

# CONSTRUCTION OF A PUBLICATION OF GUNTERT & ZIMMERMAN

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#### **DEAR CUSTOMERS AND FRIENDS:**

Welcome to the fall 2016 and World of Concrete 2017 edition of G&Z's Construction Profiles magazine. There has been a lot of exciting activity going on at G&Z this year!

As our business and range of products continue to grow, we have recently added some excellent personnel to expand our service, parts and engineering teams, in our continuing effort to serve you better. In early November, we welcomed Mike Kelley on board as our newest service technician. Mike, who will be based out of Utah, brings a wealth of concrete paving equipment and hands-on paving experience to G&Z's service team. Earlier this year we welcomed back Sean Smith, a seasoned veteran of the G&Z service team based out of Oklahoma City. Mike and Sean will complement the other two service techs we already have based out of the Midwestern United States, and the six service techs who work out of the G&Z factory in California. We also want to welcome back Robert Carbajal to our already excellent parts support team lead by Ed Cash. Ed and Robert will be dedicated to promptly assisting customers with whatever help they need. Rick Francis is also back with G&Z as a mechanical engineer to bolster G&Z's engineering / new product design team.

The most exciting news to report is the strategic alliance that has recently been formed between two of the most trusted names, and pioneers of the concrete paving industry...G&Z and Miller Formless Company (MFS) of McHenry, Illinois. With over 120 years of combined experience in concrete construction equipment manufacturing and design, both companies recognize the crucial role the other one holds in their respective markets. The strategic alliance encompasses sales, marketing and service divisions.

Under the terms of the agreement, MFS and G&Z will share industry knowledge, establish a common worldwide dealer network, and market one another's products and services in order to more effectively serve the needs of the worldwide concrete construction industry. The mutually beneficial alliance will advance the interests of our customers, employees, and other stakeholders by combining their abilities to quickly and efficiently address customer needs while providing a full range of concrete construction machinery and related equipment to the industry. The companies also intend to collaborate on advancements in technology and machine design which is a strong tradition of both our companies.

There is more exciting news to report, which we look forward to sharing in the months to come and at World of Concrete. In the meantime, on behalf of the G&Z Team I wish you and your company a great end to 2016, and a great start to the New Year. See you in Las Vegas!

Best regards,





RON GUNTERT
President/CEO

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# A SMOOTH LANDING FOR AIRCRAFT IN DETROIT



AJAX PAVES DETROIT METRO AIRPORT WITH S850SL PAVER

Located in the world's automotive capital, the Detroit Metropolitan Airport (DTW) serves over 30 million passengers annually. As one of the busiest airports in the region, the facility generates over US \$10 billion in economic impact annually. Recently, officials from the Wayne County Airport Authority determined that a renovation of the airport's westernmost runway (4L/22R) was needed. Rough runway pavements can prove harmful to aircraft suspension systems, especially during landings. Most aircraft suspension components are only designed to absorb the impact of landings and are unable to handle uneven pavements over a prolonged period.

#### NO STRANGER TO AIRPORT PAVING

The US \$84 million renovation project was awarded to Ajax Paving Industries, Inc. (Ajax), headquartered in Troy, Michigan. With over 60 years of paving experience, Ajax has plenty of expertise to execute this challenging project. In a decade, Ajax has been involved in more than 60 different airport and highway projects, and has placed over 14 million yd² (11.7 million m²) of concrete. Bar none, Ajax is one of the largest paving companies in the region. The 4L/22R runway reconstruction project was a good match for Ajax and was the largest PCC runway project in the United States in 2016.

#### OVERCOMING CHALLENGES

Ajax had to overcome several challenges for the renovation project. In less than 6 months, 260,000 yd³ (198,000 m³) was to be poured while complying with stringent Federal Aviation Administration (FAA) and Unified Facilities Guide Specifications (UFGS) paving specifications. The FAA's P-501 concrete specification required the Ajax team to meet 0.1" (2.5 mm) line smoothness tolerance and 0.05" (1.2 mm) grade tolerance from theoretical zero. Furthermore, surface smoothness deviations on concrete can't exceed 0.25" (6.3 mm) under a 16' (4.9 m) straightedge placed in any direction, including placement along and spanning any pavement joint edge.

