Why COMMANDbatch CP?

SCC Moisture Control
Dry Cast Moisture Control
Color Control System
Concrete Delivery Automation
Remote Operator Interface
Automatic Inventory Replenishment Requests
Process Visualization

Benefits of COMMANDbatch CP
- Increase productivity
- Reduce waste
- Improve quality
- Lower costs
Command Alkon is proud to introduce solutions for the manufactured concrete products producer.

Concrete Production facilities today are more complicated than ever and must be equipped to produce a wide variety of concrete. Precast production techniques using SCC, dry cast production with zero slump concrete, and color additives for concrete mixes are consistently challenging the concrete products manufacturer.

This means that the properties required for concrete products are more stringent than ever. To meet today’s tight specifications, the system must batch very accurately and account for all sources of water or the concrete may be wasted. The availability of an accurate, comprehensive moisture monitoring and water dosing system can make the difference between profit or loss.

Full featured functionality in a control system can improve the profitability of your production facilities. Automated concrete bucket delivery systems, inventory replenishment, wireless remote control, integrated color interface system controls, and robust system reliability including lightning resistance, are technologies designed to improve your bottom line.

Today’s most successful facilities are utilizing these technologies to increase productivity, improve quality control, reduce waste, and increase profits. Command Alkon has leveraged our years of practical industry experience to deliver COMMANDbatch CP, an innovative product to address the challenges of the manufactured concrete products industry.

Specifications
- Size: 75 mm (3") dia. x 60 cm (23.25") long
- Weight: 7.25 kg (16 lbs.)
- Body Material: Stainless steel
- Face Material: High strength ceramic
- Measurement Range: Depends on material composition
- Operating Temperature: 2° - 49° C (35° - 120° F)
- Typical Accuracy: +/- 0.3%
- Connection: 6-pin type PT06 waterproof connector
- Cable: 6 conductor, 24 gauge, shielded

"With COMMANDbatch CP we have taken a clear step towards the improvement and acceleration of our production process."

Cliff Morgan
Potomac Construction Industries

"Command Alkon’s Moisture Probe is a proven performer. The probe is easy to install, easy to calibrate, and most importantly, provides reliable moisture measurements without further calibration load after load."

www.commandalkon.com
**Process Visualization & Data**

An important feature of COMMANDbatch CP is the clear and ergonomic visualization of the process within a familiar MS Windows user interface.

COMMANDbatch CP’s visualization functionality can be customized to suit user preferences. Plant data such as sequences, recipes, products, and materials can be viewed and you can view which batch is being worked on and what the dosage results are. COMMANDbatch CP contains a wide selection of reports, which can be displayed and printed and the datagrids can be easily exported to Excel. In addition, COMMANDbatch CP is fully multi-user.

**Automatic, Fast, and Accurate . . .**

Based on 27 years of experience automating concrete production plants and with more than 180 project references, COMMANDbatch CP was developed as an intelligent and flexible method of process control. In developing this solution, Command Alkon has listened to the industry’s requirements and closely observed the process in practice. We understand that concrete production needs to take place automatically, quickly, and accurately. COMMANDbatch CP will enable you to streamline your production processes with advanced and intelligent control.

**How to reduce costs and improve quality . . .**

Moisture Control! Whether you are producing Zero Slump Concrete or SCC Concrete, COMMANDbatch CP provides quality moisture monitoring and water dosage to help you get control of your quality and costs.

In working with Command Alkon you can be assured of an experienced partner with in-depth knowledge of the industry.
COMMANDbatch CP

works with your concrete plants to provide a total, automated solution for the production of manufactured concrete products.

COMMANDbatch CP is a modern, Windows-based system that is fully compatible with standard concrete production equipment. Advanced process control features deliver accurate batching as well as accelerated production. Clear and well-organized visuals enable system processes to be monitored and controlled with ease.

COMMANDbatch CP optimizes the production process to deliver the highest possible production capacity while maintaining the required concrete quality. Included in the process controls are powerful features such as mixer power monitor with variable speed control, coarse and fine aggregate moisture controls, mixer moisture controls, and recycled water density compensation.

Other Process Controls

Color Control Interface

Command Alkon has worked with industry color companies to provide you with a simple way to produce and reproduce a consistent architectural product. The interface to the color control system will make the appropriate water adjustments, and dose color for your concrete to reduce waste due to color errors. Years after an architectural panel has been produced you will be able to reproduce the same color because your batch records will include the color recipe.

Remote Operator Interface

All of the functionality that comes standard on the main processor is also available on a portable PC for the floor supervisor. The floor supervisor now has the freedom to oversee the process at the plant floor while making any adjustments to mix water. The plant floor supervisor is also able to prioritize mixes and delivery from the remote wireless PC.

