Stringless System for GOMACO Slipformers ...

... Trimmers and Curb & Gutter Pavers
Leica’s world-first “stringless” 3D system is here today!

**Saving you time and money, increasing safety, productivity and paving performance.**

One or two LEICA TCA1101plus total stations, permanently transmit measurements to the PC mounted on the machine via radio modem. From the measured position data the actual position and orientation of the machine is calculated and compared to the design model’s grade and position. The resulting from this comparison is sent to the GOMACO’s G21 control system, which calculates and compares the machine to the model 6 times every second, paving height is regulated to an accuracy of ±3mm (±0.01’), and steered to within ±10mm (±0.03’).

By comparing the machine to the model 6 times every second, paving height is regulated to an accuracy of ±3mm (±0.01’), and steered to within ±10mm (±0.03’).

**Existing Customer Comments**

“Our decision to pave our taxiways with Leica’s LMGS-S stringless system was proved correct after the first three months of construction. Construction preparation time has been cut in half. Paving performance has increased by 20%. With the slipform paver, our plans are transferred on a 1:1 scale onto the project with unprecedented speed and precision. With stringlines such precision is unattainable, not to mention the obstructions they create for construction site logistics.”

Martin Bänziger, Site Manager
Project: 5th stage of the construction at the Unique Airport, Zurich.

**Precise and efficient control with Leica’s 3D Machine Control System for GOMACO Slipformers, Trimmers and Curb & Gutter**

**High quality-high mainline paving performance**

Thanks to the fact that the machine is being entirely guided by the Leica TCA1101plus instruments, operators can concentrate on the production side of their work. Improved operational safety, higher paving quality and paving performance, resulting in lower costs and higher competitiveness. Where precision and smoothness of the surface is a prerequisite, Leica’s LMGS-S “Stringless” system provides first-class results and assures the maintenance of high construction standards.

**Existing Customer Comments**

“...cut in half. Paving performance has increased by 20%. With the slipform paver, our plans are transferred on a 1:1 scale onto the project with unprecedented speed and precision. With stringlines such precision is unattainable, not to mention the obstructions they create for construction site logistics.”

Martin Bänziger, Site Manager
Project: 5th stage of the construction at the Unique Airport, Zurich.

**9000/9500 Series Trimmers**

With no modifications required, Leica Geosystems LMGS-S System provides for a high precision paving foundation. It is now possible to lay the pavement foundation as well as pave using only one 3D-system. In this way, paving is accomplished with a single process without cumbersome stringline staking out.

**GT-3200/3600/6300 Curb & Gutter**

The Leica LMGS-S 3D System opens up a wide range of curb & gutter applications. Without any additional components, the LMGS-S system can be fitted to Curb & Gutter machines. With high quality and speed, curbs, trenches and New Jersey barriers can be built with Leica 3D-system. Leica Geosystems delivers the full range of solutions for paving and trimming applications with just one system!
System Components

- Industrial touchscreen PC with USB Data Stick
- Software “LMGS-S for GOMACO”
- Robotic total station TPS1101plus with radio modem TCPS27.
- Machine radio modem TCPS27S.
- Dual-axis tilt sensor(s).
- Standard survey accessories such as prisms, masts, cables, etc.

Key benefits of the Leica LMGS-S Stringless System

- Survey Cost savings – no installation and maintenance of stringlines is required.
- Increased safety, quality of production and paving performance. Up to 20% productivity increase.
- High paving accuracy (±3mm in paving height and ±10mm in position).
- Project data produced by any CAD system can be built 1:1 directly onto your project.
- Continuous concrete paving (without stopping the machine) if multiple total stations are used.
- All G21 equipped machines can be upgraded to run with Leica Geosystems LMGS-S System.
Your one-stop-shop for construction solutions

- We offer support with project planning and system installation.
- We offer total solutions.
- We offer customised solutions.
- We offer worldwide service.

In addition to Machine Control Systems for Slipform Pavers, Trimmer and Curb & Gutter, Leica Geosystems offers solutions for other automatic construction machines such as Graders, Pavers, Milling Machines and Bulldozers.

Construction lasers – our lasers are always built to meet the demands of construction sites, no matter what they are used for: the construction of high-rise buildings, for digging trenches, for machine guidance or interior construction.

Automatic levels – professional optical levels are built for the construction site. They are quickly set-up, very precise and top every comparison of price to performance ratios.

Leading in GPS and TPS technology – used worldwide in projects that demand the highest standards, designed for various applications and to be easy-to-use. We developed the first reflectorless total stations in 1998 and our experience with GPS dates back to 1967. We hold several patents and were first at introducing many new technologies to the industry.

Software and accessories – integrated software solutions and a complete series of tripods, staffs, our patented 360° prisms, batteries, chargers, everything you need to extract the best performance from your instrument.

Hand-held Laser Distance Meter – simple and handy tool to determine distances, areas and volumes quickly and accurately, indoors and outdoors.

DIGI System – The location system provides a fast and safe solution for tracing buried utility services.

Distancer and ATR:
Laser class 1 in accordance with IEC 60825-1 and EN 60825-1
Laser class I in accordance with FDA 21 CFR Ch. I § 1040

Laser plummet:
Laser class 2 in accordance with IEC 60825-1 and EN 60825-1
Laser class II in accordance with FDA 21 CFR Ch. I § 1040

Electronic guide light:
Laser class 1 in accordance with IEC 60825-1 and EN 60825-1

Your dealer:

Illustrations, descriptions and technical data are not binding and may be changed. Printed in Switzerland.
Copyright Leica Geosystems AG, Heerbrugg, Switzerland, 2002 731190en – IX.02 – RDV