

CONSTRUCTION OF GUNTERT & ZIMMERMAN BAUMA 2016









THE RIGHT PAVER FOR THE JOB BETON-TECHNIK UTILIZES G&Z S850

In the world of slipform paving, it is often lost time between pours that inhibits a contractor from achieving the desired or mandated schedule. The trend for project owners to require contractors to arrange paving schedules to accommodate small moves and equipment jumps is steadily increasing.

These jobsite requirements necessitate contractors to utilize highly maneuverable equipment. G&Z specializes in providing slipform paving equipment that Maximizes Available Paving Time and Minimizes Everything Else. When BT Beton - Technik GmbH (Rehburg-Loccum, Germany) was awarded a project at Mihail Kogalniceanu Airport near Constanta, Romania, slipforming aprons and service roads, its schedule required frequent paver moves.

BT Beton - Technik GmbH is a specialized concrete paving contractor active in several countries of Western and Eastern Europe , CIS countries, Middle East and North Africa. BT Beton - Technik GmbH owns several pieces of slipform paving equipment but looked for a rental to accomplish the pours out at Mihail Kogalniceanu Airport. In looking for a suitable machine, BT Beton - Technik GmbH contacted Belgian contractor Mols N.V. to rent its G&Z S850QB Mid-Size Slipform Paver as this paver is equipped with several G&Z exclusive productivity features to meet the required frequent paver moves on BT Beton - Technik GmbH's project.

The last phase of work on the Airport included 87,000 sqm of concrete. The main apron pavements were 370mm thick. The service roads on the perimeter of the area were 250 - 270mm thick. The paving was accomplished at 10m width. Due to high ambient temperature during the day the paving occurred during the night. Standard German airport paving norms were applied which impose the use of fixed forms.

The concrete was supplied by two plants available in the vicinity of Constanta owned by Lafarge Cement and capable of together delivering 100m3/hr of concrete to the paver. Principle paving occurred between May 22, 2015 and July 27, 2015. BT Beton - Technik GmbH laboratory specified the concrete mix and required identical homogeneous concrete produced from the two concrete mixing plants.

The S850 performed exceptionally on the project. Mr Martin Brka, Beton-Technik Site Manager reports, "Overall we were very happy with the G&Z S850QB paver. It is a great machine that is very robust, stable and reliable. It produces a good finish with perfectly even surface. I especially liked the arrangement of the Final Finisher. I would recommend this paver for airport paving because of great maneuverability and sufficient power."



G&Z PAVER FAMILY GROWSTHE S400 IS SETTING A NEW STANDARDS

The 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, variable width, bicycle paths, sidewalks, irrigation canals, drainage swales, single and dual lane highways and airports, 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 wider set of the market," says Ron Guntert, CEO of G&Z. The S400 adds value to the customer in its versatility, low operating cost and unprecedented productivity.

The first S400 went to work for Golden Triangle Construction in Bridgeville, Pennsylvania in 2015 – 13 miles south of Pittsburgh.

On a 19 million dollar, 4 mile un-bonded concrete overlay project. 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."

VERSATILITY

The G&Z S400 is designed to handle a wide range of paving widths and applications. The S400 features a standard telescopic range of 6.5' to 17.5' (2m to 5.3m). This standard telescopic range gives



contractors the ability to pave most single lane applications without the need for bolt-on extensions. With optional extensions, the S400 can pave out to 24.5' (7.5m) giving contactors a combination single and dual lane slipform paver. Thee S400 has a very narrow profile and when the tractor frame is fully retracted, the overall width of the tractor is less than 11' (3.35m). The S400 is designed around a multi-purpose tractor frame featuring a universal bolting pattern. The S400 can utilize this universal bolting pattern to easily mount barrier molds, offset kit hangers and attachments allowing the contractor to switch between multiple applications without any major machine reconfiguration. For the contractor, the S400 is an extremely versatile paver. "G&Z is all about innovation. G&Z's innovation doesn't just start with an engineer coming up with something he thinks will work. G&Z innovation has always started with listening and having a dialogue with contractors - asking us what will help us be more productive. With what we've seen from our current G&Z products, I'm looking forward to even newer things that Guntert can come up with," comments Sciullo.