Concrete Delivery Systems

Delivery costs can be reduced with automated delivery buckets or placement cranes. These devices can be controlled and prioritized by the floor supervisor using the plant floor remote wireless PC. Routine pouring of hollow core or prestressed beds can be automated without operator intervention. The process is fully automated from the mix production to the pouring bed.

Inventory Replenishment System

COMMANDbatch CP has a fully automated inventory level and reorder system. When a silo or aggregate bin reaches a replenishment level, an automatic reorder email is transmitted to your supplier and inventory manager. If the email to the supplier is not acknowledged within one hour, a second email is sent to the plant supervisor warning him that the inventory supplier has not responded to the request.
**Dry Cast & SCC Moisture**

**Dry Cast**

The COMMANDbatch CP Hydro module, with the aid of moisture probes in the aggregates and mixer(s), dynamically adjusts the water to meet the specified properties of any mix. The operator can easily review the production process via the intuitive display to establish what data, both real-time and historical, was used to determine the batched water amounts. Retrofitting of existing mixer and aggregate moisture probes to COMMANDbatch CP is supported without the need of any additional external devices.

**Self-Consolidating Concrete (SCC)**

Self-consolidating concrete (SCC) has become a fact of life for structural precast producers. Consistent high-quality production of SCC is very challenging; many producers, trying to rely on a standard control system, have failed to achieve the promised results. COMMANDbatch CP was created to accommodate this completely new requirement of concrete production.

First and foremost, COMMANDbatch CP maintains the proper mix proportions by measuring both fine and coarse aggregate moistures in real-time using Command Alkon’s rugged, reliable Moisture Probes. This technique produces concrete with a predictable, consistent slump with an accurate yield. Through the ability to batch predictable slump concrete COMMANDbatch CP can then be instructed to precisely introduce plasticizer additives to deliver consistent “SCC Spreads”.

If you are producing SCC, can you really afford not to use COMMANDbatch CP?

**General Features Summary**

- Control processes from anywhere (workstations, control panels, portable PCs)
- Flexible mix-call options
- Real-time water management with Command Alkon moisture probes (and other probe brands) for all aggregates
- Batch correction of aggregates and water depending on moisture and temperature
- Data recordation including moisture graphics, Water/Cement ratio, and colors
- Unlimited number of plants, mixes, scales, bins, mixers
- Automatic process optimization, visualization, and monitoring
- Reliably produces SCC by using aggregate and dry-mix moisture and, optionally, a mixer viscosity probe
- Utilizes mixer based moisture probes of all brands to produce the perfect mix from SCC to Zero Slump concrete
- Automatic calibration of mix properties, including SCC
- Full integration with color dispensing equipment
- Customizable for end-user/OEM changes on plant layout
- Total process control possible with integrated concrete distribution, silo monitoring, bin-filling and water reclamation
- Extensive standard reporting with built-in report builder
- Open database and integrated excel reports offer seamless integration with enterprise and office systems
- User-level security
- Multi-lingual system
- Runs on standard Windows systems without any special hardware
- Built-in data and program restoration within minutes
- Worldwide installation and support staff provides professional support 24/7/365
Dry Cast & SCC Moisture

Dry Cast

The COMMANDbatch CP Hydro module, with the aid of moisture probes in the aggregates and mixer(s), dynamically adjusts the water to meet the specified properties of any mix. The operator can easily review the production process via the intuitive display to establish what data, both real-time and historical, was used to determine the batched water amounts. Retrofitting of existing mixer and aggregate moisture probes to COMMANDbatch CP is supported without the need of any additional external devices.

Self-Consolidating Concrete (SCC)

Self-consolidating concrete (SCC) has become a fact of life for structural precast producers. Consistent high-quality production of SCC is very challenging; many producers, trying to rely on a standard control system, have failed to achieve the promised results. COMMANDbatch CP was created to accommodate this completely new requirement of concrete production.

First and foremost, COMMANDbatch CP maintains the proper mix proportions by measuring both fine and coarse aggregate moistures in real-time using Command Alkon’s rugged, reliable Moisture Probes. This technique produces concrete with a predictable, consistent slump with an accurate yield. Through the ability to batch predictable slump concrete COMMANDbatch CP can then be instructed to precisely introduce plasticizer additives to deliver consistent “SCC Spreads”.

If you are producing SCC, can you really afford not to use COMMANDbatch CP?

