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*Industry Specific Accounting*

*for Concrete and Aggregate Producers*

## Dispatch

User Manual and Reference



Keystone Dispatch User Manual and Reference  
Version 2.0.20.0 9/30/2007



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# Keystone<sup>®</sup> Dispatch Manual and Reference

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# SYSTEM OVERVIEW

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## Introduction

The Keystone Dispatch System is the truck dispatching module within the Keystone software suite. It handles all aspects of Dispatch, from order entry and truck tracking (with optional GPS interface), through reporting and ultimately billing via the Accounts Receivable module.

The Dispatch module features very powerful reporting capabilities, allowing analysis of driver, driver and customer efficiency and overall plant production.

This manual contains a “Key Concepts” section. Understanding these concepts is vitally important to deriving the best use of Keystone Dispatch. Please read this section thoroughly, and if a point is not very clear, please contact your GivenHansco Representative for further clarification.

---

# Key Concepts

## Foreword

**Please read the following section carefully!** The entire Dispatch system is based on these key concepts. Attempting to use Dispatch without a complete understanding of them increases the likelihood of inaccurate data.

## Adding & Editing Data

To reduce the number of screens and menu options, most Keystone screens are used for both adding new entries as well as editing existing ones.

In general, information is added less frequently than it is reviewed and edited. Keystone therefore assumes that when data entry begins, the user is looking to retrieve data rather than add something new. If a user is attempting to add data, the user must either click on the + button, or hit the **Insert** key.

## Batch Control Interface

Keystone Dispatch supports a variety of batch controls. Keystone Batch is our preferred batch control as it offers the best integration and allows support staff to run diagnostics on both systems when necessary. A wide variety of other batch controls are supported as well.

The information shared between Keystone Dispatch and your batch control can vary depending on the batch control.

In most cases, your batch control's data must be set up to match Keystone Dispatch's in such areas as customers, products (with mix designs), trucks, tax authorities, etc.

If you plan to change batch controls after your installation, you must contact GivenHansco support at least two week's in advance to avoid disruptions in your production.

## GPS (Global Position Systems) / Truck Tracking (Messaging)

Keystone Dispatch can be interfaced to many GPS or Truck Tracking systems. Keystone GPS is the preferred system, as it allows support staff to run diagnostics on both systems when necessary.

Without a GPS / Truck Tracking system, the dispatcher must manually move each truck through all phases of a pour.

## Orders & Order Entry

Orders must be entered completely and accurately in order for Keystone Dispatch to correctly project the demands of the order. Order numbers are assigned at the time of entry.

Any changes made to an order where loads have already been shipped will only impact future loads. Information on loads that have already been shipped will remain unchanged unless the ticket is voided.

Once an order has begun shipping, it cannot be deleted.

## Projected Loads

In order to build the schedule correctly, Keystone Dispatch must project the loads for each order. For example, an order for 100 CY with 10 CY per load will require 10 loads. After calculating the times based on the values provided by the user, Keystone Dispatch will have the estimates start and return time for each load and update the schedule accordingly.

Changes in load size or total yardage can impact these projected loads. For example, if the customer calls and requests an additional 30 cubic yards, an additional 3 loads will be required. Similarly, if with 20 yards remaining, the customer requests 5 CY loads, the two projected remaining loads would need to become four projected loads.

Any time there is a change to the Projected Loads, Keystone Dispatch will warn the Dispatcher and offer choices on ways to proceed.

## Truck Tracking

Keystone Dispatch tracks trucks' status through their operation (loading, leaving plant, etc.) as well as their on-time progress through each stage. Dispatchers must manually move trucks through each stage unless an interface to a GPS or truck-tracking is purchased.

---

## Data Flow

### Customer Data

Customer & billing data is maintained from the Accounts Receivable module. This relieves the dispatcher of needing to maintain customer information such as address, credit status and other data not immediately critical to the functions of dispatch.

### Pricing Data

Pricing data is similarly maintained using the Accounts Receivable module, though at the customer's option, can be turned over to the dispatcher or dispatch manager. These types of issues should be discussed with your GivenHansco Installation Coordinator.

### Order Entry

All orders are entered via Order Entry. Based on the information provided, Keystone Dispatch projects the plant and truck requirements as well as organizing the schedule to meet the needs of your customers and builds the schedule screen to keep dispatchers up to date on the day's demand.

### Delivery Tickets

As loads are dispatched, each load's delivery ticket is stored for later transfer to the Keystone Accounts Receivable system. This eliminates the need for redundant data entry by office staff.

Delivery tickets are retained until invoiced by the Accounts Receivable system, when their data is stored in a sales history file. This stored data is stored indefinitely, allowing reporting for many years in the future.

### Office Data

After processing the delivery tickets, the Accounts Receivable data is updated and used by Dispatch to assure compliance with credit limits, pricing, etc.

---

## System Startup

### Prior to installing

In order to get your Keystone Dispatch system started there are some special steps to take when you first get your system up and running.

Review your current product codes. Are they easily understood? Are they concise? Are they structured logically? Do you have multiple plants? Are your product classes split according to your reporting needs? Your GivenHansco Installation Coordinator is available to answer questions and offer advice

Gather information about your products. Review your current costs. This is also an excellent time to evaluate your pricing policies, product descriptions and minimum quantities. What product codes are obsolete? Can some be discontinued?

Now might also be a good time to consider other changes, such as fuel surcharges, short-load surcharges, off-hour delivery fees, etc.

Compile the mix designs for all your concrete products and enter them into the Components section of Product Maintenance.

Contact your GivenHansco Installation Coordinator to discuss strategies on entering your product codes into the system. We can offer advice on different strategies for coding and grouping your products.

Review for accuracy. Once a product has sales history, the product cannot be deleted. It is a very good idea to review data for accuracy prior to going live.

Gather additional information on plants, trucks and drivers.

### System setup

Data must be entered (or imported) into Keystone Dispatch. Assuming that customers, products and prices are in place, data should be entered in the following order:

1. Plant Information (*see page 40*)
2. Delivery Zones (*see page 46*)
3. Driver Information (*see page 39*)
4. Truck Information (*see page 37*)
5. Usage Classes (*see page 45*)

# MENU OPTIONS

## Menu Navigation – Dispatch

- Dispatch
  - ..... Beginning of Day
  - ..... Schedule
  - ..... Order Maintenance
  - ..... Ticket Printing
  - ..... Truck Demand Graph
  - ..... Concrete Calculator
  - ..... End Of Day
  - + File Maintenance
  - + File Lists
  - + Reports
  - + Office Functions
  - + Utilities

### Menu Overview

<b>Beginning of Day</b>	Processing to prepare for the day. Resets appropriate values to their default status.
<b>Schedule</b>	Displays the schedule screen – the heart of Keystone Dispatch.
<b>Order Maintenance</b>	Entry of new orders as well as look up existing and older orders.
<b>Ticket Printing</b>	Creates a single ticket “on the fly”, without the need to set up an order.
<b>Truck Demand Graph</b>	(Optional feature) Displays a graph showing the truck demand over the course of day.
<b>Concrete Calculator</b>	Calculates the yardage required for different shapes and dimensions.
<b>End of Day</b>	Collects ticket data for transfer to the office.
<b>File Maintenance</b>	File Maintenance Menu
<b>File Lists</b>	File List Menu
<b>Reports</b>	Reports Menu
<b>Office Functions</b>	Office Functions menu
<b>Utilities</b>	Utilities Menu

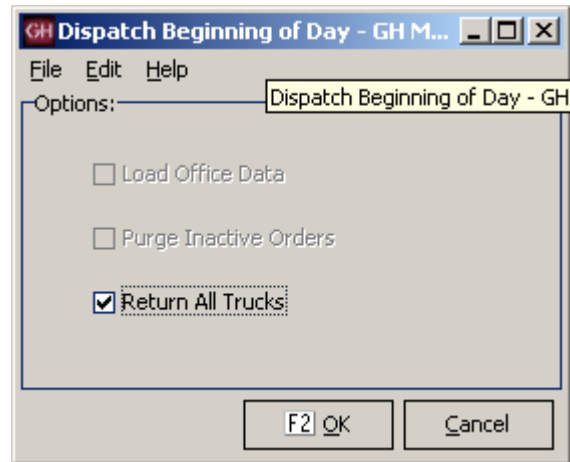
## Beginning of Day

The Beginning of Day menu option is used to prepare the database for the upcoming day such as clearing daily totals and bringing orders forward as necessary.

**Return All Trucks** – if checked (default), this option finds any trucks that may not have been clocked in from the previous night (a common problem when dispatchers leave before all trucks have returned and there is no GPS system to do this automatically).

**Load Office Data** – used by remote stand-alone sites to load the most current information from the office.

**Purge Inactive Orders** – deletes any orders flagged as Inactive.



*Beginning of Day*

## Schedule Screen

The Schedule Screen is the heart of Keystone Dispatch.

The screen is designed to give the maximum amount of information while keeping the display uncluttered.

The interface is designed to give quick access to the repetitive tasks of a dispatcher, with minimal pop-up screens and typing.

Dispatch Schedule - GH Materials

File Edit Options Help

KEYSTONE Dispatch 9/1/2007 • 05 24 Scheduling

Ordered	4 Lds	29.00
Delivered	0 Lds	.00
Remaining	4 Lds	29.00

Showing Orders for Today

WC	Customer	Order	Job ID	Mix	Qty Ord	Qty Shpd	Next	Trk	Ld	To	On Job	Pour	Wash	Rtn
	H&L Alaniz Build	1133		301635	26.00	.00	07:45							
WC	Fly-By-Night Co.	1134	TEST	201330	3.00	.00	07:45							

Order Cases

Trk Status Tr

<No data to display>

Avail Trucks Plants Clocked Out

F5 Quick Order F6 Find Truck F9 Details F11 << Status F12 Status >> Rel Trucks Refresh All Close

Schedule Screen



### Selecting Data

The Keystone Dispatch screen has been designed to maximize the space on the screen for order information.

This is accomplished by relying on sliding menus, function keys and right-click functions.

The sliding menus work by moving the mouse over the menu bar, which causes the menu to slide out. Moving the mouse off the slide-out will cause it to shrink back to the side.

By clicking on the pushpin in the top-right corner of the slide-out, the menu remains fixed in position and will not slide back.



Schedule Screen

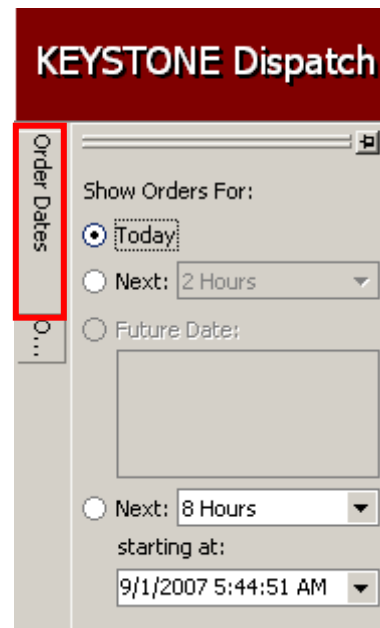
### Selecting Dates

Keystone Dispatch allows selecting of a specific date, date range, or even time slot within a date.

