

# SMART CONSTRUCTION - Twelve planned releases built to enhance digital transformation

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Komatsu Europe and SMART CONSTRUCTION are pleased announce the launch to the European market of eight new software applications and four new IoT devices. These applications and devices, together with Advisory Experts and Partner Services, form the family of solutions that make up the core offering of SMART CONSTRUCTION. This formal European introduction of SMART CONSTRUCTION will be initiated together with four partners:

- Marubeni-Komatsu Limited
- Schlüter Baumaschinen GmbH
- Komatsu France
- Scantruck A/S

These first four **Komatsu** Europe Distributors will deliver SMART CONSTRUCTION solutions and support to customers in The United Kingdom, Germany, France and Denmark. Following this initial launch, SMART CONSTRUCTION plans to expand its partner network and help customers all over Europe make their transition into an optimised digital workflow.

SMART CONSTRUCTION was introduced by Komatsu Limited in 2015 to improve efficiency and to address the labour shortage facing the Japanese construction industry. Today, with this innovative technology present on over 10.000 jobsites in Japan, America and Europe, construction companies around the globe can benefit from the increase in safety, productivity and peace of mind offered by SMART CONSTRUCTION solutions.

SMART CONSTRUCTION helps companies work in a more efficient way, improving collaboration internally and with subcontractors. This collaborative way of thinking is also used to develop the software applications that support SMART CONSTRUCTION.

In cooperation with Landlog, Komatsu Limited started SMART CONSTRUCTION as an open project partnered with 22 startups and leading companies. It led to the creation of a family of solutions, which was then put to

the test by proof-of-concept customers around the world.

This SMART CONSTRUCTION solution suite was developed for the construction industry and will be adapted continuously to the rapidly changing industry. Customer feedback will be closely monitored so their needs and new unexplored problems can be catered to.

### **Solutions:**

SMART CONSTRUCTION **Design** – Go from rolled up paper plans to robust 3D designs and more with 3D data generation.

SMART CONSTRUCTION **Remote** – Send new design data to machines in the field, or remotely support operators, without traveling to the jobsite.

SMART CONSTRUCTION **Dashboard** – Graphically visualize design, drone and machine data to measure production progress, cut/fills, quantities, and productivity.

SMART CONSTRUCTION **Fleet** – Collect the data needed to optimise fleets and track production, all on a mobile app.

SMART CONSTRUCTION **Insight** – Display an overview of progress, productivity, and profitability across multiple jobsites.

SMART CONSTRUCTION **Simulation** – From start to finish, simulate jobsites to optimise results, before the first load of dirt is moved.

SMART CONSTRUCTION **Retrofit** – Equip legacy excavators of any make or model with access to 3D data, giving operators the guidance they need.

SMART CONSTRUCTION **Rover** – Cost-effective, high-value 3D rovers to outfit all key jobsite personnel.

SMART CONSTRUCTION **Drone** – Provides a bird's-eye view of the jobsite, in a fraction of the time required by a ground-based survey.

SMART CONSTRUCTION **Edge** – Rapid processing of drone data into a 3D terrain map without leaving the jobsite.

**SMART CONSTRUCTION Field** – Cost-effective project management that includes cost tracking and helps determine the best ways to bid, manage and resource projects.

**SMART CONSTRUCTION AR** – A mobile application that helps staff on the job-site visualize the current progress against the final design through augmented reality technology.

#### **SMART CONSTRUCTION vision:**

SMART CONSTRUCTION brings solutions that integrate within the customer's current workflow. Collaboration shouldn't be a hassle and the same goes for going digital. That's why everything is run in the cloud. It removes worries about staff working on different locations, with different or shared projects.

SMART CONSTRUCTION eliminates confusion, and provides everyone with the same up-to-date data. It's a single source of information. No need to go digital if it negatively disrupts a workflow. And SMART CONSTRUCTION Advisors are there to support you on your digital transformation journey.

SMART CONSTRUCTION wants to make the step to a digital jobsite alongside our customers, they will improve and adapt their solutions to the market needs. SMART CONSTRUCTION aims to help the industry work smarter not harder.

While the previous version of SMART CONSTRUCTION only digitised part of the construction process ("vertical digitisation"), these new IoT devices and applications will allow for digitisation of the entire process ("horizontal digitisation"). It's a truly collaborative toolset where the data can be accessed by everyone involved with the project.

Worksite operations will be optimised by synchronizing the actual worksite with its digital twin, thereby realising drastic improvement in the safety, productivity and environmental performance. And as individual worksites are digitised, SMART CONSTRUCTION aims to provide further optimised control over multiple worksites by connecting them remotely ("in-depth digitisation").

The SMART CONSTRUCTION Team is very excited about the future.. Keep an eye out for them. In pursuit of a safe and highly productive, smart and clean workplace SMART CONSTRUCTION is now experimenting with both products (machine automation and automation) and process (optimisation) to deliver a family of tools that work together with customers equipment, machinery and employees.

Source: Komatsu Europe