LOW OPERATING COST

The G&Z S400 is engineered to optimize a contractor's fleet while keeping options and maintenance costs to a minimum. The S400 is capable of utilizing most options and attachments available on larger G&Z slipform paver models including: the paving kit, tie bar inserters, trailing finishing pan, final finisher, etc. Not needing to purchase dedicated options and attachments makes the S400 perfect as an entry level machine or as an addition to a fleet of slipform pavers. Sciullo adds, "The fact that G&Z has made its fleet of pavers from the S400 to the S1500 able to share parts is a huge advantage for us. We own an S850, two S600s and now, an S400. The paving kits and most of the options are interchangeable saving us time and money."

The S400's Tier 4i engine features low fuel consumption and does not have a particulate trap or NOx like other Tier 4 engines. It

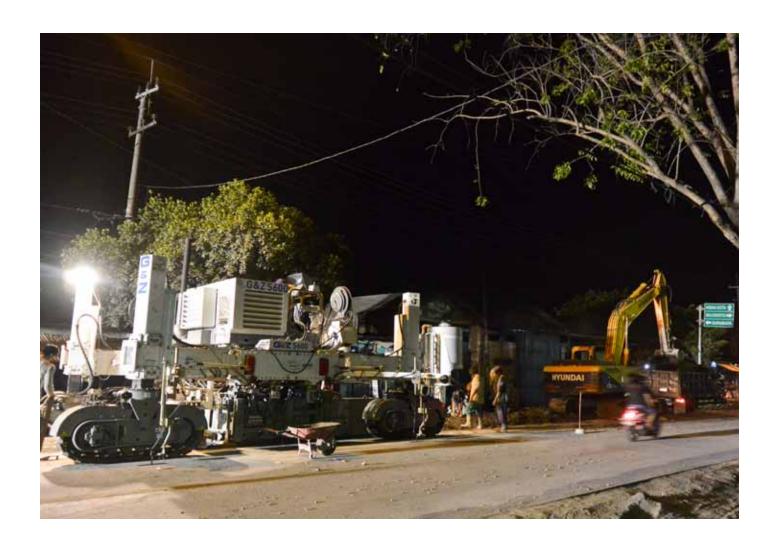
also features extended service intervals and low noise. The "Eco-Mode" feature on the S400 reduces fuel consumption by up to 35%. The S400 features a plow over auger design dramatically reducing maintenance costs.

PRODUCTIVITY

G&Z is dedicated to designing machines that Maximize Available Paving Time and Minimize Everything Else. The S400 fits into this design strategy by adopting industry proven and requested options only available from G&Z. Patented AccuSteer and SmartLeg work together to dramatically reduce the time it takes to reconfigure the S400 into 90 degree, counter rotate and transport modes semi-automatically. These features make a real impact for the contractor. Sciullo explains, "The AccuSteer and SmartLeg features are two of the best technologies on the machine. When we're paving and we encounter obstructions of the trackline such as a fire hydrant, utility pole, or curb, we can move the legs out and around those obstructions on the fly, and the track continues to stay straight. That's a big bonus! We've been talking about that for years on pavers, and we're finally able to do that, and it's actually easy to do."

Patented VariWidth and Patented TeleEnd are utilized to reduce paving kit and tractor width change times to a quick 2 hours in most cases. These unique productivity options give contractors the ability to keep the S400 paving more hours in a paving season, maximizing productivity and minimizing downtime.

The S400 is an innovative paver that offers unmatched versatility, low operating cost and productivity for G&Z customers. It offers all of the quality and function of the large G&Z pavers in an economical package.



THE SLIPFORM FRONTIER RIDLATAMA BRINGS NEW TECH TO INDONESIA

Indonesia constitutes what some would call the frontier of concrete slipform paving. A government with ambitious plans and contractors learning as they go makes for a challenging and yet exciting environment.

G&Z has embraced this market opportunity and brought its technology and concrete paving expertise to this frontier. Dispatching its concrete slipform paving experts, G&Z has set about to educate its Indonesian customers not just in machine operation but in all aspects of concrete slipform paving technology. The result of this effort is that the concrete roads being constructed using G&Z equipment are some of the highest quality concrete roads ever built in the country. Everyone from government officials to contractors are specifying or requesting that a G&Z slipform paver be used to construct the roadway being built.