Clicking the Today button will automatically show all orders for today. If this list proves too long to manage, selecting the Next button allows the dispatch to limit the screen to showing orders for the next 2, 4, 8 or 24 hours.

If there are any future-dated orders, these can be selected, allowing the dispatcher to look ahead.

The final option is to click the button near the NEXT: entry, which allows the dispatcher to view a specific time window for any current or future date and time.

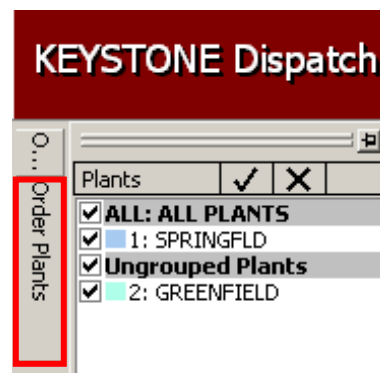


Schedule – Date Slide-out

### Selecting Plants

Keystone dispatch allows for both centralized and de-centralized dispatching even within the same office by allowing each user to select which plants' orders appear on their schedule.

Keystone also supports Plant Groups – allowing users to align plants by geography or business unit.



Schedule Screen – Plants Slide-out

# Keystone Dispatch System

## Selecting fields

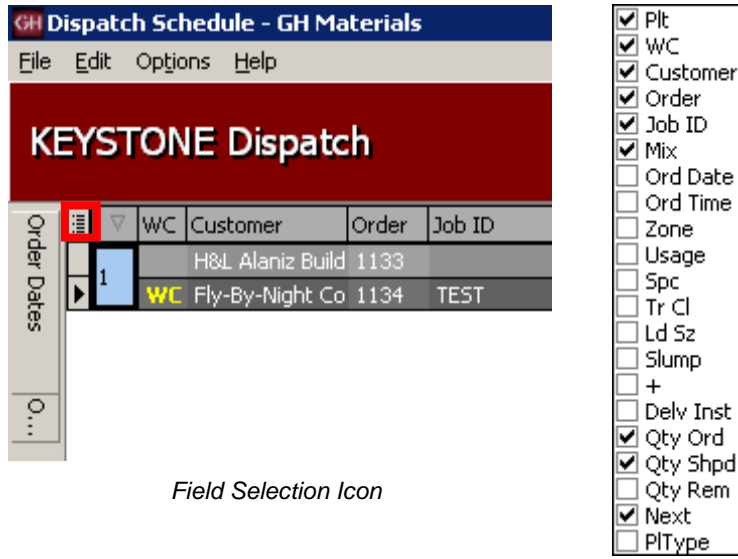
The information on the schedule screen can be customized in many ways.

One of the most popular is determining what information should appear on each line.

By default, the Plant, Will-Call Status, Customer, Order, Job, Mix, Quantity Ordered, Quantity Shipped and Next Order time are active.

Additional fields are available by clicking on the field selection icon in the top-left corner immediately to the right of the Order Dates slider.

Any field on the list can be added or removed by checking or un-checking the box, respectively.



Field Selection Icon

Field List

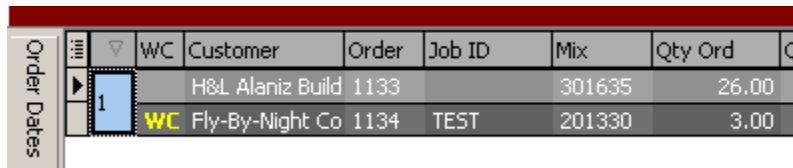
## Changing field location

The default layout for Keystone Dispatch is not the only view available to the dispatcher. By clicking on a column heading and dragging it to the new desired location, the column locations change to the desired view.

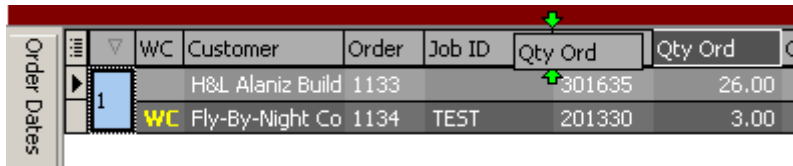
In the example to the right, the fields are aligned, the dispatcher wishes to move the Qty Ordered field immediately next to the Job Id.

By clicking on the **Qty Ord** box and holding the mouse down while moving to the left, the field moves with it.

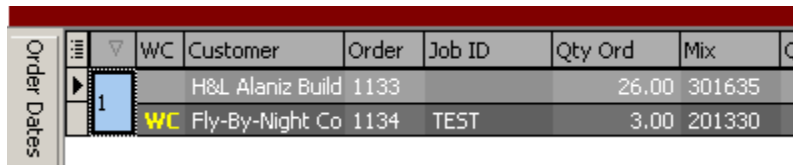
Green arrows indicate the current selected position of the field. If this is the desired location, simply release the mouse button.



Changing field location - before



Changing field location - during



Changing field location - after

## Changing order sequence

Keystone Dispatch lists orders by plant and next loading time by default.

## Order Maintenance

Order Maintenance is used to enter and/or change orders in Keystone Dispatch.

When starting Order Maintenance from the menu, dispatchers can add new orders as well as edit, copy or delete existing orders.

From the **Schedule Screen**, an order can be added by hitting the **Quick Order** button. To edit an order already on the screen, right-clicking on the order brings up an option menu containing an editing option.

Dispatch Order Maintenance - GH Materials Order Maintenance Screen

File Edit Options Help

Customer Id  +  Inactive

Order Id  +

Job Id  Slump  Phone

Plant Id  P.O.  Truck Type  Contact

Delv Date  Time  Order Status  Lot

Zone  Zone Time   C.O.D.  Plus  Block

Usage Type  Unload Time   W/C  Roll Forward  Tax Auth  Slsprn

Load Size  Spacing   Print Prices  Print Weights  Balance

Products | Delivery Info | Dispatch Warning | Times | Notes | History | Events | Loads | Warnings

Product Id	Description	U/M	Qty Ord	Qty Delv	Unit Price	Unit Disc	Tax
<No data to display>							

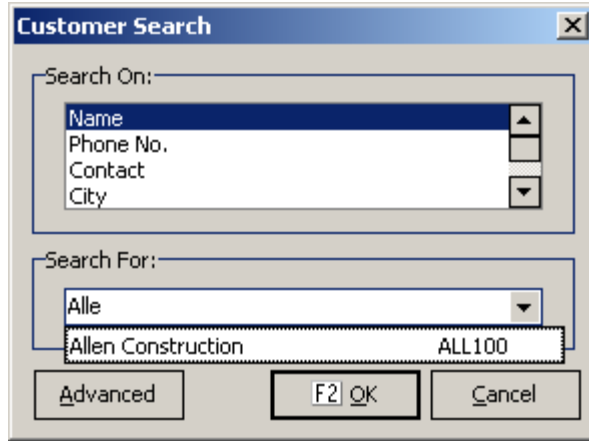
Sub Total .00      Sales Tax .00      Order Total .00

F5 Comment   Reprice   Copy Order   F3 Delete   F12 Print   Recalc   F2 OK   Cancel

# Keystone Dispatch System

## Customer Id

The first piece of information Order Maintenance requires (whether adding a new order or editing an existing order) is the customer who is being billed for the material.



Customer Search Pop-Up Screen

## Order Id

When entering a new order, this field is bypassed and the word “new” appears (Keystone Dispatch does not assign an Order Id for new orders until the order is saved).

When editing an existing order, the user can key in the Order Code if it is known.

Another option is use the dropdown and scroll through the orders (see example).

Order Id	678	Westfield	MA	01085
Job Id	678	1ST & SAVANNAH	352635	4/20/2007
Plant Id	700	1ST & SAVANNAH	352635	4/25/2007
Delv Date	741	1ST & SAVANNAH	352635	4/26/2007
Zone	776	1ST & SAVANNAH	352630	4/30/2007
Age Type	803	BURNS SUBD	301635	5/2/2007
Load Size	838	703 HIGHWAY 83	302645	5/4/2007
	896	1705 TOLEDO	302645	5/10/2007
	918	EAST MOORE	302645	5/11/2007
	954	1705 TOLEDO	302645	5/15/2007
	966	1705 TOLEDO	302645	5/17/2007

Order Id Dropdown List

Another powerful option is to do an Order Search by hitting the F4 function key.

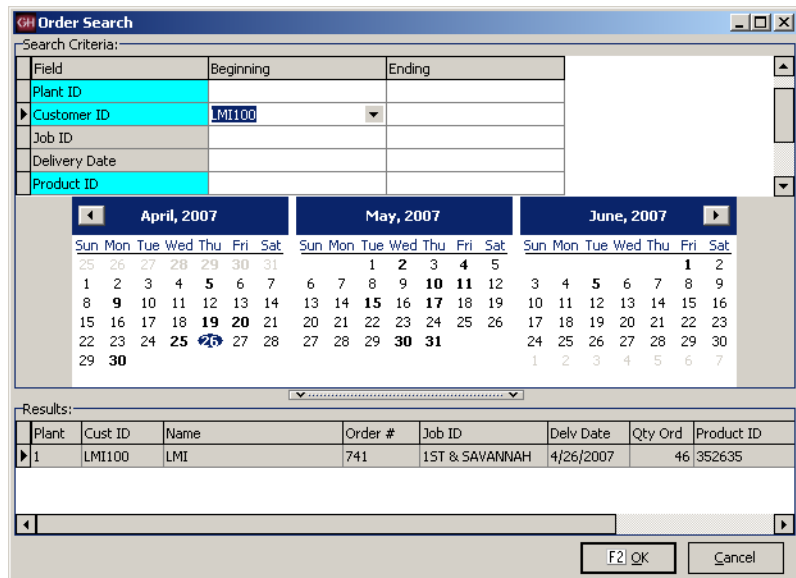
This will bring up a screen allowing the user to search for specific orders by supplying information to target specific orders.

The most common way to look up old orders is by delivery date. A calendar is displayed in the middle of the screen. Any days that the customer placed an order appear in bold. By clicking on a date, orders for that date appear below.

In the example to the right, customer LMI has had orders 5, 9, 19, 20, 25, 26 and 30 of April. The user has clicked on April 26, so the system displays Order 741.

A range of orders can also be selected by entering the starting and ending date range in the section above the calendar.

Additional information such as Plant, Job Id and Product can also be used to filter out the orders.



Order Search Screen

## Job Id

This field contains a list of all pre-negotiated priced jobs in Keystone. By selecting one of these specially-priced jobs, materials will automatically receive the agreed upon price. This relieves the dispatcher from needing to know all special prices.

In the example to the right, LMI has two current special-priced jobs.

Note: Even if a pour is not receiving special prices, this field should be filled in, as invoices produced in the Accounts Receivable module will reference this Job Id.

