

# intelligent Machine Control



### **Excavators**

SMARTCONSTRUCTION Intelligent Machine Control **Engine power range** 165 HP (123 kW) @ 2,000 rpm 359 HP (268 kW) @ 1,900 rpm **Operating weight range** 51,397 lbs. - 107,850 lbs. (23,313 kg - 48,920 kg) Bucket capacity range 0.66 - 4.15 yd<sup>3</sup> (0.50 - 3.17 m<sup>3</sup>)

### **iMC Excavators**

- Get new operators up to speed quickly
- Go from mass excavation to finished grading faster than ever
- Fully integrate 3D design data into your machines
- Empower operators to work efficiently. pass after pass

Have you ever watched your construction crews, surrounded by modern equipment, begin a job by pounding a wooden stake into the ground and think, "Isn't there a better way?" There is. And it's available to you right now.

Using Komatsu's innovative intelligent Machine Control (iMC), you can program 3D design data directly into your machines. Your operators — even those with less experience — can work with utmost efficiency, guided by sophisticated automation. You can be confident you're getting the most from your machines, your crew and your carefully designed plan.

Komatsu's iMC suite of products, services and digital solutions was developed with input from leading construction companies. By incorporating a host of advanced machine technology — some patent-pending — you gain the ability to add sophisticated, productivity-enhancing automation and cutting-edge job site design to your operation.

## Transform your job sites with advanced automation



## Working smarter in every way Benefits of iMC 2.0



**Save money** Frees GPS Dozer from need to achieve final grade so it can work elsewhere on the site.





33%

**47%** 

## Less time grade checking

Monitor performance and stay on grade from the cab: operators spend time working, not grade checking.

### Improve accuracy

Continuously monitor grade and semi-automatics to dig precisely to grade.

### Reduce base aggregate Greatly reduce over-digging and the

Greatly reduce over-digging and the amount of costly base aggregate needed for applications like utilities.

\*All savings, improvements, and reductions are compared to traditional grading methods.



Give your operators the power to work more effectively than with conventional aftermarket machine guidance (indicate only) or manual operation. Intelligent Machine Control (iMC) excavators with semi-automatic control offer the capability to work smart from rough digging to finish grading, and help minimize over-excavation to make every pass count.

• Semi-automatic for trenching, slope work and high production applications

## **iMC Excavators**

 Protection + precision + performance = the formula for pursuing maximum productivity versus conventional machine guidance

### **iMC Excavators**



#### Adjusts to the operator's experience level

A fully integrated grade assist automatically traces the target surface to minimize over digging. A built-in facing angle compass ensures the machine is aligned with the target surface.

#### Auto stop control

To help eliminate potential damage during boom or bucket operation, the machine automatically stops when the bucket edge reaches the design surface.

#### **Minimum distance control**

iMC controls the bucket by automatically selecting the point closest to the target surface, which minimizes operator input while providing higher accuracy and grading confidence.

#### **Critical precision for utility applications**

For utility customers looking for the utmost precision, the excavator allows your operator to input structure, invert elevations of pipe runs and automatically calculates fall of pipe.

#### **Control box**

The monitor of the Komatsu intelligent Machine Control (control box) uses a large touchscreen for visibility and ease of use. The simple screen layout displays the necessary information in an easily understood fashion. Touch screen icon interface instead of multi-step menu simplifies operation.

#### Stroke sensing hydraulic cylinder

Stroke sensing hydraulic cylinders provide real-time position that is immediately displayed to the operator. This is an improvement over conventional aftermarket machine guidance (indicate only) systems with tilt sensors that require time to stabilize.

## Enhanced Operability of the Machine Control

Semi-auto/manual mode switching and design surface offset function can be operated with switches on the control levers.

## New in iMC 2.0

## Perform finish grading using only arm input

Your operators can finish grade quickly and accurately with a bucket angle hold control that automatically holds the bucket angle to the design surface during arm operation, enabling operators to perform finish grading using only arm input.

Just as technology has transformed global business, intelligent Machine Control can help you quickly transform your construction job sites into highly efficient, highly productive operations. Contact your Komatsu distributor to learn more.

## **iMC equipped Excavators**

Excavator	Weight	НР	<b>Bucket capacity</b>
PC210LCi-11	51,397-53,882 lbs.	165 HP @ 2,000 rpm	0.66-1.57 yd³
	(23,313-24,440 kg)	(123 kW @ 2,000 rpm)	(0.50-1.20 m³)
PC290LCi-11	70,702-72,091 lbs.	196 HP @ 2,050 rpm	0.76-2.13 yd³
	(32,070-32,700 kg)	(149 kW @ 2,050 rpm)	(0.58-1.62 m³)
PC360LCi-11	78,484-79,807 lbs.	257 HP @ 1,950 rpm	0.89-2.56 yd <sup>3</sup>
	(35,600-36,200 kg)	(192 kW @ 1,950 rpm)	(0.68-1.96 m <sup>3</sup> )
PC390LCi-11	87,867-90,441 lbs.	257 HP @ 1,950 rpm	0.89-2.91 yd <sup>3</sup>
	(39,856-41,023 kg)	(192 kW @ 1,950 rpm)	(0.68-2.22 m <sup>3</sup> )
PC490LCi-11	105,670-107,850 lbs.	359 HP @ 1,900 rpm	1.47-4.15 yd³
	(47,931-48,920 kg)	(268 kW @ 1,900 rpm)	(1.12-3.17 m³)

## **iMC Excavators**

#### Auto tilt bucket control

Auto tilt bucket control assists the operator in aligning the bucket parallel with the slope, so finish grading can be accomplished without having to align the machine with the target surface.





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