Ridlatama Group is one of these Indonesian contractors. With 14 years of roadbuilding experience in asphalt and manual concrete forming, Ridlatama Group was a perfect candidate to modernize

its concrete paving division with a slipform paver to increase efficiency and quality while cutting costs. Ridlatama Group is based and works in the province of Jawa Timur which is in East Java - 2nd largest province in Indonesia after Jakarta.

Ridlatama Group selected the G&Z S600 Multi-Purpose Slipform Paver for its productivity, ease of operation and low maintenance. The G&Z S600 was designed to be a multi-purpose, versatile slipform paver making it an ideal candidate for contractors in developing markets. With its ability to cover the widest variation of widths in its class, change widths quickly and achieve superior smoothness, the S600 provides a realistic one machine solution as opposed to a multiple machine purchase situation. The S600 can pave widths from 2.5m (8 ft) to 6.75m (22 ft) without frame extensions (up to 9.5m [31 ft] with frame extensions), change widths in a matter of hours, and accept a dowel bar inserter for paving widths up to 7.5m (24.5') with hydraulic poker vibrators and 9.5m with electric vibrators. Spanning the single and dual lane applications, the S600 is the perfect choice for an economical mainline paver.

The first project Ridlatama Group prepared for the S600 was Road Improvement Legundi - Bts. Kab. Sidoarjo (Link. 135) / Bts. Kab. Gresik - Krian (Link. 141) – a public street in Surabaya. The project was paved 3m (9.8 ft) wide and 30cm (11.8 in) thick. The total project was constructed in three passes to a finished 9m (29.5 ft) wide public road. The length of the project was 1.6km (1 mi); a great project to get used to the new equipment.

The G&Z Service and Sales Departments sent Ridlatama Group service men that were not only experts in the commissioning of paving equipment but who were also concrete slipform paving experts. Having this expertise on site ensured a clean start up and operation. The results have Ridlatama Group ecstatic about the machine.

"The G&Z S600 Multi-Purpose Slipform Paver is a premium paver in quality and productivity. The operation and controls on the machine are easy to learn and use. For a contractor new to concrete slipform paving, we were surprised by how easy it was to supervise the machine's operation. The S600 is clearly the best solution compared to other pavers on the market in Indonesia. I say this because what's most important in the world of a slipform paving contractor in Indonesia is ease of operation and maintenance as well as producing the best quality so the S600 is the ultimate solution for us," says Novi Endaryono, Director Ridlatama Group.

Changing and modernizing a contractor's construction means and methods is not an easy task. The initial corporate expenditure for the technology is a hurdle as well as the training and education needed to implement. Ridlatama Group is a forward thinking contractor and saw this up and coming technology in Indonesia as a way to distinguish its company from its competitors. In looking for the right machine solution, the G&Z brand's association with quality, service and expertise made the decision clear.

With the G&Z S600 purchase made, the implementation was key to ensure the success of not only the paver but the use of slipform paving over manual methods. The results speaks for themselves.

Ir Sri Winarti, General Superintendant for Ridlatama Group, says, "The G&Z S600 paver is an efficient technology to work with. Getting the jobsite ready for paving takes much less time than formwork. We have seen a 50% increase in productivity using the S600 over formwork. If we were to build the road project Legundi Gresik – Krian

Sidoarjo manually, it would have taken 3 months. With the S600 it only took 1.5 months. Also, the labor requirements using the G&Z S600 are 65% more efficient. We need 7 people to run with the S600 Paver. When using formwork, we need 20 people."

Modernizing the concrete road construction method from forms to slipform has not just been proven to reduce production times but has proven to be the more economical method by reducing setup and manpower. This kind of success has given Ridalatama Group confidence to move forward and bid on more concrete paving work.

Ridalatama Group will use the G&Z S600 on their next higher profile highway project. "We will bring the S600 to construct the Mojokerto-Kertosono Toll Road Section 3. We will rely on the G&Z S600 paver because it has proven its quality," concludes Novi Endaryono.