General Features Summary

- Control processes from anywhere (workstations, control panels, portable PCs)
- Flexible mix-call options
- Real-time water management with Command Alkon moisture probes (and other probe brands) for all aggregates
- Batch correction of aggregates and water depending on moisture and temperature
- Data recordation including moisture graphics, Water/Cement ratio, and colors
- Unlimited number of plants, mixes, scales, bins, mixers
- Automatic process optimization, visualization, and monitoring
- Reliably produces SCC by using aggregate and dry-mix moisture and, optionally, a mixer viscosity probe
- Utilizes mixer based moisture probes of all brands to produce the perfect mix from SCC to Zero Slump concrete
- Automatic calibration of mix properties, including SCC

- Full integration with color dispensing equipment
- Customizable for end-user/OEM changes on plant layout
- Total process control possible with integrated concrete distribution, silo monitoring, bin-filling and water reclamation
- Extensive standard reporting with built-in report builder
- Open database and integrated excel reports offer seamless integration with enterprise and office systems
- User-level security
- Multi-lingual system
- Runs on standard Windows systems without any special hardware
- Built-in data and program restoration within minutes
- Worldwide installation and support staff provides professional support 24/7/365
COMMANDbatch CP works with your concrete plants to provide a total, automated solution for the production of manufactured concrete products.

COMMANDbatch CP is a modern, Windows-based system that is fully compatible with standard concrete production equipment. Advanced process control features deliver accurate batching as well as accelerated production. Clear and well-organized visuals enable system processes to be monitored and controlled with ease.

COMMANDbatch CP optimizes the production process to deliver the highest possible production capacity while maintaining the required concrete quality. Included in the process controls are powerful features such as mixer power monitor with variable speed control, coarse and fine aggregate moisture controls, mixer moisture controls, and recycled water density compensation.

Other Process Controls

Color Control Interface

Command Alkon has worked with industry color companies to provide you with a simple way to produce and reproduce a consistent architectural product. The interface to the color control system will make the appropriate water adjustments, and dose color for your concrete to reduce waste due to color errors. Years after an architectural panel has been produced you will be able to reproduce the same color because your batch records will include the color recipe.

Remote Operator Interface

All of the functionality that comes standard on the main processor is also available on a portable PC for the floor supervisor. The floor supervisor now has the freedom to oversee the process at the plant floor while making any adjustments to mix water. The plant floor supervisor is also able to prioritize mixes and delivery from the remote wireless PC.

Concrete Delivery Systems

Delivery costs can be reduced with automated delivery buckets or placement cranes. These devices can be controlled and prioritized by the floor supervisor using the plant floor remote wireless PC. Routine pouring of hollow core or prestressed beds can be automated without operator intervention. The process is fully automated from the mix production to the pouring bed.

Inventory Replenishment System

COMMANDbatch CP has a fully automated inventory level and reorder system. When a silo or aggregate bin reaches a replenishment level, an automatic reorder email is transmitted to your supplier and inventory manager. If the email to the supplier is not acknowledged within one hour, a second email is sent to the plant supervisor warning him that the inventory supplier has not responded to the request.
Water Management System

COMMANDbatch CP relies on specialized batch process control algorithms in combination with an array of automatic sensors in the aggregate bins and/or in the mixer to produce slump or SCC concrete with superior performance results while maximizing production.

With the aid of these sensors, COMMANDbatch CP is able to “read the signature” of each type of concrete as unique depending on the cement content, aggregate gradations, admixes, water, temperature and the size of the batch in the mixer.

The capture of the signature for each mix is very easy and mostly automatic. The system is calibrated by making a test-batch of each mix. To achieve the desired concrete characteristics COMMANDbatch CP can be equipped to measure moisture in the aggregate materials as they are weighed. In this manner the system compensates in real-time for the amount of moisture in the aggregates. This is especially important for SCC to keep the total fines of the mix design constant. When the test mix is at the proper specification, the operator tells COMMANDbatch CP to remember this signature for future batches.

Relying on accurate measurement of the moisture in the aggregate materials, COMMANDbatch CP can consistently produce concrete of the desired signature, with maximum performance, while minimizing production time.

Key System Features

- Water compensation is automatically adjusted based on the temperature of the concrete.
- Automatic correction of the water amounts based on the batch size. Due to mixer characteristics this is usually not a simple 1:1 calculation.
- Real-time monitoring of the mix consistency allows COMMANDbatch CP to automatically reduce or increase mix time until the right consistency is achieved.
- Capture of unique “signature” for each mix and subsequent production of future batches to the same signature by one of two methods. Once the raw materials are introduced to the mixer the system will either drive the mix to a consistent workability or to an exact W/C ratio. The system allows for specification of which method to use as part of the mix design configuration.
- Turbo mode to maximize production capability for systems equipped with both fine aggregate and mixture moisture probes.
Water Management System

COMMANDbatch CP relies on specialized batch process control algorithms in combination with an array of automatic sensors in the aggregate bins and/or in the mixer to produce slump or SCC concrete with superior performance results while maximizing production.

With the aid of these sensors, COMMANDbatch CP is able to "read the signature" of each type of concrete as unique depending on the cement content, aggregate gradations, admixes, water, temperature and the size of the batch in the mixer.