The reconstructed runway is 10,000' (3,048 m) long and 150' (45 m) wide. Typically, it is used for aircraft arrivals and can accommodate operations in low-visibility conditions, making it critical to the airport's operational efficiency and business continuity. The project also involved reconstruction of the associated taxiway system which provides a safe connection for aircraft from the runway to the passenger terminals at the airport. In total, the project encompassed 6.5 mi (11km) of airfield pavement. The runway's original cross section



consisted of 17" (431 mm) of PCC, a bituminous base of 9" (228 mm), and an aggregate base of 18" (457 mm). For the renovation, the old PCC was completely removed and replaced, along with 3" (76 mm) from the bituminous base. The new concrete runway was placed at a width of 18.75' (5.7 m), and a thickness of 18.5" (469 mm)

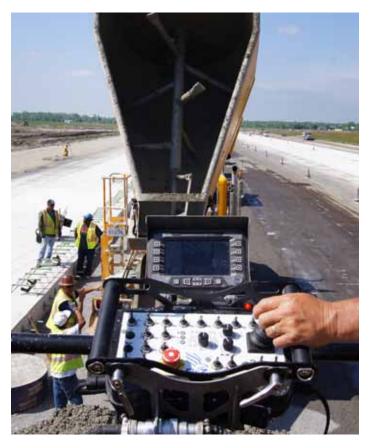
The transverse contraction joints and longitudinal construction joints are reinforced with 1.5" x 20" (39 mm x 500 mm) epoxy coated dowels. The dowels on the transverse contraction joints were supported by dowel basket assemblies secured to the subgrade with the dowels on 18" (450 mm) centers. Mesh reinforcement was used only in tapers and odd width taxiway pours.

#### FEATURES INCREASE PRODUCTIVITY

Thanks to G&Z's NoLine Stringless Paving Preparation Kit and Trimble Total Station Guidance system, the G&Z S850SL paver was able to easily comply with FAA's stringent smoothness tolerance specifications. Also, G&Z's new paver Remote Control Belly Pack allowed tremendous flexibility and visibility for the paver operator; whether on the machine while paving or on the ground during a width change or loadout.

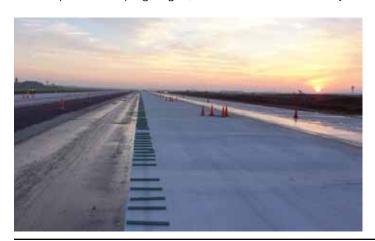
G&Z's S850SL paver was fed up to 4,000 yd³ (3,058 m³) of concrete daily using a fleet of both dump trucks and agitors. Each dual drum 12 yd³ (9 m³) plant produced as much as 500 yd³ (382 m³) of concrete/hr. At both plants, the mix was appropriately formulated to meet FAA's P-501 spec design parameters. Thanks to the spreader plow on G&Z's S850SL, the concrete could be quickly distributed, even at the lower end of the concrete slump limit. The spreader plow can move a higher volume of concrete more quickly and efficiently than an auger. Other benefits of a spreader plow include faster width changes, lower power consumption and operating costs, and enhanced safety relative to other concrete spreading options when paving.





G&Z's TC1500 texture cure machine was also used on the project. Both the G&Z S850SL paver and TC1500 are 4-track and equipped with 90 degree steering and counterrotation capability. With a "flip of a switch", both machines have the ability to either counter-rotate within the machine width or traverse 90 degrees to the paving direction. While in the 90 degree mode, the S850SL and TC1500 have a wide range of steering capabilities including crab and coordinated steering, eliminating hours of non-productive paving time on the project.

"The quality of product coming out of the G&Z S850SL paver was excellent," says Pete Mann, Ajax's Project Manager. "The trailing finishing pan with adjustable fixed edger assemblies provided not only an excellent surface finish, but also sharp and crisp non-slumping edges," added Bill Hartsock of Ajax.