*Job Id Dropdown List*

## Additional Data Entry Fields

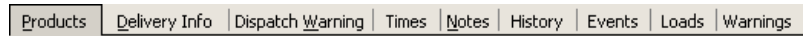
Field Name	Description / Usage
<b>Plant Id</b>	The <b>primary</b> delivery plant is specified in this field. Other plants may be used to dispatch this order as well.
<b>P.O.</b>	Purchase Order numbers should be entered here. Note: If a specially-priced job has a PO assigned, this number will automatically be assigned when the Job Id is specified. This field can also be used for Lot #'s for customers desiring separate invoices for each lot within a development.
<b>Delv. Date</b>	Enter the delivery date in this field. Delivery Dates can be entered for today or any point in the future. Any attempt to date an order in the past will generate a warning.
<b>Time</b>	Enter the first <b>on-site</b> time for this order. Keystone Dispatch will automatically calculate the batch time based on other fields entered later. The time field uses military time (eg: 3:00pm is 1500), and should be entered as a number without any punctuation.
<b>Zone</b>	This field indicates the delivery zone for the order.
<b>Zone Time</b>	This field receives its default value from the entry made in the Zone field, however may be overridden.
<b>Usage Type</b>	The type of pour greatly influences the time an order requires. Usage Type indicates the type of pour, and builds the discharge rate into the time estimations.
<b>Unload Time</b>	This field receives its default value from the entry made in Usage Type, however may be overridden.
<b>Load Size</b>	This is the default load size for each order. Each order can be overridden as needed, however the assumption is that each load will be the size specified here.
<b>Spacing</b>	This value represents how often a new should be sent to the job. If this field is left blank, Keystone Dispatch will adopt a one-at-a-time dispatch schedule, only sending out a truck when the last truck returned.
<b>Slump</b>	If a specific slump is required, or needs to be printed, enter the slump here.
<b>Truck Type</b>	For plants with both front and rear discharge mixers, this field can be used to specify a preferred mixer type.
<b>Order Status</b>	<b>Open</b> is the default order status for any current order. <b>Closed</b> orders are orders which will not receive any more loads.

## Keystone Dispatch System

	<p><b>Completed</b> status is assigned by End-Of-Day processing when an order's delivered quantity matches or exceeds the ordered quantity.</p> <p><b>Cancelled</b> status is for orders which are cancelled prior to receiving any material.</p> <p><b>Hold</b> status represents orders which are not currently shipping, but are expected to resume.</p>
<b>C.O.D.</b>	The COD flag is automatically set for any COD customers. This automatically triggers the printing of prices on the delivery ticket. In addition, these delivery tickets will not be subject to office re-pricing.
<b>Plus</b>	When an order ships enough material to match the quantity ordered, it is no longer displayed on the order stack. By flagging an order as a plus order, it indicates that the quantity ordered is more of an estimate, and these orders will remain on the schedule.
<b>W/C</b>	This field is used to indicate WILL CALL orders. Will Call orders appear on the schedule screen with a status indicating that it is not a firm order.
<b>Roll Forward</b>	<p>Most orders entered into Keystone Dispatch are for a single day. At the end of the day, even if not completed, the orders disappear from the schedule screen.</p> <p>Roll Forward orders stay on the schedule screen until their delivery quantity is met, whether that takes an extra day or an extra month.</p>
<b>Print Prices</b>	<p>Checking this box triggers the printing of prices on the delivery ticket.</p> <p>Note: Some installations are set to automatically print prices on all tickets.</p>
<b>Print Weights</b>	<p>Checking this box triggers the printing of batch weights on the delivery ticket.</p> <p>Note: Some installations are set to automatically print batch weights on all tickets.</p>
<b>Phone</b>	This field contains the customer's phone number. It can be changed to an on-site cell phone number if desired.
<b>Contact</b>	This field contains the customer's contact name. It can be changed to the on-site foreman if desired.
<b>Lot</b>	This field is used for lot numbers for large development projects. In Keystone Accounting, the priority for invoices is Job Id, PO #, Lot and Block. If there is no PO # associated with a job, it is recommended that the Lot be used in the PO # field.
<b>Block</b>	This field tends to be used instead of Lot #, and is used for large development projects such as shopping centers or single-structure, multiple-housing units.
<b>Tax Auth</b>	This contains the Tax Jurisdiction where the job is located. While most jurisdictions levy sales taxes based on the delivery location, some are based on the plant location.
<b>Slsbn</b>	This field contains the salesperson code.
<b>Balance</b>	<p>This field is maintained by Keystone Dispatch and contains the running dollar balance of the order.</p> <p><i>Note: Tickets are subject to change during billing, so it is not recommended to quote this number to customers as the current balance.</i></p>

**Information Tabs**

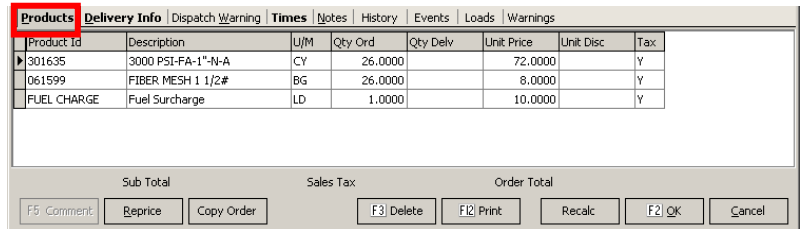
Due to the very large amount of information that some orders require, tabs are used to organize the data.



Order Maintenance Information Tabs

**Products Tab**

The data on this tab contains information about the material and surcharges on each truck.



Products Tab Screen

Field Name	Description / Usage
<b>Product Id</b>	Enter the product(s) to be shipped in this field.
<b>Description</b>	The product description is filled in from the product code. Any description can be overridden, with the overridden text appearing on the ticket and invoice. This is especially useful for customer who wish to see something unusual (such as cement content) on the description without having to create a special product.
<b>U/M</b>	The Unit of Measure field is filled in from the product code.
<b>Qty Ord</b>	This field contains the quantity ordered for individual products. Some products such as a fuel surcharge or an off-hour delivery fee are assessed per load, in which case the quantity ordered will be 1.
<b>Qty Delv</b>	This field contains the quantity delivered so far. Keystone Dispatch automatically updates this value.
<b>Unit Price</b>	This is the unit price for the material. This price can vary by customer and job. <i>Note: The price may not appear on all systems.</i>
<b>Unit Disc</b>	This is the per-unit discount for the material based on prompt payment. <i>Note: The price may not appear on all systems.</i>
<b>Tax</b>	This field indicates if a product or service is taxable. A value of "Y" indicates sales tax will be assessed on the product/service. A numeric code (1 – 9) indicates there is no sales tax for that line.

# Keystone Dispatch System

## Delivery Info Tab

This tab is used for delivery information. The Ship To fields are used for invoicing, while the Delivery Instructions are directions to the job site.

The Comments and Notes section are used for extra space that may be included on delivery tickets on request.

Delivery Info Tab Screen

## Dispatch Warning Tab

Any entries made in here will pop-up as soon as any attempt is made to dispatch a load on the order. This can be used for important delivery instructions, changes required (additives on certain loads, etc.) or any other critical piece of information for the dispatcher.

The **Show Dispatch Warning** checkbox allows enabling/disabling the warning without having to clear any warning already in place.

Dispatch Warning Tab Screen

## Times Tab

The times tab is used as the basis for calculating the timing of events for this order. All the times on this tab will use the default values established for the plant, but may be overridden if necessary here.

Times Tab Screen

## Notes Tab

The notes tab is a free-form box which can be used to take notes about the order. None of the information on the tab will be displayed on any delivery screens or tickets.

Notes Tab Screen

## History Tab

The history of each order's shipments is contained on the history tab. It contains the ticket number, date and time of each dispatched load. If a ticket is later voided, a checkbox to the right indicates the voided status.

Until end of day processing, the Dispatcher can edit any non-voided ticket by double-clicking on the ticket number.

Ticket No.	Ticket Date	Ticket Time	Void
42254	5/17/2007	11:54	<input type="checkbox"/>
42250	5/17/2007	10:24	<input type="checkbox"/>
42247	5/17/2007	9:15	<input type="checkbox"/>
42245	5/17/2007	9:03	<input type="checkbox"/>
42244	5/17/2007	8:55	<input type="checkbox"/>

History Tab Screen



### Events Tab

Any time an order is changed, the events tab logs it. In the example to the right, the load size was changed from 0 to 9 by Jeff at 11:19. Two minutes later, the order quantity was changed to 20 yards.

Several hours later, Javier apparently noticed an incorrect price in the order, and changed it from \$69.00 to \$68.00.

This logging takes place automatically. The **Order Audit Trail** report can be run to track all order events.

Type	Event Date/Time	Field Name	Old Value	New Value	User ID	Comment
FC	5/23/2007 11:19 AM	LOAD_SIZE	0	9	JEFF	
FC	5/23/2007 11:21 AM	QTY_ORDERED	0	20	JEFF	
FC	6/4/2007 3:31 PM	UNIT_PRICE	69	68	JAVIER	

Sub Total **1390.00**      Sales Tax **114.68**      Order Total **1504.68**

F5 Comment   Reprice   Copy Order   F3 Delete   F2 Print   Recalc   F2 OK   Cancel

Events Tab Screen

### Loads Tab

When an order is saved, Keystone Dispatch projects the individual loads required to fill the order. In the example to the right, a 26 yard order was entered with a maximum load size of 9 cubic yards at 45 minute intervals beginning at 6:00. Keystone Dispatch determined that three loads were necessary, and set the load size and schedule as shown.

Load #	Load Size	Pk. No	Trk No	Schedule Date/Time	Message Alert
1	9	1		9/1/2007 6:00 AM	
2	9	1		9/1/2007 6:45 AM	
3	8	1		9/1/2007 7:30 AM	

Sub Total **1882.00**      Sales Tax **155.27**      Order Total **2037.27**

F5 Comment   Reprice   Copy Order   F3 Delete   F2 Print   Recalc   F2 OK   Cancel

Loads Tab Screen

### Warnings Tab

The Warnings tab contains messages generated by Keystone Dispatch alerting the user of changes or unusual settings.

In the example to the right, it recorded that the unit price and zone had both been changed since the order was initially entered.

If an order contains inaccurate information, this tab often helps the dispatcher find the problem quickly.

Products	Delivery Info	Dispatch Warning	Times	Notes	History	Events	Loads	Warnings
Information: The unit price has been changed. Information: The zone has been changed.								

Sub Total **1856.00**      Sales Tax **153.12**      Order Total **2009.12**

F5 Comment   Reprice   Copy Order   F3 Delete   F2 Print   Recalc   F2 OK   Cancel

Warnings Tab Screen

### Control Buttons / Function Keys

F5 Comment   Reprice   Copy Order   F3 Delete   F2 Print   Recalc   F2 OK   Cancel

Control Buttons / Function Keys

#### F5 Comment

This button is only highlighted while entering data in the products tab. This allows the dispatcher to enter comments in the product area of the delivery ticket.

#### Reprice

Clicking this button reprices the delivery ticket based on the latest pricing available for the product, customer or job. This is especially useful when copying old orders.

## Keystone Dispatch System

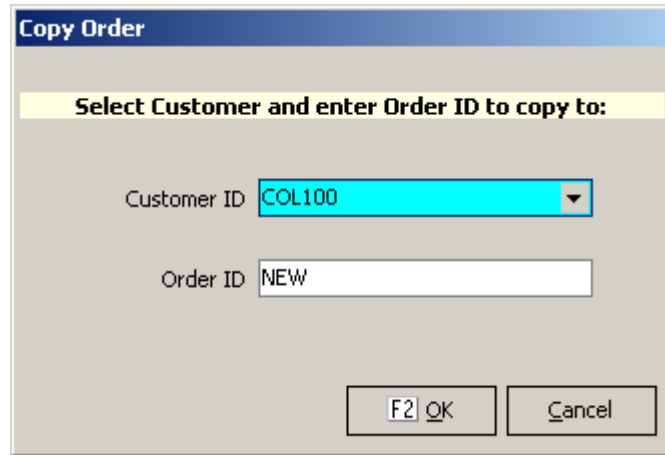
### Copy Order

This button allows the dispatcher to bring the same order information from one day to another or one customer to another without re-keying and while allowing changes.

