Cement
Distribution
Solutions

Quality
Environmental
Solutions

Plant
Automation
Services

Comprehensive
Customer
Care

Cement Distribution Management

A Comprehensive Tool Kit for Effective Management of the Logistics of Cement Distribution

Cement **Distribution Management** from Process Solutions can help increase operating efficiency, improve customer service, and be used to provide new, differentiating alternatives for customers. Cement companies across North America, large and small, have implemented solutions based on this continuously evolving suite of software, designed with and for Cement Producers as a highly flexible and functional set of applications for management of finished cement product distribution.

Modules currently available under license include **Order Management, Loading Management, Self-Service Loading, Plant Portal Loading, Self-Service Receiving, Self-Service Ticketing, Inventory Tracking and a CDM Access API** to provide customer-designed web-based access to the system. Enhancements and extensions to the suite have been, and will continue to be developed in partnership with sponsoring cement producers.

The suite has been interfaced to several corporate financial/ERP systems, including SAP®, Marcam Solutions Inc.® Protean™ and J.D. Edwards® OneWorld™. Interfaces are customized to the requirements of the client, but data transfer methods have included EDI/file transfer, BAPI and direct data replication.

Order Management

Cement dispatch and shipping involves a number of transaction types which may not be easily handled by generic order management systems. Process Solutions' *Order Management* module has been designed with and for cement producers, and handles transactions such as preloads, diversions, third party orders and full or partial returns, as well as standard sales orders and stock transfers for both bulk and packaged materials

Utilizing a simple and intuitive Microsoft® Windows™ interface, *Order Management* users can create, track, edit and modify orders, diversions and returns for a single location, or with centralized order management, for a number of locations, such as a plant and its associated distribution terminals.

Loading Management

Process Solutions' *Loading Management* modules provide options for both **operator control** and **automated Self-Service Loading**. Operator controlled interfaces range from basic bill of lading creation with scale interface and electronic signature capture to multi-alley centralized loading control with full process interface. All *Loading Management* options provide seamless inter-operability with *Order Management*, allowing selection and assignment of previously created orders to loading alleys, or creation of a new order for customer pickups. Pick lists, Bills of Lading and Return Receipts (if required) may be formatted to client specifications. Electronic signature capture is available with every loading option, with documents saved in Adobe® Acrobat PDF format.

Simple Order Completion provides a basic scale interface to allow automated retrieval of tare and gross load weights for bulk shipments. The operator-controlled *Loading Management* module provides a comprehensive set of loading automation functions for bulk material loading, including:

- **Tare checking:** Preventing contamination by alerting the operator that a vehicle may contain retained product from a previous load
- **Automatic setting of cutoff weights** (setpoints): Preventing overloads, based on truck loading pattern and silo-specific setbacks
- **Controlled silo selection and lockout:** Ensuring that only silos containing the material specified in the order can be selected for loading.

Centralized Loading Control

Centralized loading control allows one or more operators to manage the entire process for multiple loading facilities at the same time. With video monitoring, control may be located across the plant site from the loading facility, or even in another city.

Self - Service Loading

Activated by a Radio Frequency IDentification (RFID) card, *Self-Service Loading* allows a truck driver to retrieve available loads, and automatically sets up the loading pattern and silo selection. The card may also be used for site and building access.

To load a truck, the driver follows color-coded instructions on a touch screen, and can complete the entire loading process with as few as five selections. The kiosk captures the driver's signature and prints the required number of Bills of Lading automatically.

Self - Service Loading Kiosk

Plant Portal Loading

Plant Portal Loading provides customers convenient 24/7 access to loading while optimizing the throughput capacity of loading facilities. It separates the order selection and order completion processes from the loading process in the alley.

To load a truck, the driver selects an order from a Portal Kiosk and is directed to a loading alley. The driver uses his RFID card to identify himself and uses the Autoload panel to interact with the loading process. On completing the load, the driver proceeds to a Portal Kiosk and completes the transaction by providing a signature and entering any additional data. The kiosk prints the required number of Bills of Lading.

Self – Service Receiving

Receipt of Raw Materials and other deliveries requiring scaling can be provided as an unattended function using the same basic technology as *Self-Service Loading*. An additional option is the recording of receipts in a "touchless" fashion using a long range RFID reader and vehicle tags, or mid-range swipe cards which specify the truck and production one action.

Inventory Tracking

The optional *Inventory Tracking* module provides detailed, current tracking of inventory levels in every specified storage location, as well as inventory which is in temporary and mobile locations, such as trucks, rail cars and barges.

In addition to automatic updates from the outbound transactions recorded through any of the *Loading Management* interfaces, *Inventory Tracking* provides recording of incoming deliveries and transfers and automatically calculates inventory from silo measurements. Historical trending, periodic balances and recent transaction details are also available.

Support and Maintenance Agreements

Process Solutions provides a standard 6-month warranty on all products. Extended maintenance and support agreements are also available. For bundled hardware/software products such as Self-Service Loading kiosks, warranty and extended support cover both hardware and software. The Customer Care group performs on-site installations, and provides full-time Help Desk support.

Process Solutions establishes client partnerships for the long term, through on-going working relationships that enable our customers to get the most from their existing solution(s), and at the same time help Process Solutions to further develop the portfolio by understanding and satisfying customer needs.

For More Information

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