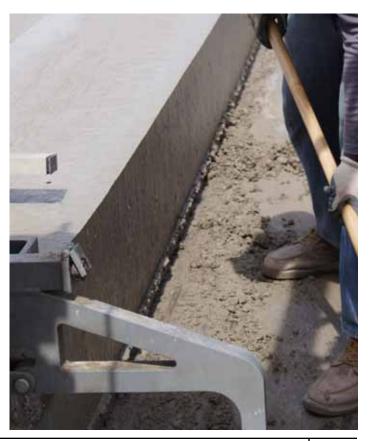




#### SETTING AN EXAMPLE

The jobsite served as a showcase for one of American Concrete Pavement Association's (ACPA) Airport Pavement Design & Construction Workshop. Among other topics, the workshop featured a useful discussion about the challenges contractors experience with airport paving, while addressing possible solutions. G&Z's President & CEO Ron Guntert presented at the workshop, along with the company's National Accounts Manager, John Eisenhour. Speakers from the FAA, ACPA, Michigan Concrete Association, Ajax, and other industry representatives also contributed to the event.

As part of its continuous effort to improve DTW's infrastructure, the Wayne County Airport Authority plans to design and construct additional airfield concrete projects in the future.





# CONCRETE "INLAYS" SMOOTH RUTTED ASPHALT



#### WHITETOPPING GAINS POPULARITY IN U.S.A.

Over the years, we have featured several articles in Construction Profiles about successfully paved "thin whitetopping" (TWT). Today, hundreds of miles of TWT is being paved every year. Much of this TWT work is being completed across the Midwestern United States. Probably the most famous TWT project is a 1.9 mi (3 km) six lane section of Parker Road SH83 located in southeastern Denver, Colorado which was constructed in 2004. This project was paved at 6" (150 mm) thick using high strength concrete with a joint pattern of 6' x 6' (1.8 m x 1.8 m). Deformed steel tie bars were specified on all longitudinal joints. No dowels were used on the transverse contraction joints. With an average daily traffic count of 52,000, this 1.9 mi (3 km) section of heavily travelled state highway has performed exceptionally well.



A variation of whitetopping is currently being done in Oregon to replace badly rutted, asphalt truck (slow) lanes on primarily long uphill grades with durable, continuously reinforced concrete pavement (CRCP). Oregon has done several of these concrete "inlay" projects over the last several years. The Concrete Placing Company, Inc. (CPC) of Boise, Idaho has successfully completed three of these inlay projects in the last three paving seasons. One project in 2014 on I-84 near La Grande, Oregon, and two recently completed projects located on I-84 near Durkee, Oregon and I-5 near Curtin, Oregon.

For these inlay projects in Oregon, the width of the badly rutted truck (slow) lanes are milled out to a nominal 8" (203 mm). The asphalt shoulders and passing lanes are left intact providing they are in good condition, and if they are deteriorated they are patched and repaired. The total concrete pavement thickness is 11" (279 mm) with a nominal 3" (76 mm) of the new concrete pavement sticking up above the existing asphalt surface. The advantage of this is as follows:

- You are not trying to match new concrete pavement surfaces to irregular, old asphalt surfaces which would adversely impact concrete smoothness.
- Once the new concrete surface reaches a specified strength level, the traffic can travel on and off the new concrete pavement (only 3" [76 mm] above the existing asphalt) without issue.
- If only the truck (slow) lane is being replaced with CRCP, the new asphalt overlay for the passing lane and shoulders can be brought up to a smooth, new truck lane, concrete surface.
- If the passing lane is also replaced with concrete, the paver has a new, machine placed concrete slab on which to match the companion passing lane slab.

The terrain of the 2014 La Grande project entailed steep grades up to 6%, superelevated curves up to 10%, and limited construction space only allowing room for the total station robots (guns) on one side of the paving spread and concrete trucks on the other side. To feed concrete over the CRCP pavement, a placer/sidefeeder with a retractable sidefeeding skip was required to let concrete trucks and construction traffic pass. Use of an FAMC/Leica PaveSmart machine control system and GPS guidance for grade and steering reference was provided to the paving train, consisting of the G&Z PS1200, S600, and TC1500.



This saved precious space on either side of the paving spread. As many as eight Leica guns were used concurrently to guide the G&Z S600 paver along superelevated curves. With an average 42 mi (70 km) haul roundtrip, the average concrete production rates were 200 yd³ (152 m³)/hr. Despite the challenges of this project, the smoothness achieved excellent numbers, scoring a job average PRI of 1.46"/mi (23 mm/km). Tiebars were inserted while paving on the truck climbing lane of this project.