After bringing up the order to be copied and hitting the Copy Order button the screen to the right appears allowing the dispatcher to choose the customer to copy the order to.

The order is then copied, and the dispatcher can make changes as necessary before saving it.

*Note: It is recommended that the dispatcher click the REPRICE button after copying an order if the prices may be subject to change from the original order.*



Copy Order Screen

### F3 Delete

The Delete button erases the order from the system completely. Once a load is shipped on an order, it cannot be deleted and should instead have its status changed.

### F12 Print

This button prints a summary of the order, with product information, delivery instructions and estimated times.

*Note: The layout of this print-out can be customized if necessary.*

### Recalc

When an order is entered and saved, Keystone Dispatch projects the loads necessary to complete the order.

If changes are made to the quantity ordered or load sizes, this can change the number of loads required to complete the job.

This button is used to recalculate the projected loads to complete the order.

### F2 OK

This button saves all changes.

### Cancel

This button cancels changes made to the existing order, or cancels the entire order if it had not already been saved.

## Ticket Printing

The Ticket Printing option from the Keystone Dispatch menu is intended for single-load orders that are not scheduled.

This streamlined method of generating a delivery ticket does not require setting up and order in Order Maintenance. Tickets generated in this manner are currently not included in the Schedule Screen.

For information about the data that must be entered into the fields, please see page 19 (*Additional Data Entry fields*).

**Dispatch Ticket Printing - GH Materials - Plant 1**

File Edit Options Help

Customer Id: FLY100 Fly-By-Night Construction  
 Ticket No.: NEW 7921 Riverdale St.  
 West Springfield MA 01089

Job Id: 392 ELM ST. Zone: 20 Ticket Date: 9/1/2007  C.O.D  
 Customer P.O.: Miles: 0 Ticket Time: 9:34  
 Tax Authority: MA Salesperson: BK  
 Truck Id: 32 Elapsed Time: Lot:  
 Driver: KEVIN Slump: Block:

Produ... Delivery Info Times Notes

Product Id	Description	U/M	Qty Sold	Unit Price	Unit Disc	Tax
▶ 3000PERFCG	3000 PSI Concrete Curb & Gutter	CY	6.0000	78.0000		Y
FUEL CHARGE	Fuel Surcharge	LD	1.0000	10.0000		Y

Sub Total **478.00** Sales Tax **23.90** Ticket Total **501.90**

F5 Comment Reprice F6 On-Hand F2 OK Cancel

Ticket Printing Screen

## Truck Demand Graph

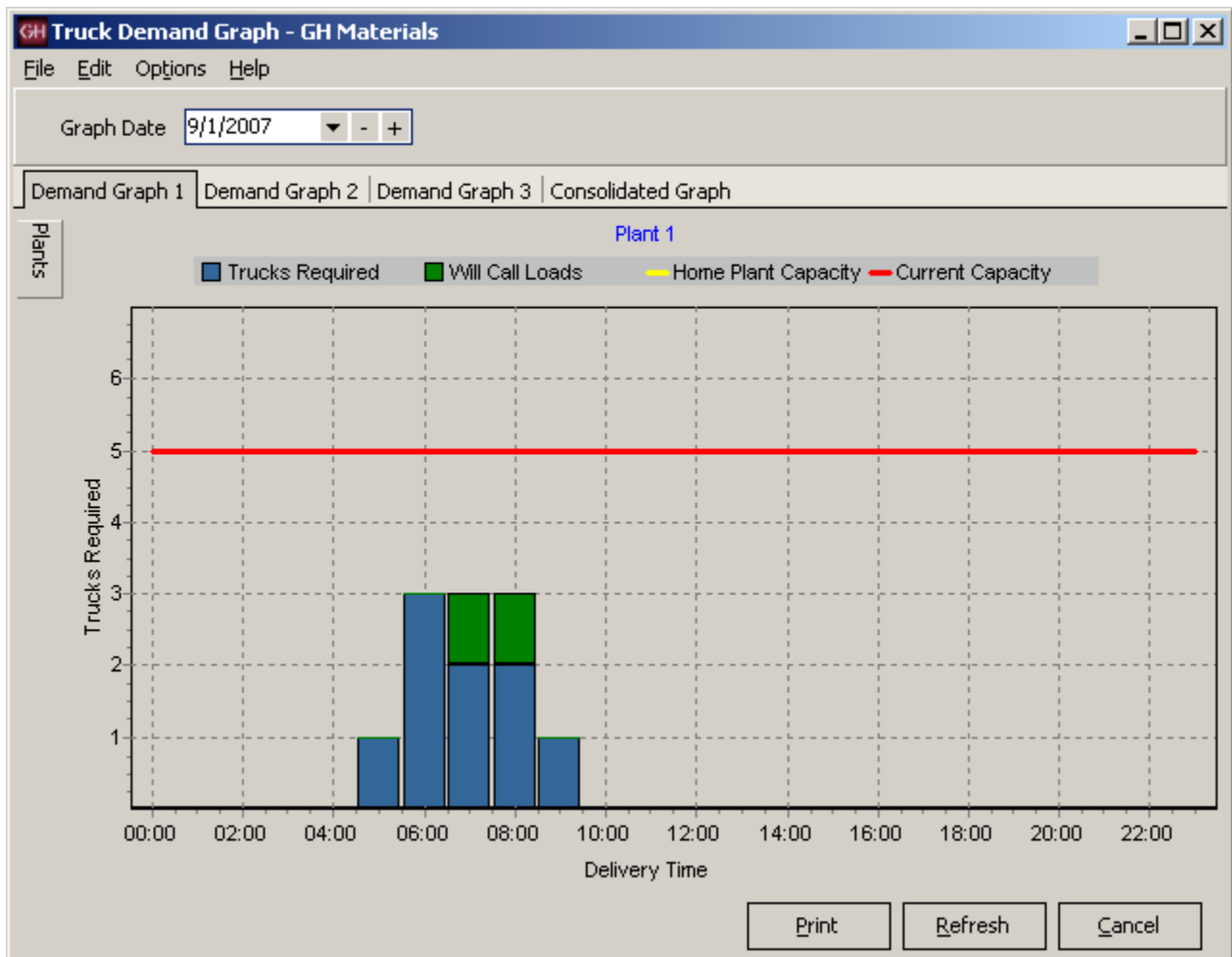
(Optional Feature)

The Truck Demand Graph is designed to be a visual aid in projecting the number of trucks required throughout the day to meet the scheduled demand.

The modest Saturday example below shows a firm need (represented by the blue bar) for one truck at 5:00, increasing to three trucks from 6:00 and 7:00, decreasing to two trucks at 8:00 and only one truck needed for 9:00. There is also the potential need for a truck to service a will-call order (represented by the green bar) from 7:00 through 8:00.

Lines are also plotted to represent the home plant capacity (number of trucks assigned to the plant), as well as the current capacity, which may rise or fall as trucks are loaned or borrowed between plants.

This program allows for three individual graphs, allowing the Dispatcher to monitor three separate sets of demand, as well as a consolidated graph, which shows overall demand at all selected plants.



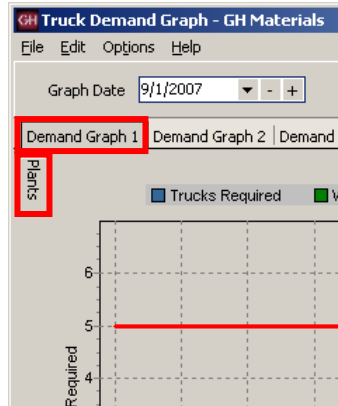
Truck Demand Graph Screen

### Plant Selection

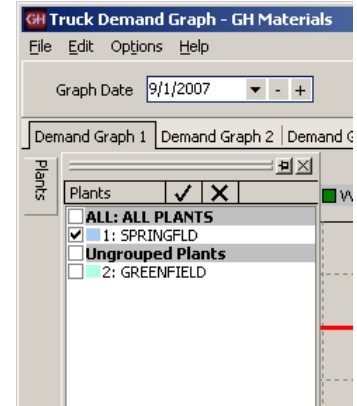
To determine which plants appear on each tab, begin by selecting the tab desired (in the example to the right, it is Demand Graph 1).

To assign plants to this tab, move the mouse over the tab labeled **Plants** (see figure 1) - clicking is not required.

A menu will slide out (see figure 2) allowing the user to select which plants should be shown on the graph.



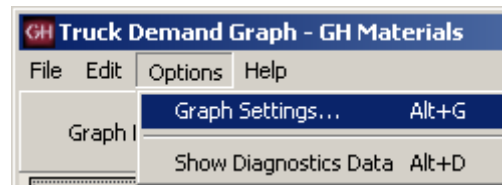
Plant Slider Bar – Fig. 1



Plant Slider Bar – Fig. 2

### Graph Settings

The Truck Demand Graph can be customized by the dispatcher to give the



Changing the Graph Settings

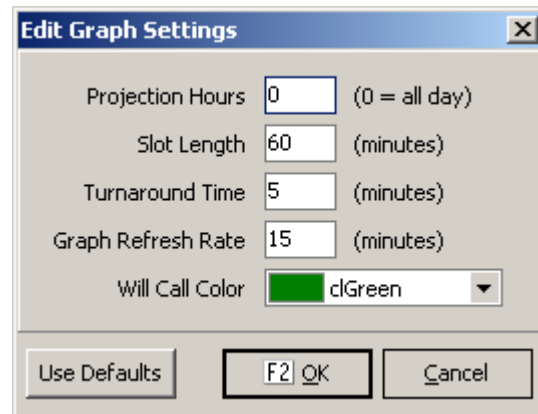
**Projection Hours** determines how much of the current day to show. Entering a two in this field will show the graph for the current time through the next two hours.

**Slot Length** determines the amount of time indicated by each graph bar. In the example above, 60 minute slots were used.

**Turnaround Time** is the amount of preparation time required for a returning truck to be ready for its next load. For example, if a truck is returning at 8:05, it may not be ready to receive its next load for 5 minutes, so a load scheduled to depart at 8:07 couldn't rely on using that truck, while a load at 8:15 could.

**Graph Refresh Rate** is how often the Truck Demand Graph is recalculated.

**Will Call Color** is the color used on the graph to differentiate firm orders from will-call orders.



Graph Settings Screen

# Keystone Dispatch System

## Diagnostic Data

The graph is plotted based on the projected loads generated from Order Maintenance.

By clicking on **Options** and **Show Diagnostics Data**, additional tabs will appear allowing the Dispatcher to review the calculated data.

The demand is determined by adding new orders within the time slot to existing loads already in transit.

From this number, deductions are made for trucks returning in time to take another load within the time slot.

For each time slot, a total is generated for the following categories:

**Turnaround** is the number of trucks that are returning within a time slot that will be ready to take another load within that time slot.