NEW EQUIPMENT

MP550 MATERIAL PLACER



MACHINE SPECIFICATIONS

Machine Capacity Including Conveyors	8.75 cyd (6.7m³)	
Receiving Hopper	5.5 cyd (4.2m³) Powerful Variable Speed 14" (355mm) Auger 23" (584mm) High Front Lip with Hydraulic Flop Gate	
Conveyors	Swing Conveyor: 36" (914mm) Wide x 35' (10.66m) Long 170° of Swing Capability Transfer Conveyor: 36" (914mm) Wide x 23' (7m) Long Variable Speed 0 - 600fpm	
Propel System	4 Wheel Drive - High Flotation Rubber Tires 5 Steering Modes - Coordinated, Crab, Front, Rear and Optional Automatic 0 - 9 mph (0 - 14.5km/h) 12' (3.66m) Steering Radius*	
Elevation Control	Standard: Hydraulic Hopper Height Adjustment Optional: 4 Jacking Columns with 27" (685mm) Hydraulic Height Adjustment	
Machine Weight	Approx. 45,000lbs (20,412kg)**	
Engine Power	260 HP (193 kW) 6 Cycle Tier 4i Diesel Engine with ECO Throttle	

^{*} To Centerline of Inside Tires

International Patents Pending

VERSATILE

The MP550 is the most versatile material placer on the market. It is capable of handling a wide variety of concrete slumps as well as dry materials. The MP550 features four wheels with high flotation tires. It is four-wheel drive with dual axle steering with only a 12' (3.66M) inside turning radius. This offers greater ease of movement in and around the jobsite. Its receiving hopper design has been carefully crafted featuring a hydraulically adjustable flop gate with a front lip that is only 23" (584mm) off the ground. The hopper is designed to accept the widest range of trucks. The MP550's 35' (10.7m) long Swing Conveyor, which can pivot 170 degrees, is designed with a hinge point near the tail pulley for ease of clearing concrete barrier walls and other jobsite obstructions while minimizing the material discharge height.

HIGH PRODUCTION

The MP550 is capable of the highest concrete spreading production on the market. Its industry leading hopper size can hold approx. 5.5 cyd (4.2 m³) not including the material held on the two belts. The hopper's unique front "flop gate" is actuated hydraulically to seal against the dump truck during dumping to minimize spillage and to feed the material to the auger. The hopper is also available with hydraulically adjustable front pusher rollers with up to 12" (30cm) of adjustment in and out. The high capacity Transfer and Swing Conveyors are capable of handling the largest loads without stall or slippage. The conveyors are equipped with rugged shaft-mounted drive motors that offer ample torque for high production placing.

EASY TO MAINTAIN

The MP550 is designed to be the easiest placer on the market to clean and maintain. G&Z put heavy emphasis on making the conveyors and their components readily accessible and easy to clean and maintain to keep operating costs low. The hopper has been designed with a quick-release mechanism to allow the carrier to safely walk away from the hopper for ease of access, cleaning, loading or switching to other attachments. The carrier side access panels safely guard the transfer conveyor during operation and provide access during daily cleaning. The tail end of the transfer conveyor can quickly be lowered (or even disconnected) hydraulically from the bottom of the hopper for cleaning and maintenance. Each conveyor has also been meticulously designed to allow the vulcanized belts to be easily replaced.

LOWEST OPERATING COST

The MP550 is outfitted with a 6 cylinder Tier 4i diesel engine with a simple design solution for upgrade to Tier 4 final. The Tier 4i engine features low fuel consumption and does not have a particulate trap or NOx like other Tier 4 engines. It also features extended service intervals. The "Eco-Mode" feature on the MP550 reduces fuel consumption by up to 35%. The tire over track design choice dramatically reduces maintenance and cost. Because the two conveyors are accessible and easy to clean, the high operating costs associated with concrete belts is dramatically reduced. The MP550 is also designed to be quick and easy to transport. The swing conveyor hydraulically folds up for transport and high speed travel.

^{**}Dry Weight with no options
Patents Pending

TECHNOLOGY

MAXIMIZE AVAILABLE PAVING TIME AND MINIMIZE EVERYTHING ELSE.



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, speed manuevering onsite, quickly reconfigure the machine, and into the transport configuration.

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 solutions makes G&Z equipment: **Contractor Inspired. Guntert Engineered.**

MAXIMIZE AVAILABLE PAVING TIME: 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 powertful hydraulic cylinders to clamp and hold removable spacers / pan sections in

perfect alignment. No bolts are required. VariWidth is designed to eliminate the need to support the tractor or unbolt extension tube clamping pucks. VariWidth uses cam rollers and hydraulic clamping pucks to accomplish quick and easy tractor width changes.