More room was available on the 2016 Durkee project because of the relatively straight road alignment and wide right away available between the east and west bound lanes of I-84. For this project, CPC used their new G&Z MP550 Material Placer to feed their G&Z S600 paver. Curing and longitudinal tining followed with their G&Z TC1500. The challenge of this project was that the concrete plant site was located 15 mi (24 km) away from the paving, limiting their average job production rate to 163 yd³ (124 m³)/hr. Despite the challenges with the mix, the job average smoothness was an IRI of 56"/mi (883 mm/km).



If existing road conditions permit, the Oregon Department of Transportation's preferred method of reconstructing roadways involves concrete inlays. Oregon plans to continue this program of replacing rutted asphalt truck lanes with concrete inlays. To maintain efficiency in the flow of traffic, CPC has inlayed one lane, then returned to mill the subsequent lane next to the new overlay. This was achieved on the Anlauf-Elkhead project on I-5 in southern Oregon. The crew had placed a 25' (7.6 m) and a 13' (3.9 m) wide section, then returned to add a 12' (3.6 m) lane. Tiebars were also drilled and epoxied into the slabs.





# MP550 Material Placer

**Receiving Hopper** Approx. 5 yd³ (3.8 m³)¹

Powerful Variable Speed 14" (355 mm) Auger

23" (584 mm) High Front Lip with Hydraulic, Hinge Up, Flop Gate

Conveyors Swing Conveyor: 36" (914 mm) Wide x 35' (10.66 m) Long

170° of Swing Capability

Transfer Conveyor: 36" (914 mm) Wide x 23' (7 m) Long

Variable Speed: 0 - 600 fpm (0 - 183 mpm)

**Propulsion System** 4 Wheel Drive - High Flotation Rubber Tires

5 Steering Modes - Coordinated, Crab, Front, Rear, and Optional Automatic

Working Speed: variable approx. 0 - 110 fpm (0 - 33.5 mpm) Walking Speed: variable approx. 0 - 9 mph (0 - 14.5 km/hr)

Approx. 12' (3.66 m) Steering Radius<sup>2</sup>

Elevation Control Standard: Hydraulic Hopper Height Adjustment

Optional: 4 Jacking Columns with 27" (685 mm) Hydraulic Height Adjustment

Machine Weight<sup>3</sup> Approx. 45,000 lbs (20,547 kg)

Approx. 55,000 lbs (25,113 kg) with optional jacking columns

**Engine Power** 260 HP (193 kW) 6 Cycle Tier 4i Diesel Engine with ECO Throttle



#### **VERSATILE**



State of the Art Propulsion System



Belly Pack Control System



Hinging Swing Conveyor

#### **HIGH PRODUCTION**



Largest Hopper Size



High Capacity Conveyors



Adjustable Pusher Rollers

#### **EASY MAINTENANCE**



Quick Release Hopper



Swing Open Side Panels

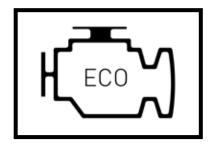


Easy To Change Continuous Belts

#### **LOWEST OPERATING COST**



Premium Tier 4i Engine



ECO-Mode



Easy to Access Transfer Belt



### **BIG PLAY IN BIG SPRINGS**

#### IHC PAVES WITH G&Z'S S1500



It was a big project for Interstate Highway Construction, Inc.'s (IHC) west division, headquartered in Centennial, Colorado. The Nebraska Department of Roads (NDOR) awarded IHC the over US \$30 million contract for reconstructing 9.3 mi (15.5 km) of deteriorating roads along Interstate 80 between Brule and Big Springs, Nebraska. "The project included removal and reconstruction of both the eastbound and westbound lanes over the course of two years, spanning the 2015 and 2016 construction seasons," says Cal Thomas, Vice President and Corporate Equipment Manager for IHC.

There was also a big opportunity and incentive for IHC to not only finish the project on schedule, but also finish with high quality smoothness. The heavy highway contractor could earn incentive pay of up to 106% of the contract pay item on two 12' (3.6 m) wide travel lanes if the ride measured up to contract specifications. Smoothness was measured using the International Roughness Index (IRI) scale, and IHC stood to receive bonus if smoothness readings were in the 50's and 60's. "It's a sliding scale from 100 to 106% pay, so we would receive 102% of pay with ride numbers in the low 60's," explains Brett Clark, IHC'S Project Manager.