**Inbound** represents the number of trucks that are returning to the plant, but will not be back in time to take another load within the time slot.

**Outbound** is the number of new loads that are being dispatched within that slot.

**Required** is the number of firm orders being dispatched within that slot.

**Will Call** is the number of will-will orders being dispatched within that slot.

The **Depart Data** and **Return Data** contain the data from each load (ordered by departure time and return time, respectively).

The Diagnostics tabs will disappear the next time the Truck Demand Graph is refreshed.



*Showing the Diagnostics Data*

The image shows the main window of the application. The 'Graph Date' is set to 9/1/2007. The 'Graph Data' tab is selected, displaying a table with the following data:

PLANT	BEGIN TIME	SLOT TIME	TURNAROUND	INBOUND	OUTBOUND	REQUIRED	WILL CALL
1	9/1/2007	0	0	0	0	0	0
1	9/1/2007 1:00:00 AM	100	0	0	0	0	0
1	9/1/2007 2:00:00 AM	200	0	0	0	0	0
1	9/1/2007 3:00:00 AM	300	0	0	0	0	0
1	9/1/2007 4:00:00 AM	400	0	0	0	0	0
1	9/1/2007 5:00:00 AM	500	0	0	1	1	0
1	9/1/2007 6:00:00 AM	600	0	0	2	3	0
1	9/1/2007 7:00:00 AM	700	0	1	0	3	0
1	9/1/2007 8:00:00 AM	800	0	1	0	2	0
1	9/1/2007 9:00:00 AM	900	0	1	0	1	0

At the bottom of the window, there are buttons for 'Print', 'Refresh', and 'Cancel'.

*Diagnostics Data Screen*

### Timeslot Order detail

By double-clicking a graph bar on the Truck Demand Graph, the dispatcher can view all activity within the timeslot.

A screen will open with an upper and lower half representing Outbound and On Job orders respectively.

### Outbound Loads

These are orders that are being dispatched within this time slot. These orders are color-coded to represent how the order is serviced.

A white entry means that a new truck is required – there are no returning trucks within this timeslot which can dispatch this order in time.

A green entry means that there is a truck returning within this time slot which will be able to take the load and depart on time.

### On Job Loads

The bottom half represents trucks that are already on jobs, as well as trucks that are returning to the plant. These entries are also color-coded.

A white entry represents a truck that is on a job and is not scheduled to return within this time slot.

A yellow entry indicates an truck that is returning to the plant within this time slot, but will not be back in time to

A green entry is used to show a truck that is returning within this time slot that will be back in time to take another load within this timeslot.

Outbound Orders								
Outbound Loads: 2					<input checked="" type="checkbox"/> A returning truck can take this load. <input type="checkbox"/> There is no returning truck in this slot for this load.			
Scheduled	Plant	Order No.	Will Call	Load #	Quantity	Customer	Job Id	Due Back
9/1/2007 6:07:00 AM	1	1133	N	2	9	H&L Alariz Builders		9/1/2007 8:20:00 AM
9/1/2007 6:53:00 AM	1	1133	N	3	8	H&L Alariz Builders		9/1/2007 9:05:00 AM

Loads on Job: 1      Turnaround: 0								
Due Back	Plant	Order No.	Will Call	Load #	Quantity	Customer	Job Id	Departed
9/1/2007 7:35:00 AM	1	1133	N	1	9	H&L Alariz Builders		9/1/2007 5:22:00 AM

Truck is returning in time to take another load in this slot.  
 Truck is returning too late to take another load in this slot.  
 Truck is returning outside this slot.

F2 OK

*Timeslot Order Detail*

## Concrete Calculator

Like most dispatch systems, Keystone Dispatch is equipped with a concrete calculator.

Unlike other dispatch systems, Keystone Dispatch's concrete calculator can be used to calculate both the individual pieces of the job as well as the total yardage of a job.

GH Unit Calculator - GH Materials

File Help

Shape: Wall/Slab, Quantity: 1, Length: 40, Width: 80, Thickness: 9

Yards Required: 88.89

Buttons: Add, Clear, Grand Total

SHAPE	QUANTITY	LENGTH (ft)	WIDTH (ft)	HEIGHT (ft)	THICKNESS (in)	YARDS
<No data to display>						

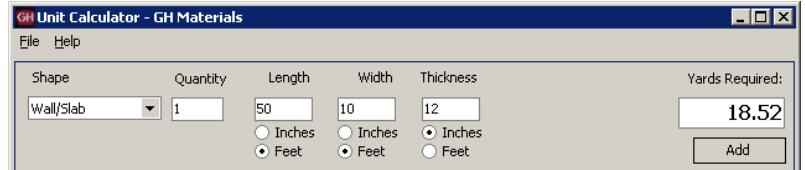
Concrete Calculator Screen



### Calculating volume

Calculating the volume of material needed is as simple as determining the shape, quantity and dimensions.

As the numbers are entered, the yards required is calculated and displayed (approximately cubic yards), allowing the dispatcher to change dimensions quickly.



Calculating Volume – individual component

### Job Totaling

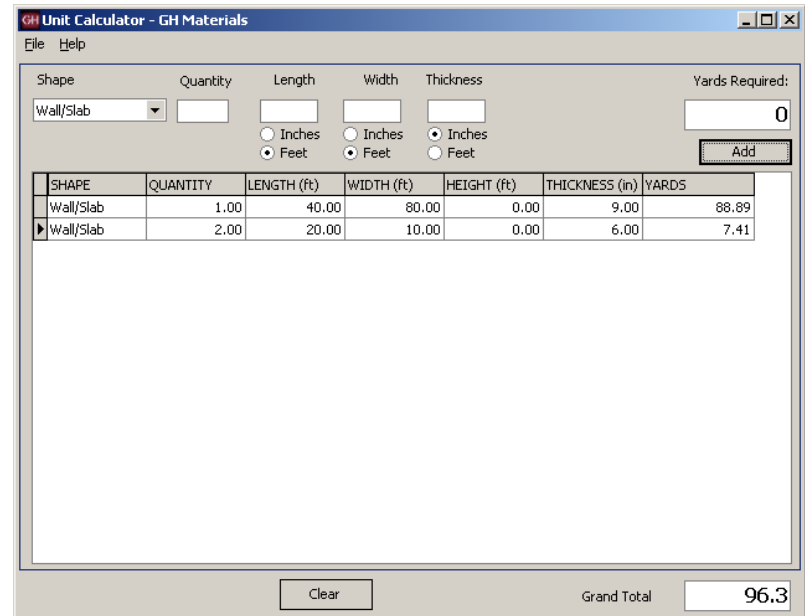
What is particularly useful with Keystone’s Concrete Calculator is the ability to enter each component individually, but have them tallied for a job total.

In the example to the right, in addition to the 40 x 80 slab, two additional slabs, measuring 20 x 10 are also required.

After entering the dimensions for the larger slab, the dispatcher clicked on the Add button, then entered the second dimensions and added that as well.

The result is shown to the right. All three slabs are shown, with the grand total of 96.3 yards required.

The totals can be cleared by clicking the **Clear** button.

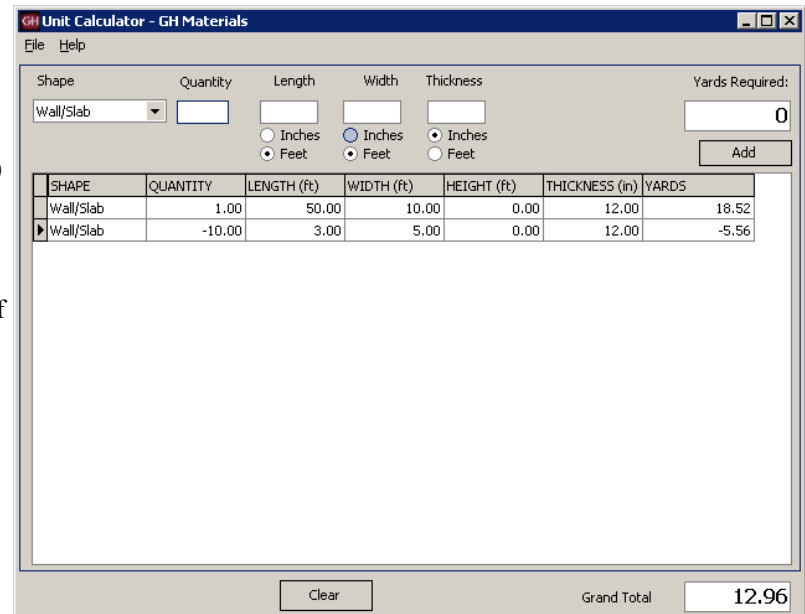


Job Totaling

The Concrete Calculator also accepts **NEGATIVE** quantities to yield negative yardage. This can be helpful in calculating openings in a shape.

In the example to the right, a wall measure 50 feet by 10 feet and 12 inches thick requires about 18.5 cubic yards.

If there are ten windows measuring 3 feet by 5 feet, that’s approximately 5.5 cubic yards of material not required. By doing the first calculation, then doing the window calculations using -10, the accurate figure of 13 yards is derived.



**Other Shapes**

There are many shapes supposed by the Concrete Calculator, each with different measurements. Most measurements can be entered in either feet or inches as needed. In addition to Wall/Slab, the following shapes are available:

**Wall/Slab** – Quantity represents the number of slabs, while Length, Width and Thickness are measurements of the slab itself.

**Column** – Quantity represents the number of columns required. Measurement type can be set to either *Diameter* or *Radius* of the column with the appropriate value, as well as the height of the column.

**Pipe** – This unit works similarly to column, except there is an additional field called thickness which represents the thickness of the walls of the pipe.

**Foundation** – This shape is designed to be a shortcut in calculating the amount of concrete required for a calculation. It requires the Length, Width and Height of the four walls, as well as the thickness of the wall. The calculation does not include the slab.

**Steps** – This shape is used for building a solid staircase. The quantity represents the number of individual steps. Tread Width, Tread Height and Width of the steps are also required.

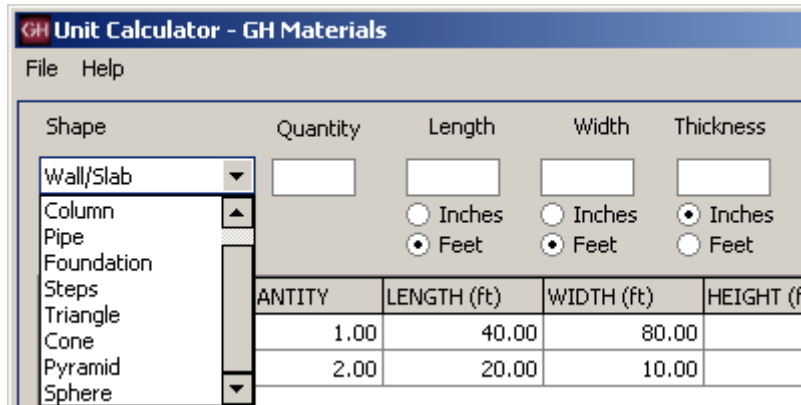
**Triangle** – This calculation requires Length and Width and Thickness of the concrete.

**Cone** – Cone calculation are similar to column calculations, with a volume reduction

**Pyramid** – Length, Width and Height measurements are required for this shape.

**Sphere** – The measurement type (diameter or radius) and accompanying measurement is all that is required for the solid sphere.

