

Adaptive Controls 2 Product Overview

Increase production – decrease wear

- Improve productivity and dig performance through optimized control and power application
- Increase digging power without sacrificing mechanical components
- Reduce boom jacking and other loads from impact and operator error
- Decrease operator fatigue from machine shock and rocking motion

Adaptive Controls 2 is standard on the P&H 4800XPC and can be ordered as a retrofit upgrade on larger shovel classes with Centurion control system. 4100A and 2800XBP / 2800XPC (AC and DC models) with Centurion do not include Opti Toe or Active Load Compensation.



For more information, contact a local Komatsu Mining representative or visit komatsu.com

Description

Adaptive Controls 2 is a suite of integrated control functions that helps optimize shovel production while lessening the effects of impacts on the machine. By augmenting operator control, both the cycle time and dipper fill factor are increased to improve production by up to 9% and reduce boom jacking by up to 50%. Decreased damage to equipment reduces repair and maintenance time, while lowering employee exposure to safety risks.

Shovel technology panel

Adaptive Controls 2 is built on the new shovel technology panel, which allows for integration of the Adaptive Controls 2, Payload 2, and Track Shield 2 options into a single hardware platform. All options are sold separately and are completely independent of each other. This means that whatever combination of technologies you choose, you only need one panel installed on your shovel.



Smart Crowd



Opti Toe*



Smart Retract



Active Load Compensation*

Reduce tipping moment and operator fatigue

- **Opti Toe** limits forward tipping moment during digging while **Smart Crowd** limits rearward tipping moment during impact and crowding into bank.
- Reduced rocking motion increases operator comfort.

Improve operator and truck safety

- **Active Load Compensation*** helps the operator spot the load into the truck safely by reducing torque and speed when the dipper is heavily loaded.

Improve production and reduce boom jacking

- **Smart Crowd** optimizes the crowd motion resulting in improved bank penetration in hard toe and helps reduce boom jacking by up to 50% – even more with inexperienced operators.
- **Opti Toe*** improves cutting force contributing to productivity enhancements, while encouraging the operator to dig close to bank.

Reduce mechanical loads

- **Smart Retract** reduces structural loading by smoothing disengagement from the bank.



Technology-as-a-Service (TaaS) option

With the TaaS option, you pay a set monthly or annual fee with no large up-front cost. Komatsu provides you with the entire Adaptive Controls 2 technology package, including operation and hardware. If any of the hardware fails or becomes obsolete to the point that the system no longer works, you receive a replacement at no additional charge.

**Not available on all models.*

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