IHC's big play – complete a 40' (12.2 m) wide monolithic pour with its mainline slipform paver, using a dowel bar inserter and stringless technology. It was something never attempted before by IHC, nor by any other contractor paving at this width for the NDOR. The paver of choice for IHC's bold move to complete the project with bonus pay at stake: the Guntert & Zimmerman S1500 Slipform Paver equipped with a patented Compact Dowel Bar Inserter (CDBI) and an FAMC/Leica PaveSmart machine control system.

#### **BUILT FOR SPEED**

Everything about the I-80 project was built for paving speed, efficiency and quality. Stringless paving allowed cross slope and elevation to be dialed, while eliminating the stringline for placement. "Workers or equipment can accidentally bump into the survey stake and line, which can throw off grade and can be reflected in the road's surface," mentions Clark.

Installing the CDBI to the S1500 eliminated the need for baskets to be placed in front of the paver, which saved time plus the cost of a placer. "Also, eliminating the stringline and baskets made it much easier and more efficient for our trucks to deliver concrete to the site," contributes Pablo Erazo, paving foreman for IHC. "It opened up the job, so the trucks could deliver the load right up to the paver."

What gave IHC the confidence to try a paving configuration never attempted before was the paver behind the crew. "We have a long standing relationship with G&Z dating back to the 1970's," Cal Thomas offered. "We have purchased several G&Z pavers, including the prototype S850 purchased in 1996. The G&Z pavers have stood the test of time and all of them are still used extensively and are an integral part of our paving operations." Thomas also comments that the G&Z Service Team is very responsive and provides excellent technical support and expertise.

The S1500 paver's deep section, double telescoping frame easily and quickly accommodates extended paving widths. "The machine's double-telecopic frame telescopes 12' (3.6 m) to either side of the 18' (5.4 m) center frame module, allowing the S1500 to quickly adapt to paving widths from 18 to 42' (5.4 m to 12.8 m)," says John Eisenhour, National Accounts Manager for G&Z. "With optional bolt in frame sections, the S1500 offers IHC total possible paving widths reaching 52.5' (16 m)."

The machine's paving kit features a deep section, latticework frame, which delivers the stiffness and rigidity to meet the strict smoothness results demanded on the I-80 project. The kit can also accommodate up to three crown points along its paving width. On IHC's project, the contractor needed two crown points in the slab. "We have a double crown throughout the 40' (12.2 m) width, 2% at the center travel lanes and 4% at the shoulder," comments Erazo.

#### **OPTIONS INCREASE PRODUCTIVITY**

Technology is on display and put into use on the I-80 project paver. On this job, stringless paving technology eliminated the stringline found on most projects, while G&Z's CDBI automatically positions the dowels at a pre-set depth in the concrete slab. This eliminates the survey crew to set and place the stringline and the manpower required to assemble and place thousands of baskets along the 9.3 mi x 40' (15.5 km x 12.2 m) wide stretch. "This really opens up access to the paving lane and improves smoothness results," mentions Thomas.

IHC's G&Z S1500 paver was built to accommodate the 40' monolithic paving width on the I-80 project. In one pass, crews paved the 4' (1.2 m) inside shoulder, two 12' (3.6 m) wide travel lanes and a 12' (3.6 m) outside shoulder. "Being able to pave the entire width in a single pass," explains Clark, "eliminates the need to key in a longitudinal joint, improves quality by eliminating failure points and saves us approximately 10 days in the paving schedule."



G&Z simplifies integration of stringless paving capabilities into the S1500 paver with its available NoLine: Stringless Paving Preparation Kit. This exclusive G&Z feature allows contractors to easily connect stringless technology directly into the S1500 paver's controls, while telescopic mounts are provided on the paver for two Leica prisms. For this project, IHC used an FAMC/Leica PaveSmart machine control system on the paver. "The system gives us four survey points, and it took less than a day to configure the system for this job," reports Adam Hall, West Division Surveyor or for IHC.



Saving multiple prep days for the project, G&Z's patented modular, self-supporting CDBI module quickly mounts to the rear of the S1500's frame without the need of a separate diesel power unit to power the dowel bar inserter. "Prior to the I-80 project, the widest we had paved with the CBDI was 38' (11.5 m)," reports Thomas. For the I-80 travel lanes, IHC's crew set up the dowels to be inserted at 1' (305 mm) centers. A total of 25 dowels were inserted at a time at every 16.5' (5 m) contraction joint in the slab.