The capture of the signature for each mix is very easy and mostly automatic. The system is calibrated by making a test-batch of each mix. To achieve the desired concrete characteristics COMMANDbatch CP can be equipped to measure moisture in the aggregate materials as they are weighed. In this manner the system compensates in real-time for the amount of moisture in the aggregates. This is especially important for SCC to keep the total fines of the mix design constant. When the test mix is at the proper specification, the operator tells COMMANDbatch CP to remember this signature for future batches.

Relying on accurate measurement of the moisture in the aggregate materials, COMMANDbatch CP can consistently produce concrete of the desired signature, with maximum performance, while minimizing production time.

Key System Features

- Water compensation is automatically adjusted based on the temperature of the concrete.
- Automatic correction of the water amounts based on the batch size. Due to mixer characteristics this is usually not a simple 1:1 calculation.
- Real-time monitoring of the mix consistency allows COMMANDbatch CP to automatically reduce or increase mix time until the right consistency is achieved.
- Capture of unique "signature" for each mix and subsequent production of future batches to the same signature by one of two methods. Once the raw materials are introduced to the mixer the system will either drive the mix to a consistent workability or to an exact W/C ratio. The system allows for specification of which method to use as part of the mix design configuration.
- Turbo mode to maximize production capability for systems equipped with both fine aggregate and mixture moisture probes.
**Automatic, Fast, and Accurate . . .**

Based on 27 years of experience automating concrete production plants and with more than 180 project references, COMMANDbatch CP was developed as an intelligent and flexible method of process control.

In developing this solution, Command Alkon has listened to the industry’s requirements and closely observed the process in practice. We understand that concrete production needs to take place automatically, quickly, and accurately. COMMANDbatch CP will enable you to streamline your production processes with advanced and intelligent control.

**Moisture Control!** Whether you are producing Zero Slump Concrete or SCC Concrete, COMMANDbatch CP provides quality moisture monitoring and water dosage to help you get control of your quality and costs.

**How to reduce costs and improve quality . . .**

In working with Command Alkon you can be assured of an experienced partner with in-depth knowledge of the industry.

**Process Visualization & Data**

An important feature of COMMANDbatch CP is the clear and ergonomic visualization of the process within a familiar MS Windows user interface.

COMMANDbatch PC's visualization functionality can be customized to suit user preferences. Plant data such as sequences, recipes, products, and materials can be viewed and you can view which batch is being worked on and what the dosage results are. COMMANDbatch CP contains a wide selection of reports, which can be displayed and printed and the data grids can be easily exported to Excel. In addition, COMMANDbatch CP is fully multi-user.
Concrete Products Automation

Command Alkon is proud to introduce solutions for the manufactured concrete products producer.

Concrete Production facilities today are more complicated than ever and must be equipped to produce a wide variety of concrete. Precast production techniques using SCC, dry cast production with zero slump concrete, and color additives for concrete mixes are consistently challenging the concrete products manufacturer.

This means that the properties required for concrete products are more stringent than ever. To meet today’s tight specifications, the system must batch very accurately and account for all sources of water or the concrete may be wasted. The availability of an accurate, comprehensive moisture monitoring and water dosing system can make the difference between profit or loss.

Full featured functionality in a control system can improve the profitability of your production facilities. Automated concrete bucket delivery systems, inventory replenishment, wireless remote control, integrated color interface system controls, and robust system reliability including lightning resistance, are technologies designed to improve your bottom line.

Today’s most successful facilities are utilizing these technologies to increase productivity, improve quality control, reduce waste, and increase profits. Command Alkon has leveraged our years of practical industry experience to deliver COMMANDbatch CP, an innovative product to address the challenges of the manufactured concrete products industry.

**Specifications**
- **Size:** 75 mm (3") dia. x 60 cm (23.25") long
- **Weight:** 7.25 kg (16 lbs.)
- **Body Material:** Stainless steel
- **Face Material:** High strength ceramic
- **Measurement Range:** Depends on material composition
- **Operating Temperature:** 2° - 49° C (35° - 120° F)
- **Typical Accuracy:** +/- 0.3%
- **Connection:** 6-pin type PT06 waterproof connector
- **Cable:** 6 conductor, 24 gauge, shielded

**“With COMMANDbatch CP we have taken a clear step towards the improvement and acceleration of our production process.”**

Cliff Morgan
Potomac Construction Industries

“Command Alkon’s Moisture Probe is a proven performer. The probe is easy to install, easy to calibrate, and most importantly, provides reliable moisture measurements without further calibration load after load.”
Why COMMANDbatch CP?

- SCC Moisture Control
- Dry Cast Moisture Control
- Color Control System
- Concrete Delivery Automation
- Remote Operator Interface
- Automatic Inventory Replenishment Requests
- Process Visualization

Benefits of COMMANDbatch CP

- Increase productivity
- Reduce waste
- Improve quality
- Lower costs