

With drones and driverless dozers, Komatsu to begin leasing automated construction fleets



Automated construction fleets

- The D61i-23 was the first Komatsu machine released with Intelligent Machine Control. The technology offers semi-automatic control of dozers and excavators now, but Komatsu is now using it to power a new business that fully automates jobsites.
- Unveiled in 2013 alongside the [D61i-23](#), iMC is now available on [four Komatsu dozers](#) and [one excavator, the PC210LCi-10](#). The technology delivers automatic control from rough dozing through finish grading on dozers while heavily cutting production time by limiting excavators from digging beyond a target surface.

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- Komatsu SmartConstruction will use drones from Skycatch to survey jobsites before sending data along to iMC-equipped machines.
- The technology allows contractors to place operators in control of these machines with much lower skill levels than previously required thanks to a combination of sensors and software doing a lot of the work eyes and steady hands have done in the past. In our talks concerning iMC machines we've wondered how long it would be until Komatsu introduced a fully-automated dozer or excavator, driven from the office rather than the cab.

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- The no. 2 construction equipment manufacturer in the world has announced a new business called SmartConstruction, hoping to usher in the “jobsites of the future.” Using construction machinery equipped with iMC alongside [drones](#), the goal of the business is to automate pre-foundation work jobsites and monitor them from the office.
- But Komatsu hasn’t announced any new machines with SmartConstruction. Instead, the manufacturer will lease machines currently available *and* operate them for customers through Komatsu Rental. The service will be available February 1 and initially only in Japan.

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Komatsu says SmartConstruction will scan a customer's jobsite with drones and 3D laser scanners, as well as a stereo camera installed on the operator seat of the earthmoving equipment being used on the site.

Komatsu says it will combine that gathered data into a comprehensive survey of the site. Soil classification and buried objects will be included in the site research.

Equipped with iMC, the PC210LCi-10 hydraulic excavator cuts production times by up to 63 percent.



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- That data will then be transmitted to machines equipped with iMC through KomConnect and the machines are able to do the work themselves. In its press release announcing the new service, Komatsu mentions operators and semi-automatic machine control. However, [in a report from the *Wall Street Journal*](#), it is reported that the drones, made by Skycatch, and construction equipment will all “move along largely preprogrammed routes...leaving humans to program the machines and then push a button to send them to work.”
- *WSJ* also adds that human operators would be present on the automated jobsites only to “take control of a machine if necessary.”

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- Akinori Onodera, president of the new Komatsu SmartConstruction unit, told the *WSJ* that the company is launching the business because of a severe shortage of construction workers in Japan due to the country's aging workforce. The country is facing “thousands of construction projects, including many tied to the 2020 Summer Olympics in Tokyo,” the paper reports.
- The U.S. is facing its own worker shortage, [with 83 percent of U.S. construction companies reporting](#) they are having trouble hiring enough skilled workers, particularly craft workers.

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- Onodera says the new capabilities of drones have finally made a fully-automated jobsite possible because they are quickly able to gather accurate terrain data for the machines to base their operation on.
- “If we want to measure a large construction site, measuring by air is much, much easier,” Onodera told the *WSJ*. “The old way needed two persons for one week. The [drones] can do it in one or two hours.”
- - See more at: <http://www.equipmentworld.com/with-drones-and-driverless-dozers-komatsu-to-begin-leasing-automated-construction-fleets/#sthash.h5SUdgF6.dpuf>