#### **SMOOTH SAILING**

With the S1500's tractor frame and paving kit configured for the 40' (12.1 m) paving width, IHC budgeted 20 days of mainline paving for the eastbound and westbound lanes. An additional 20 days were budgeted for paving the gaps, ramps and crossovers.

IHC centrally located its concrete central mixing at the jobsite, reducing truck delivery circuit times to the paver. The plant produced a Nebraska 47-B concrete mix with 70% sand and 30% 3/4" (19 mm) minus rock at production rates reaching 450 yd³/hr (343 m³/hr). The concrete was mixed with 6.5 to 9% air entrainment and transported to the jobsite in end-dump trucks.

In total, the paving project included nearly 455,000 yd² (380,576 m²) of doweled concrete pavement. IHC's paving crew set a production target of 50 truckloads of concrete placed in front of the S1500 paver/hr, 500 trucks/day. "This allowed us to meet our 0.5 mi/day (0.8 km/day) paving target," says Clark.

Load after load, the concrete was placed directly in front of the S1500 paver, where the machine's powerful and efficient spreader plow evenly distributed the mix across the entire front of the paver. "The spreader plow system moves more concrete faster than a spreader auger system," says Eisenhour. "It also eliminates the side-mounted gearboxes that block the flow of fresh concrete to the edges, costs much less than auger systems to maintain and offers much easier width changes."

The travel lanes were paved at 13" (330 mm) deep, while the shoulders tapered off to a 10" (254 mm) depth. Eisenhour adds, "The S1500's paving kit and weight offers the structural integrity to deliver standard paving thickness reaching 18" (457 mm). With bolt-on side form extensions, deeper slabs are possible."

Paving depth tolerances are ensured by an FAMC/Leica PaveSmart machine control system. The stringless system includes four survey points with two survey guns pointed toward the receivers at the top of the paver.

"It triangulates points to get elevation and position, and we survey every 300' (91 m)," explains Hall. "We also use secondary guns for QC/QA checks."

Having such precise elevation control over the paver aids in smoothness, and it helps to ensure correct and accurate dowel bar positioning to the center of the slab. By specification, each dowel must be placed at a 6 to 7" (152 to 178 mm) depth from the top of the concrete, and quality control uses an MIT scan to verify correct dowel placement. "We've achieved perfect placement of the dowels throughout the entire job," adds Clark.

Everything is going as planned for IHC as the company approaches the end of the contract, which concludes in November 2016. The G&Z S1500 paver equipped with stringless paving and the CBDI is efficiently paving the 40' (12.2 m) monolithic slab and returning bonus level results. "We are achieving average ride numbers in the low 50's on the shoulders without longitudinal tining, and we're averaging high 50's to low 60's for the travel lanes," continues Clark. This puts IHC in the bonus level category for the I-80 project.









### TECHNOLOGY AVAILABLE ONLY THROUGH G&Z

G&Z is dedicated to designing machines that Maximize Available Paving Time and Minimize Everything Else. G&Z's Exclusive industry proven and requested options include: AccuSteer, SmartLeg, TeleEnd, VariWidth and more. These optional systems work together to reduce paving kit and tractor width change time, easily maneuver onsite, quickly reconfigure the machine, and transport to dramatically save time.

G&Z is committed to making its customers as productive as possible. G&Z offers a wide range of technologies to help contractors have as many paving days as possible during the season. Listening to contractors' needs and engineering patented solutions makes G&Z equipment: **Contractor Inspired. Guntert Engineered.** 

#### MAXIMIZE AVAILABLE PAVING TIME WITH FASTER WIDTH CHANGES

Changing widths quickly without affecting pavement smoothness is a significant challenge. With the combination of the TeleEnd and VariWidth systems, changing both the paving kit and tractor widths has never been quicker or easier. With TeleEnd, no need to drop the kit to change width. TeleEnd uses hydraulic cylinders to open and close the end section

to add or remove sections of kit. VariWidth is designed to eliminate the need to support the tractor or unbolt extension tube clamping pucks. VariWidth uses adjustable cam rollers and hydraulic clamping pucks to accomplish quick and easy tractor width changes.