VARIWIDTHTRACTOR WIDTH CHANGES





The VariWidth system features rollers and hydraulic clamping pucks to easily extend and retract tractor extension tubes without supports. VariWidth can cut tractor width change time from hours to minutes.

TELEEND TELESCOPIC END SECTION



The TeleEnd: Telescopic Paving Kit End Section offers 3 ft (1m) of quick change kit per side. A 6 ft (2m) width change can be accomplished by one or two people in as little as an hour. Larger TeleEnds available up to 6.5 ft (2m) per side.

MAXIMIZE AVAILABLE PAVING TIME: 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 semi-automatically reconfigure the machine into the transport configuration.

ACCUSTEER SLEW DRIVE TRACK CONTROL



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

SMARTLEG SWING LEG SYSTEM



The SmartLeg system allows contractors to adjust the swing leg angle on-the-fly to maneuver around an obstacle without in the track path while the crawler track stays straight ahead.

MAXIMIZE AVAILABLE PAVING TIME: EASY OPERATION & CONNECTIVITY

What's the use of great features and options without easily operable 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

come available, integration and operation should not be difficult and time consuming. EGON makes integration and operation simple and 'plug and play' to make 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 IntelliMaticsTM 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.

IN THE BOOTH: EGON

EGON IS PACKED WITH GREAT FEATURES

NEW EGON BFILLY PACK



The rugged EGON Belly Pack console provides tremendous flexibility to the operator. The operator has the option of strapping on the wireless Belly Pack and working anywhere on or around the machine or docking the belly pack on a mount complete with power and LCD display. The mount can be located on the operator platform handrailing or at the ground level at the side of the machine.

EGON INTELLIMATICS™



EGON IntelliMatics™ is a powerful remote diagnostics/monitoring system that will allow any machine owner to protect their investment. The G&Z software engineering team has added to the already extensive onboard capabilities and designed a web based remote user interface to allow maximum connectivity anywhere in the world. Some of these capabilities include: the ability to download program updates, input and output monitoring, remote troubleshooting to reduce service visits, error codes emailed to the customer and G&Z in real-time, connectivity via WiFi or GSM, GPS technology to monitor location, data logging, maintenance reminders, remote setting changes, etc. To summarize all of these potential machine events, IntelliMatics™ will even send the customer and G&Z a detailed report at the end of a predetermined machine runtime for constant monitoring and peace of mind. Truly the sky is the limit with this system, and the potential customer savings over the life of the paver are limitless. EGON has once again taken machine connectivity and service to the next level, and this new system will allow G&Z to always be connected.

EGON NOLINE



With EGON, stringless guidance is available with third party stringless systems by utilizing G&Z's NoLine: Stringless Preparation Package. NoLine: Stringless Preparation Package can be included as an option on all G&Z Pavers and Support Equipment. NoLine is comprised of a software upgrade and a hardware kit. The NoLine Software Upgrade integrates the use of third party stringless technology directly into the machine's CANbus network. The NoLine Hardware Kit provides telescopic masts for the total station prisms (only necessary on pavers) and battery backup. NoLine makes paving stringless easy through reliable, proven and integrated software.

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.

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.

PARTS DEPARTMENT:

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SERVICE DEPARTMENT:

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CANAL LININGFQUIPMENT

EAGLE TRENCHERS



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 flexible machine design is intended to allow the machine to be reconfigured for a wide variety of canal sections.

Guntert & Zimmerman 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 and fiber optic installations. Eagle Trenchers are built rugged enough for your toughest jobs.

G&Z CONCRETESLIPFORM 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 wide range of concrete slipform paver models along with other support equipment, such as mechanical Dowel Bar Inserters, Placer Spreaders and Texture Cure Machines to suit your present and anticipated future needs.

G&Z equipment designs are based on more 70 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 - 7.5m)

S600

8' - 31' (2 - 9.5m)

\$850 (QB OR SL)

12' - 42.5' (3.5 - 13m)

S1500

18' - 52.5' (5.5 - 16m)

CONCRETE SLIPFORM PAVING SUPPORT EQUIPMENT









DBI

Dowel Bar Inserter

MP550

Material Placer

PS1200 PLACER SPREADER

18' - 41' (5.5 - 12.5m)

TC1500 TEXTURE CURE MACHINE

12' - 56' (3.5 - 17m)

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