To derive the area for a hollow sphere, calculate the volume based on the outer measurement, and then use a negative value for the inner measurement.



Shape Selection Screen

## End of Day

End of Day processing serves several purposes in Keystone Dispatch.

It's primary function is to prepare the delivery tickets export to the Keystone Accounts Receivable system. Once tickets are exported, they may no longer be re-printed, edited or voided. While the delivery tickets are no longer available to the dispatcher, the orders that generated the delivery tickets remain in the system.

**Dispatch End of Day - Ticket Transfer - GH Materials**

File Edit Help

Printer Name: \\svw2k1\HP LaserJet 4000 Series P5 Properties...

Report Sequence: Customer Id, Job Id, Ticket Date, Ticket No.

Field	Beginning	Ending
Ticket Date		
▶ Plant Id		

**Options**

Print Material Usage Report

Show 8 Inch Equivalence

**Product Totals:**

None

Units of Measure

Product Summary

F12 Print F11 Preview Cancel

End of Day Screen

# Keystone Dispatch System

## Report Sequence Options

The End of Day prints a copy of all tickets. By changing the Report Sequence, dispatchers can generate the report in the most appropriate order for their needs.

Report Sequence	Customer Id, Job Id, Ticket Date, Ticket No.
Selection Criteria	Customer Id, Job Id, Ticket Date, Ticket No. Customer Id, Ticket Date, Ticket No. Customer Id, Plant Id, Job Id, Ticket Date, Ticket No. Plant Id, Customer Id, Job Id, Ticket Date, Ticket No. Plant Id, Customer Id, Ticket Date, Ticket No. Plant Id, Ticket No. Ticket No.

Report Sequence Screen

## Additional Report Options

By checking the appropriate selections on the Options tab, additional information can be included on the report.

### Material Usage Report

Checking this box generates an additional report at the end of the ticket list showing the raw material usage (sand, stone, cement, etc.)

Print Material Usage Report

Show 8 Inch Equivalence

### Show 8 Inch Equivalence

Primarily used for block & brick, this generates a report of block in 8 inch equivalences.

### Product Totals

This optional report can generate a summarized or detailed list of products.

When **Units of Measure** is selected, End of Day generates a grand total of yardage.

When **Product Summary** is selected, the report contains each product, the total of each product, as well as a grand total.

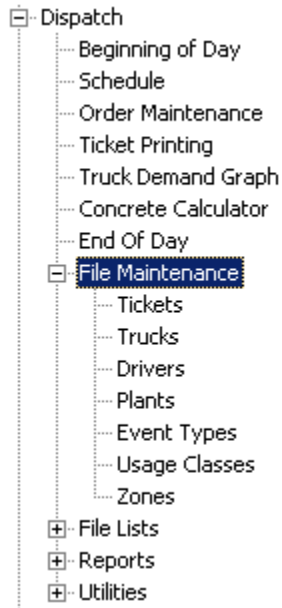
Product Totals:

None

Units of Measure

Product Summary

## Menu Navigation – File Maintenance



### Menu Overview

<b>Tickets</b>	Dispatchers can edit delivery tickets using this option.
<b>Trucks</b>	Using Truck Maintenance, users can add new trucks, as well as changing status, reporting and defaults of existing trucks.
<b>Drivers</b>	Editing of driver information is done through this option.
<b>Plants</b>	Plant setup values are stored in Plant Maintenance. Values here have a major impact to Keystone Dispatch and great care should be taken when making changes.
<b>Event Types</b>	Changes to an order are tracked as events. The type of changes tracked are discussed here.
<b>Usage Classes</b>	Different types of pours (eg: slab, curb, etc.) and the time required to service the job are defined within Usage Classes.
<b>Zones</b>	Delivery Zones and their impact on transit times are reviewed here. For additional information on Delivery Zones, see Appendix A ( <i>see page 73</i> ).

## Ticket Maintenance

Delivery tickets are created when the load is batched. This does not necessarily mean the information on the ticket is accurate or complete. Ticket Maintenance allows dispatchers an opportunity to correct delivery tickets. Information can be changed (eg: correcting Job Id), or new products added (eg: excess on-site time).

The editing screen looks identical to the screen opened when the delivery ticket is first created to make editing easier.

**GH Dispatch Ticket Maintenance - GH Materials**
\_ □ ×

File Edit Help

Customer Id	EFF100	Efficiency Homes Designs
Ticket No.	43040	115 Colonial Dr. Hatfield MA 78504

Ticket Date	9/1/2007	Truck Id	80	Ticket Time	9:36	<input type="checkbox"/> C.O.D
Plant Id	1	Driver	KEVIN	Salesperson	JH	<input type="checkbox"/> Void
Job Id	EAGLE RIDGE	Zone	25	Elapsed Time	:72	
Customer P.O.		Miles	0	Lot		
Tax Authority	MA			Block		

Products
Delivery Info
Times
Notes

Product Id	Description	U/M	Qty Sold	Unit Price	Unit Disc	Tax
▶ 302645	3000 PSI 4.5 Sk.+R-A	CY	9.0000	67.0000		Y
FUEL CHARGE	Fuel Surcharge	LD	1.0000	10.0000		Y

Sub Total <b>613.00</b>	Sales Tax <b>30.65</b>	Ticket Total <b>643.65</b>
-------------------------	------------------------	----------------------------

F5 Comment	Reprice	F3 Delete	F12 Print	F2 OK	Cancel
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Truck Maintenance Screen

## Truck File Maintenance

Keystone Dispatch must have some basic truck information in order to run the dispatching schedule.

The only three *required* fields are **Truck Id**, **Home Plant** and **In Service**.

It is strongly recommended to fill out the **Default Driver** and information on the **Vehicle Info** tab.

Tare Weights and Legal Max are used more for the Aggregate and Block functions. Customer Id allows a truck to be tied exclusively to a customer, while Owner Id is used for third-party haulers.

GH Truck Maintenance - GH Materials

File Edit Options Help

Truck Id 32 +  Inactive

Tare Weight  Customer Id  In Service Yes

Last Tared  Owner Id

Legal Max  Default Driver KEVIN

Home Plant 1 Inc. on Reports Yes

Truck Class MX Internal? Yes

Vehicle Info Notes

VIN No.

Make

Model

Year

Exp. Date

F3 Delete F12 Print F2 OK Cancel

Truck Maintenance Screen

## Keystone Dispatch System

### Truck Maintenance Data Entry Fields

Field Name	Description / Usage
<b>Truck Id</b>	Truck Id is the way Keystone Dispatch displays trucks. This field may be up to five characters long.
<b>Tare Weight</b>	Tare Weight is typically used for aggregate operations where scales are used to determine the amount of material loaded on a truck. This field is unnecessary for concrete operations.
<b>Last Tared</b>	This field contains the last date the truck's tare weight was established.
<b>Legal Max</b>	Also intended more for aggregate operations, once the Maximum Legal Weight of the truck is entered here, Keystone will not allow any overloaded truck to be ticketed.
<b>Home Plant</b>	This represents the plant where the truck is typically based. Each day, the Beginning of Day processing returns a truck to its home plant (if it were loaned to another plant)
<b>Truck Class</b>	Truck Class is a method of differentiating trucks. Operations which operate both front and rear discharge mixers typically use Truck Class to distinguish the trucks.
<b>Customer Id</b>	Customer Id is used <b>only</b> when a truck is owned by a customer and used exclusively for that customer's benefit. This is more typical of aggregate operations.
<b>Owner Id</b>	Owner Id is used when a truck is owned by a third-party and is rented or leased. This permits truck reports by owner.
<b>Default Driver</b>	While any driver can be assigned to a truck at any time, the default driver is the assumed driver of a truck unless otherwise specified.
<b>Inc. on Reports</b>	All trucks are included on trucking reports unless this field is set to N, and typically only for customer-owned trucks.
<b>Internal</b>	
<b>In Service</b>	The In-Service setting is very important in determining the pool of trucks available to dispatch. If a truck is out of service, it will not appear on the schedule screen.
<b>VIN No.</b>	The Vehicle Identification Number is not required for dispatch purposes, but useful to have stored in the database.
<b>Make</b>	The make of the vehicle.
<b>Model</b>	The model of the vehicle.
<b>Year</b>	The production year of the vehicle.
<b>Exp. Date</b>	Expiration date is used to specific the registration expiration date, allowing administrative to easily browse upcoming expiring registrations.



## Driver File Maintenance

While driver setup is not required for Keystone Dispatch, entering the information will allow for enhanced reporting capabilities.

The Driver Id must be unique for each driver, but does not necessarily have to be their employee number. In the example, the Driver Id is Kevin, while his employee number is WES220.

The only required field is the home plant, however additional information should be provided whenever possible.

**GH Driver Maintenance - GH Materials**

File Edit Options Help

Driver Id: KEVIN  Inactive

Name: Kevin Westcott

Employee No.: WES220

Phone: 413-786-2179

License No.: 2743971247

Home Plant: 1

License Exp.: 7/16/2008

**Notes**

Cell 413-210-4174

F3 Delete F12 Print F2 OK Cancel

Driver Maintenance Screen

## Plant File Maintenance

GH Plant Maintenance - GH Materials

File Edit Options Help

Plant Id 1  Inactive

Screen Id SPRINGFLD Ticket No. Source

Name Springfield Plant Last Ticket No. 43048

Address 1 1457 Main St.

Address 2 Springfield, MA 01105

Phone 413-781-1897 G/L Mask

Plant Type Dispatch - Concrete Bonus Rate  (\$/ld)

Location Id 0

Defaults Costing **Ticketing** Dispatch Devjces Notes

Tax Authority

Salesperson

F3 Delete F12 Print F2 OK Cancel

Plant Maintenance Screen

## Plant Type Setup

The first step in setting up Keystone Dispatch is to indicate which plants use it.

It is important to select **Dispatch – Concrete**. There is an option of Concrete, however this setting is used for concrete plants that will not be using Keystone dispatch (eg: a small satellite plant).

Click **OK** after making your changes so the additional tabs will appear.

The screenshot shows the 'Plant Maintenance - GH Materials' window. The 'Plant Type' dropdown menu is highlighted with a red box and contains the text 'Dispatch - Concrete'. Other fields include Plant Id (1), Name (Springfield Plant), Address 1 (1457 Main St.), Address 2 (Springfield, MA 01105), Phone (413-781-1897), Location Id (0), Ticket No. Source, Last Ticket No. (43048), G/L Mask, and Bonus Rate (\$/ld). The 'Dispatch' tab is selected in the bottom navigation bar.

Plant Maintenance Screen

## Ticketing Setup

The **Print Batch Weights** checkbox sends a signal to the batch computer that batch weights are required on the delivery tickets.

**Ticket Form** should be set up you're your GivenHansco installer.

**Batch Mix** is used when a truck will be carrying a non-concrete load (eg: a mixer full of gravel). This product will be sent to the batch control along with the non-concrete product on the second delivery line of the ticket.

**Load Size** is the default load size for orders from this plant.

The screenshot shows the 'Plant Maintenance - GH Materials' window with the 'Ticketing' tab selected and highlighted in red. The 'Print Batch Weights' checkbox is checked. Other fields include Ticket Form, Batch Mix (000000), and Load Size. The 'Dispatch' tab is also visible in the bottom navigation bar.