# VARIWIDTH (PATENTED) TRACTOR WIDTH CHANGES





The VariWidth system features adjustable cam rollers and hydraulic clamping pucks to easily extend and retract tractor extension tubes. This can be accommodated without supports or a "two-stage" telescopic tube, which can cause the frame to sag and adversely impact steering and smoothness. VariWidth can reduce tractor width change times from hours to minutes.

# **TELEEND** (PATENTED) TELESCOPIC END SECTION



The TeleEnd: Telescopic Paving Kit End Section offers 3' (1m) of quick change kit per side. A 6' (2 m) width change can be accomplished by one or two people in as little as an hour. TeleEndXL's are available allowing up to 4' (1.25 m) per side. TeleEndXXL's are also offered for up to 6.5' (2 m) per side.

#### MAXIMIZE AVAILABLE PAVING TIME WITH SUPERIOR MANEUVERABILITY

AccuSteer and SmartLeg systems take paver productivity to the next level. The two systems work in tandem to adjust the swing leg angle on-the-fly while the crawler track automatically steers straight ahead. These two systems rapidly and semiautomatically reconfigure the machine into the transport configuration.

### ACCUSTEER (PATENTED) SLEW DRIVE TRACK CONTROL



The AccuSteer system offers unparalleled maneuverability and steering accuracy while allowing steering in 90 degree and counter-rotation mode in every swing leg position.

# SMARTLEG (PATENTED) SWING LEG SYSTEM



The SmartLeg system allows contractors to adjust the swing leg angle on-the-fly to maneuver around an obstacle without stopping production.

What's the use of great features and options without easy to operate controls? G&Z's Equipment Guidance and Operation Network (EGON) makes operating a piece of G&Z equipment easy and intuitive. Also, EGON boasts great add-ons like IntelliMatics $^{\text{TM}}$ , NoLine: stringless integration, and remote

operability. As new technologies become available, integration and operation should not be difficult and time consuming. EGON's simple and intuitive "plug and play" integration makes the latest advancements available to all customers.



EGON is a Next Generation Operator Control System that incorporates user friendly features, a modular state of the art network of controllers, extensive onboard and remote monitoring options, and diagnostic capability to allow superior ease of use and troubleshooting. It has never been easier to operate, reconfigure, diagnose, and manage a piece of concrete paving equipment.



EGON IntelliMatics™ is a powerful remote diagnostics/ monitoring system. The G&Z software engineering team has designed a web based remote user interface to allow maximum connectivity anywhere in the world for the contractor as well as for solving challenges with G&Z service personnel.

### **G&Z S400 PAVER**

#### A TOP SELLER IN 2016

The New G&Z S400: Multi-Purpose Slipform Paver is designed to carry on the top performance of the G&Z brand, while adding even greater value for the customer. The S400 is an entry level, single/dual lane paver with the ability to perform versatile applications including: city streets, ramps, shoulders, highway, airport, dual lane, off-set, zero or minimum clearance and barrier walls. "The S400 is a slipform paver that does not confuse 'entry-size' with 'entry-quality'. Its functional design at an affordable price point opens the G&Z brand to a much wider market," says Ron Guntert, President/CEO of G&Z. The S400 adds value to the customer in its versatility, low operating cost and productivity.

The first S400 went to work for Golden Triangle Construction in Bridgeville, Pennsylvania on a US \$19 million, 4 mi (6.7 km) un-bonded concrete overlay project located 13 mi (21.7 km) south of Pittsburgh. Describing the purchase of the S400, David Sciullo, Vice President of Heavy Highway Construction for Golden Triangle, says, "We bought the S400 because we get results from G&Z products. We get better product coming out the back of the paver which is really the bottom line. We needed a paver to primarily tackle our single lane and shoulder work. The S400 is an economical machine that is competitively priced with other manufacturers, and it comes with G&Z features and quality that aren't available elsewhere in the market."









RAMPS & INTERCHANGES / CITY & MUNICIPAL STREETS / CONCRETE OVERLAYS SHOULDERS & BIKE PATHS / COUNTY & SECONDARY ROADS / MAINLINE PAVING AIRPORT PAVING / BARRIER WALL / CURB & GUTTER / CANAL & RESERVOIR LINING

### PARTS & SERVICE DEPARTMENT

### YEARS OF EXPERIENCE



Guntert & Zimmerman's Parts Department is one of the company's many assets. The Parts Department is available **24/7** reducing downtime and giving our customers the peace of mind that we're always available. G&Z Inside Sales, has close to two decades of parts experience with G&Z machines. Their expertise allows our customers to receive the right parts the first time.

