges and ensuring that the product coming out the back of the paver is of the highest quality and smoothness. The trailing finishing pan along with the rear walkway can be hinged up for easy transport.

FINAL FINISHER



The optional Final Finisher (FF) with supports is an effective finishing device with a longitudinal, magnesium surface finishing ski, that floats on the concrete surface. The longitudinal ski oscillates fore and aft while traveling transversely back and forth across the slab. Transverse travel and longitudinal stroke speed are hydraulically adjustable. The FF is optionally available with a PLC controlled hydraulic valving system that slows the ski down as it approaches the slab edge and cushions the change of direction. The PLC also allows the ski to stop at different locations on each pass across the slab. The support arms of the FF are optionally available with hydraulic lifting cylinders to lift the FF ski out of harm's way when not paving.

CUMMINS QSB6.7



The fuel efficient U.S.A. EPA Tier 3 and EU Stage IIIA Cummins QSB6.7 six cylinder diesel engine is ready to take on your toughest paving project. The QSB6.7 provides all of the performance, reliability, durability and long maintenance intervals that you would expect from a Cummins engine. Cummins Electronic Control Module manages all engine components for a completely integrated system.

The S600 power unit is designed with the safety and comfort of the operator by suppressing noise, heat, and vibration. The engine muffler is located inside the engine enclosure and the entire enclosure is noise insulated. The engine radiator and hydraulic system heat exchanger are separate, each with a computer controlled, variable speed, hydraulic motor driven fan which evacuates heat from the enclosure. To further reduce noise and vibration, the engine with pump drive box are vibration isolated from the power unit module and the power unit module vibration isolated from the tractor frame center module.



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SEMI-AUTOMATIC TRANSPORT CONFIGURATION



SIX SIMPLE STEPS:

STEP 1

Move Sensor Arms Out of the Way

STEP 2

Auto Rotate Tracks 90 Degrees

STEP 3

Unpin SmartLeg Cylinder

STEP 4

Auto Walk Swing Leg into Transport Position

STEP 5

Pin Swing Leg to Turnbuckle

STEP 6

Auto Rotate Track to Transport Position



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TRANSPORTING THE S600

With the new optional SmartLeg and AccuSteer Systems, the process for transforming the S600 from paving mode into the transport configuration can be automated. This simple innovative process dramatically saves the time required to transform the S600 into the transport configuration as compared to other conventional slipform pavers. Using the combination of the AccuSteer 90 degree steering mode and the SmartLeg feature, the four swing bolsters and crawler tracks are automatically walked into the outboard, transport position in approx. 30 minutes. In this transport configuration, the S600 can easily walk and steer onto a standard 8' (2.5 m) wide trailer. There is no switching of hoses required on the crawler tracks and the crawlers are automatically kept parallel for steering.



GZ 007800



TRAVELING IN TRANSPORT CONFIGURATION



Because of the speed at which the S600 can transform into the transport mode using the AccuSteer / SmartLeg System, it is now practical to put the machine in the transport mode to maneuver around a job site where space to walk is limited.



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COMPACT DOWEL BAR INSERTER



G&Z is the worldwide leader in DBI technology. The S600 is available with G&Z's market leading Compact Dowel Bar Inserter (CDBI). The patented CDBI is a single, self-supporting module that mounts quickly on the rear of the S600. The highly productive, mobile, and reliable G&Z CDBI is designed to insert dowel bars accurately on the transverse contraction joint, make width changes and transport easily, and achieve smooth rides. G&Z's optional and patented self loading system eliminates the need for a crane for loading on a trailer. The transport width of the CDBI module is less than 12' (3.5 m).. Ask about G&Z's narrow profile dowel bar inserter.



OTHER AVAILABLE OPTIONS

- D3 size crawler tracks in lieu of D2 size for wide paving widths and the use of a DBI
- DBI Preparation Kit including larger 260 HP (193 kW) Cummins QSB6.7 EPA Tier 3 / Euro Stage IIIA diesel engine in lieu of the standard 200 HP (139 kW) including more pump capacity and the S600 being pre-wired / pre-plumbed for DBI
- Offset Paving Kit up to 12' (3.66m) wide
- Front Tie Bar Inserter with chain feeder
- Side Tie Bar Inserter
- AC or DC Night Lighting Systems
- Rear Telescopic Aluminum Walkway - folds up for transport
- Electric Poker Vibrators in lieu of hydraulic vibrators
- Hydraulic vibrator computerized monitoring system
- Computerized Crown / Transition Control System
- High Pressure Wash Down System

PARTS & SERVICE



G&Z's S600 Paver is backed by world class parts and service support. The G&Z dedicated service staff is knowledgeable about how to get the best performance out of your paver as well as the various construction disciplines that apply to paving. Rapid response to a customer's parts needs is facilitated by G&Z's readily available stock of parts at our location in central California. There are four major international airports within 1.5 hours of the factory, allowing counter-to-counter airfreight service. G&Z also maintains service centers in other world regions complete with service staff and spare parts inventory. Same day service is possible, depending on the time of the call.

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SLIPFORM PAVING EQUIPMENT



S1500

Paving Width: 18' (5.5m) to 42' (12.8m)
(Optional Paving Width of 56' (17m))



S850

Paving Width: 12' (3.6m) to 34' (10.3m)
(Optional Paving Width of 39' (12m))



S600

Paving Width: 8' (2m) to 22' (6.7m)
(Optional Paving Width of 29'6" (9m))



CDBI

Available on all G&Z Pavers.

SLIPFORM PAVING SUPPORT EQUIPMENT



TC1500

Texture Cure Machine
Width: 12' (3.65m) to 56' (17m)



PS1200

Placer Spreader
Width: 16' (5m) to 40' (12.2m)



SCP

Semi-Mobile Concrete Mixing Plant



MCP

Hyper-Mobile Concrete Mixing Plant

CANAL LINING EQUIPMENT



G&Z pioneered the use of mechanized and automated canal construction machinery starting in 1947. Through the years, G&Z's canal equipment including trimmers, liners, and jumbos have proven itself to be highly productive and reliable. G&Z's design is intended to allow the machine to be used on a wide variety of canal sections including full section, half section, and flat configuration. They can even be converted for use on highway and airport paving.

EAGLE TRENCHERS



G&Z is committed to manufacturing high quality bucket wheel trenchers to increase your productivity, lower your operating costs, and insure ease of operation. Eagle Trenchers are an excellent choice for a wide variety of high production trenching applications, such as foundations, utilities, irrigation, edge drains, and fiber optic cable installations. Eagle Trenchers are built rugged enough for your toughest jobs.

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