Ticketing Tab

## Dispatch Setup

**Plant Color** is used to distinguish each plant's schedule and trucks. There is a large choice of colors to choose from. It is *strongly* recommended that light colors are selected, and not shades of Red or Yellow, as these colors are used to indicate warnings to the dispatcher.

**Reschedule Threshold** is not implemented at this time. When implemented, this acts as an allowance when scheduling orders around your plant's operating hours.

For example, assume a plant is open until 5:00pm. If an order's schedule has the last order leaving the plant at 5:15 and the reschedule threshold is 30 minutes, it will schedule the load for today.

If your reschedule threshold is set to 10 minutes, this final load would fall outside the threshold, and be scheduled for tomorrow morning.

The remaining fields are used to set the default values in the plant when taking orders.

**Batch Capacity** is the maximum yardage that can be batched at one time.

**Open Time / Close Time** represent the plant's operating hours. No loads will be scheduled prior to the opening or after the closing time without requiring the dispatcher to approve the change.

The remaining fields are used to establish default times for any loads dispatched from this plant.

The screenshot shows a software window titled "Plant Maintenance - GH Materials". The window has a menu bar with "File", "Edit", "Options", and "Help". Below the menu bar, there is a "Plant Id" dropdown set to "1" and an "Inactive" checkbox. The main area contains several input fields: "Screen Id" (SPRINGFLD), "Name" (Springfield Plant), "Address 1" (1457 Main St.), "Address 2" (Springfield, MA 01105), "Phone" (413-781-1897), "Plant Type" (Dispatch - Concrete), and "Location Id" (0). On the right side, there are fields for "Ticket No. Source", "Last Ticket No." (43048), "G/L Mask", and "Bonus Rate" (\$/ld). Below these fields is a tabbed interface with tabs for "Defaults", "Costing", "Ticketing", "Dispatch" (highlighted with a red box), "Devices", and "Notes". The "Dispatch" tab contains fields for "Plant Color" (a color selection dropdown), "Reschedule Threshold" (5 mins), "Batch Capacity" (10.0000), "Open Time", "Close Time", "Batch Setup" (3 mins/ld), "Batch Load" (33 secs/ld), "Plant Wash" (5 mins/ld), "Job Setup Time" (10 mins/ld), and "Job Wash" (15 mins/ld). At the bottom of the window are buttons for "F3 Delete", "F12 Print", "F2 OK", and "Cancel".

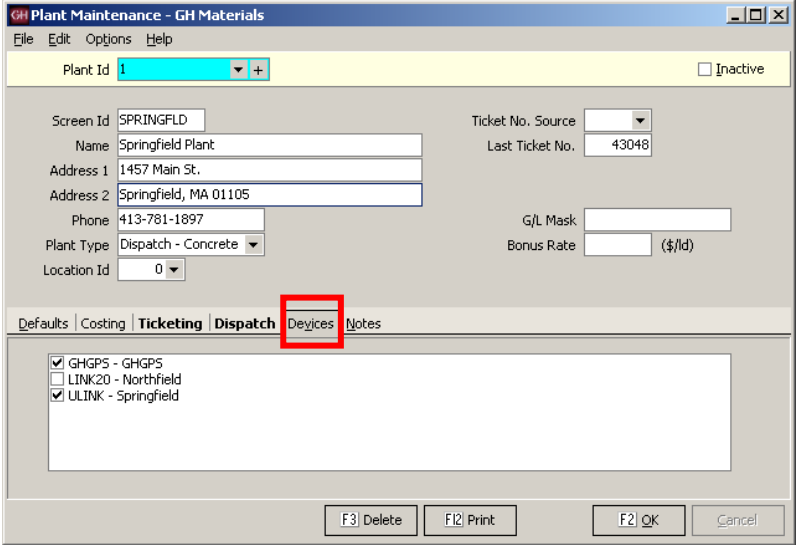
*Dispatch Tab*

### Device Setup

This section contains a list of all devices that Keystone Dispatch will be using for this plant.

It is very important that the correct devices are checked. These settings will be determined at installation by your GivenHansco installer.

*Never modify these settings except as directed by GivenHansco support.*



Devices Tab

## Event Type Maintenance

Under the Keystone order screen events tab, changes to the order are automatically tracked. Any time a value is changed an event is generated. If an order is cancelled, this too is tracked.

Some dispatchers may wish to record additional information in this events tab. Before doing so, the type of event they are recording must be set up in Event Type Maintenance.

GH Dispatch Event Type Maintenance - GH Materials

File Edit Options Help

Event Type C +  Inactive

Description Order Cancelled

Notes

F3 Delete F12 Print F2 OK Cancel

*Usage Class Maintenance Screen*

## Usage Class Maintenance

To assist in projecting the duration of each pour, Keystone Dispatch requires information about the type of pour.

Some standard usages and discharge rates are pre-defined within Keystone Dispatch, however these existing entries may be modified, as well as accepting new entries.

Note: The **Unload Rate** is in *seconds* per yard, not minutes.

GH Usage Maintenance - GH Materials

File Edit Options Help

Usage Id AP +  Inactive

Description APPROACH

Unload Rate 360 (secs/yd)

U/M CY

Notes

F3 Delete F12 Print F2 OK Cancel

Usage Class Maintenance Screen

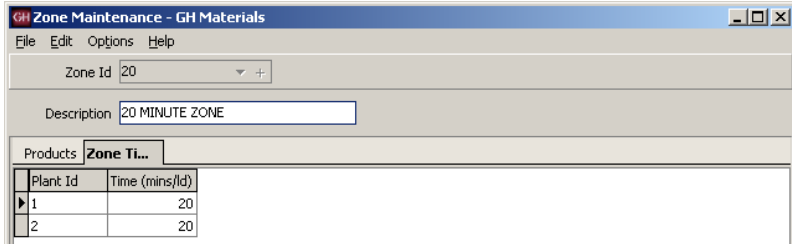
## Zone Maintenance

Once a method is determined for establishing delivery zones, Zone Maintenance is used to enter each zone as well as the *one-way* time it takes to reach the zone from each plant.

When keying in orders, Dispatchers enter the delivery zone and Keystone Dispatch calculates the anticipated transit time to and from the job.

Identification of delivery zones tends to fall into three basic categories, each of which is explained below:

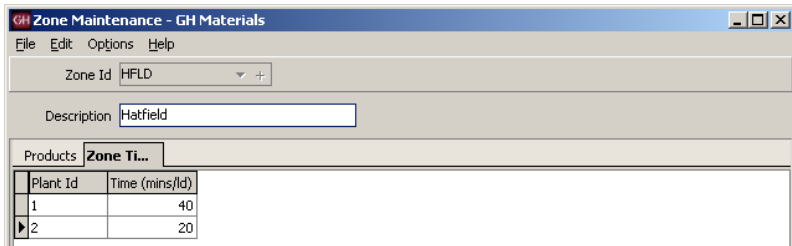
**Time-based zones** are established based on the delivery time from a given plant. There are no charts to consult, and it is easy to set up. Simply create different zones based on your delivery radius and key in the value. The values will be the same for all plants, as the zone IS the time required to get to a location.



Zone Maintenance Screen – Time-based zone

**Delivery-based zones** are established based on the delivery area. Each possible delivery location is established, with the delivery time required entered for each plant.

In the example to the right, you can see that Hatfield is 40 minutes from plant 1, but only 20 minutes from plant 2.

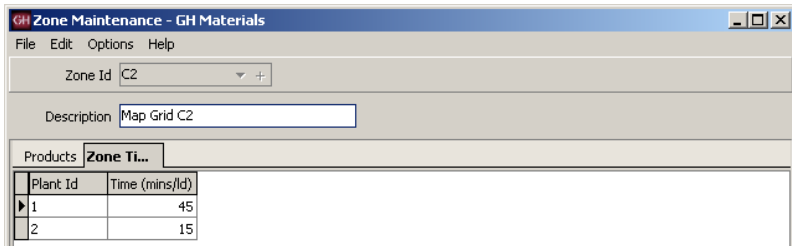


Zone Maintenance Screen – Delivery-based zone

**Map-based zones** are established based on a map which is shared between plants.

In the example to the right, you can see that the area in map grid C2 is 45 minutes from plant 1, but only 15 minutes from plant 2.

It is also possible to use a custom map, based on terrain, speed limits on roads and traffic considerations.



Zone Maintenance Screen – Map-based zone



## Menu Navigation – File Lists

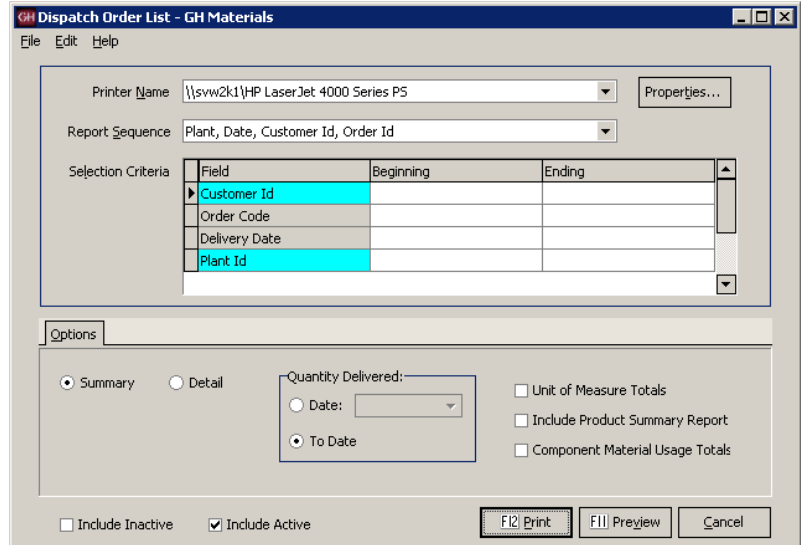
- [-] Dispatch
  - ... Beginning of Day
  - ... Schedule
  - ... Order Maintenance
  - ... Ticket Printing
  - ... Truck Demand Graph
  - ... Concrete Calculator
  - ... End Of Day
  - [+] File Maintenance
  - [-] **File Lists**
    - ... Orders
    - ... Trucks
    - ... Drivers
    - ... Plants
    - ... Zones
  - [+] Reports
  - [+] Utilities

### Menu Overview

<b>Orders</b>	
<b>Trucks</b>	Using Truck Maintenance, users can add new trucks, as well as changing status, reporting and defaults of existing trucks.
<b>Drivers</b>	Editing of driver information is done through this option.
<b>Plants</b>	Plant setup values are stored in Plant Maintenance. Values here have a major impact to Keystone Dispatch and great care should be taken when making changes.
<b>Zones</b>	Delivery Zones and their impact on transit times are reviewed here. For additional information on Delivery Zones, see Appendix A ( <i>see page 73</i> ).

## Orders List

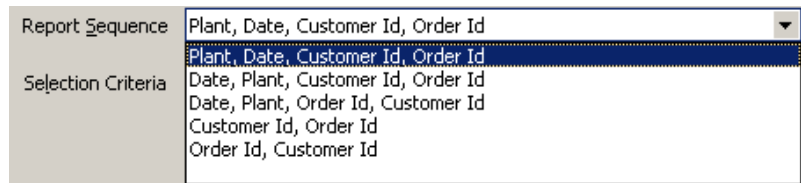
The Orders List is a multi-purpose report. It can be used to run history reports, or used to project ahead. It can be used to review plant, date and/or customer order activity, including products and even raw materials.