We pride ourselves in our customer service. That is why we stock parts at our facility to ensure availability when a customer needs them. If we don't have it, we'll find it for you quickly. With G&Z it's not necessary to talk to an under stocked distributor. Customers speak directly to the G&Z manufacturing plant in Ripon, CA which is located just 1.5 hrs from four major airports with international service. If you do not know the part number, G&Z's staff can promptly locate the correct part for your machine and in many instances have it shipped the same day.

#### **PARTS DEPARTMENT:**

+1.209.924.1236



G&Z's staff has a simple unwavering instruction...when a customer calls, drop what you are doing and take care of the customer's needs, NOW. Our dedicated staff is knowledgeable about the various construction disciplines where our equipment is used. If there is a question a staff member cannot answer for you, they will quickly put you in touch with someone who can.

G&Z service techs not only hold intimate knowledge of G&Z equipment but also of the concrete paving, trenching and canal construction processes. The service department is reachable **24/7** by phone and e-mail. We assist not only in commissioning, training and teaching the best maintenance practices of G&Z equipment, but also consulting in the areas of concrete mix design analysis and construction techniques. Our goal is to see your equipment perform above and beyond any specifications or expectations.

#### **SERVICE DEPARTMENT:**

+1.209.599.5604



# CANAL LINING EQUIPMENT



Guntert & Zimmerman pioneered the use of mechanized and automated canal construction machinery starting in 1947. Through the years, G&Z's canal equipment has proven itself to be highly durable and reliable. Some G&Z canal equipment built and sold in 1975 is still being used today. These tools have maintained their value and have kept their owners in a competitive bidding position throughout the long life of the equipment. The machine design is intended to allow the machine to be reconfigured for a wide variety of canal sections. They can even be converted for use on highway and airport paving. In regions of the world that rely heavily on irrigation such as the western United States, Spain and South Africa, G&Z equipment has been used to construct **more than 80%** of the existing concrete lined canals.

# **EAGLE**TRENCHERS

Guntert & Zimmerman is committed to manufacturing high quality 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 and fiber optic installations. Eagle Trenchers are built rugged enough for your toughest jobs.



# CONVERTIBLE HIGHWAY AND AIRPORT EQUIPMENT



As an alternative to a custom built solution, G&Z's Highway and Airport Concrete Paving Equipment can be converted into canal and reservoir liners, such as the S1500 paver shown, with minimal modification. The G&Z TC1500 can also be converted to a cure jumbo for canals and reservoirs.



# **G&Z CONCRETE**SLIPFORM PAVING EQUIPMENT

Guntert & Zimmerman's (G&Z's) Slipform Paving Equipment are the most trusted machines in the business. In 1956, G&Z pioneered and introduced the first concrete highway and airport slipform paver mounted on crawler tracks with automatic line and grade control. Today, G&Z offers a full range of concrete slipform paver models along with other support equipment, such as mechanical Dowel Bar Inserters, Placer Spreaders, Material Placers, and Texture Cure Machines to suit your present and future needs.

G&Z equipment designs are based on 75 years of experience. G&Z paving equipment is built to last under the rigors of job site use, transport, and configuration changes. Unique productivity features are incorporated in the machine design to reduce the time required to transport, maneuver, and change paving widths without sacrificing the performance advantages contractors have come to expect from a G&Z.

#### CONCRETE SLIPFORM PAVERS









**S400**6.5' - 24.5' (2 - 7.5 m)

**S600** 8' - 31' (2.5 - 9.5 m) **S850** (QB OR SL)

**S1500**18' - 52.5' (5.5 - 16 m)

#### CONCRETE SLIPFORM PAVING SUPPORT EQUIPMENT









DBI

Dowel Bar Inserter

MP550 Material Placer PS1200 PLACER SPREADER

18' - 41' (5.5 - 12.5 m)

**TC1500** TEXTURE CURE MACHINE

12' - 56' (3.5 - 17 m)



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