Orders List Screen

## Report Sequence

The Order List can be sorted in varying ways depending on the needs of the report.

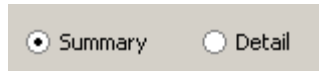


Orders List – Report Sequence Dropdown List

## Summary / Detail

Summary mode reduces each order to a single line entry, allowing a short report containing basic order information.

The detailed report lists all products on each order within the report.



Summary / Detail checkbox

## Unit of Measure Totals

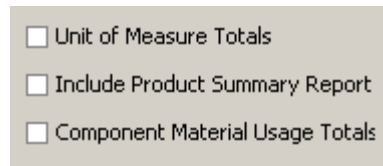
Check this box to print yardage totals.

## Product Summary Usage

Check this box to print a list of products sold.

## Component Material Usage

Check this box to print a list of raw materials requirements for the mixes on the report.



Additional reports checkboxes

In Sequence By Plant, Date, Customer Id, Order Id  
Delivery Date 9/1/2007 only

Plt No.	Customer Name	Order Id	Job Id	Product Id	Quantity Ordered	Delivered To Date	---Delivery--- Date	Time	Status
1	H&L Alaniz Builders	1133		301635	26.00		9/1/2007	06:00	
1	Fly-By-Night Constructio	1134	TEST	201330	3.00		9/1/2007	08:00	WC

**Order List Summary**

In Sequence By Plant, Date, Customer Id, Order Id  
Delivery Date 9/1/2007 only

Plt No.	Customer Name	Order Id	Job Id	Product Id	Quantity Ordered	Delivered To Date	---Delivery--- Date	Time	Status
1	H&L Alaniz Builders	1133		301635	26.00		9/1/2007	06:00	
				061599	26.00				
				FUEL CHARGE	1.00				
1	Fly-By-Night Constructio	1134	TEST	201330	3.00		9/1/2007	08:00	WC
				FUEL CHARGE	1.00				

**Order List Detail**

Product Id	Description	U/M	Order Quantity	Delivery Quantity
1	1" STONE	LB	44200.00	
38	3/8" STONE	LB	5175.00	
CEM	TYPE I CEMENT	LB	13465.00	
SAND	CONCRETE SAND	LB	45100.00	

**Order List – Material Usage listing**

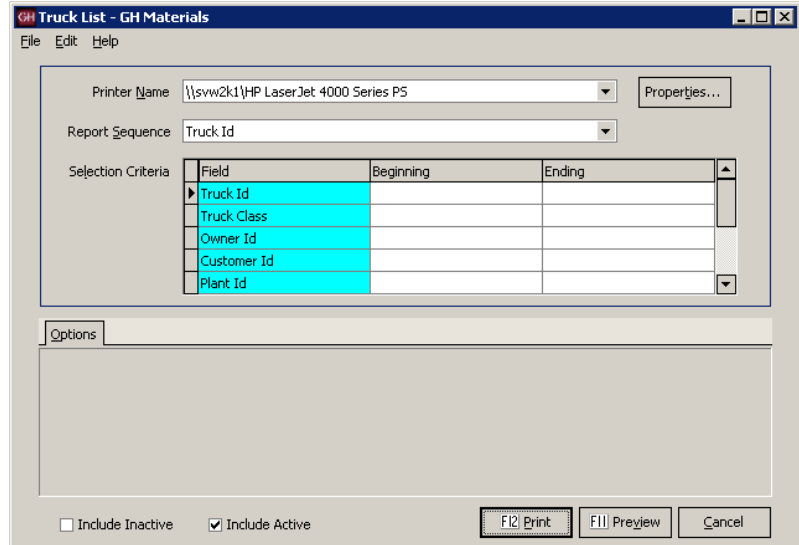
U/M	Product Id	Description	Order Quantity	Delivery Quantity	Orders Delv.	Average Load Size	Total Sales	Average Unit Price
BG	061599	FIBER MESH 1 1/2#	26.00		1			
CY	201330	2000 PSI-FA-3/8"-N-A	3.00		1			
CY	301635	3000 PSI-FA-1"-N-A	26.00		1			
		Total	CY 29.00					
LD	FUEL CHARGE	Fuel Surcharge	2.00		2			

**Order List – Product Totals listing**

## Truck List

The Truck List is used to display truck information based on user selection (plant, customer, etc.)

The sample below is a list of all trucks in plant 1.

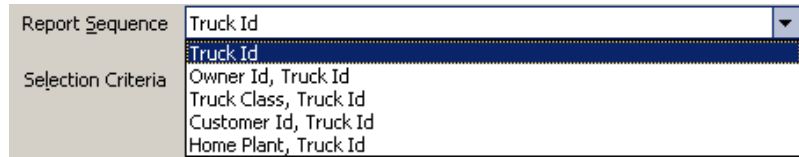


*Truck List Screen*

## Report Sequence

The Truck List can be sorted in varying ways depending on the needs of the report.

Owner Id and Truck Id is a very useful sequence when calculating payments for third-party haulers.



*Truck List – Report Sequence Dropdown List*

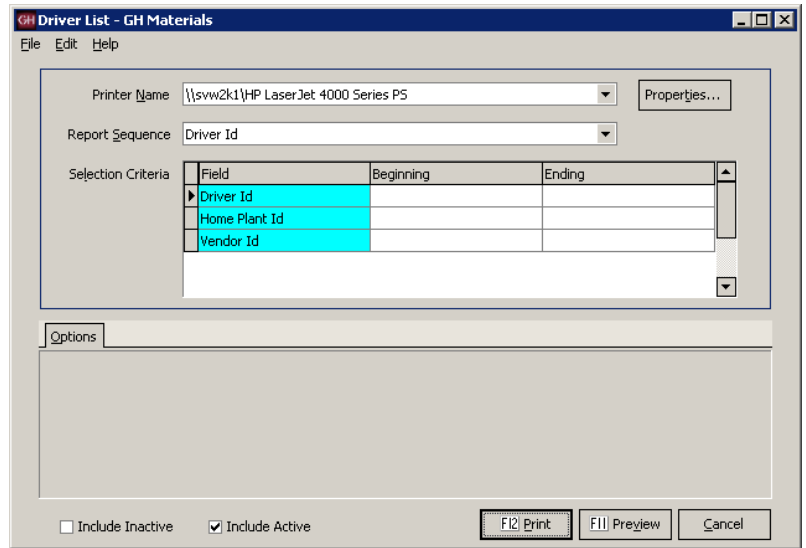
Truck Id	Truck Class	Customer Id	Owner Id	Driver Id	Home Plant	Tare Weight	Tare Date	Legal Max Wt	Inc Rep	Inc Internal?
32	MX			KEVIN	1				Y	Y
62	MX			PETE R.	1				Y	Y
66	MX			BILL	1				Y	Y
67	MX			PETE M.	1				Y	Y
68	MX			JOHN	1				Y	Y
69	MX			MIKE	1				Y	Y

*Truck List*

## Driver List

The Driver List is used to display driver information based on user selection such as driver, plant, or vendors (third part haulers).

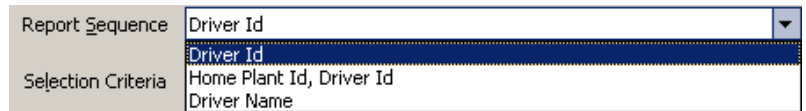
The sample below is a list of all drivers in plant 1.



*Driver List Screen*

## Report Sequence

The Driver List can be sorted in varying ways depending on the needs of the report.



*Driver List – Report Sequence Dropdown List*

Driver Id	Name	Employee Id	Phone	License No.	Home Plant	License Exp Date
BILL	Bill Smith	SMI210	413-749-1431	137197137	1	9/24/2009
KEVIN	Kevin Westcott	WES220	413-786-2179	2743971247	1	7/16/2008
PETE M.	Peter Michaels	MIC740	413-497-6641	246172893	1	2/3/2010
PETE R.	Peter Robertson	ROB220	413-646-1382	795713815	1	10/27/2007

*Driver List*

## Plant List

The Plant List is used to display plant setup information.

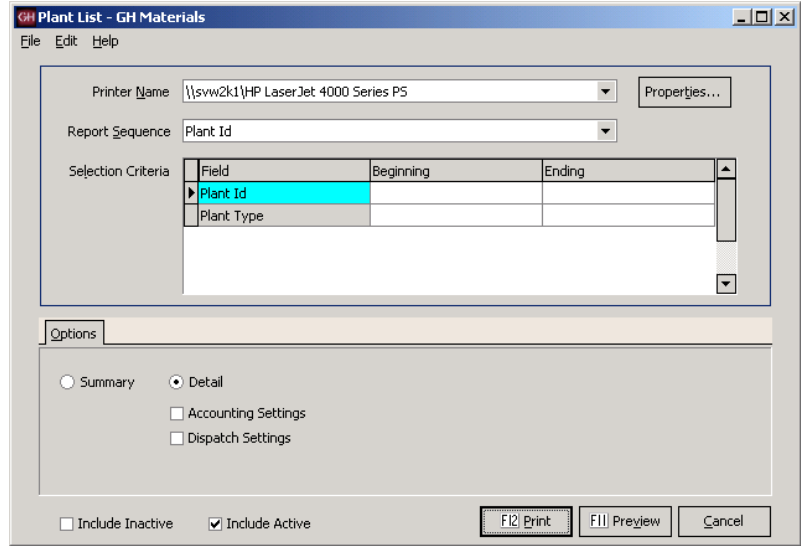
Plant information has far-reaching effects throughout the system, so the print options tab offers selections to list the criteria needed.

In Summary form, it simply prints one line per plant, essentially as a contact sheet.

In Detail form, it adds the address information, but remains primarily a contact sheet.

The Accounting settings include information on G/L, invoicing, ticketing and basic costing.

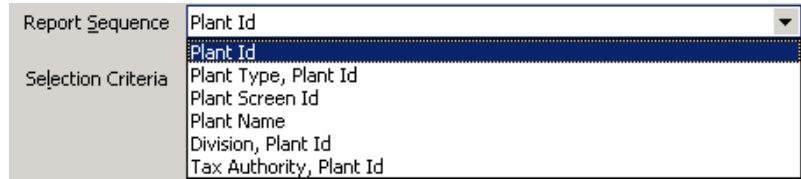
The Dispatch settings include the default settings and times for dispatch as well as any GPS settings.



*Plant List Screen*

## Report Sequence

The Plant List can be sorted in varying ways depending on the needs of the report.



*Plant List – Report Sequence Dropdown List*

Plant Id	Screen Id	Loc Id	Name	Phone	Plt Typ
1	SPRINGFLD		Springfield Plant	413-781-1897	D

*Plant List Summary*

Plant Id	Screen Id	Loc Id	Name & Address	Phone	Plt Typ	Ticket Format	Bonus Rate
1	SPRINGFLD		Springfield Plant 1457 Main St. Springfield, MA 01105	413-781-1897	D		4.0000

*Plant List Detail*

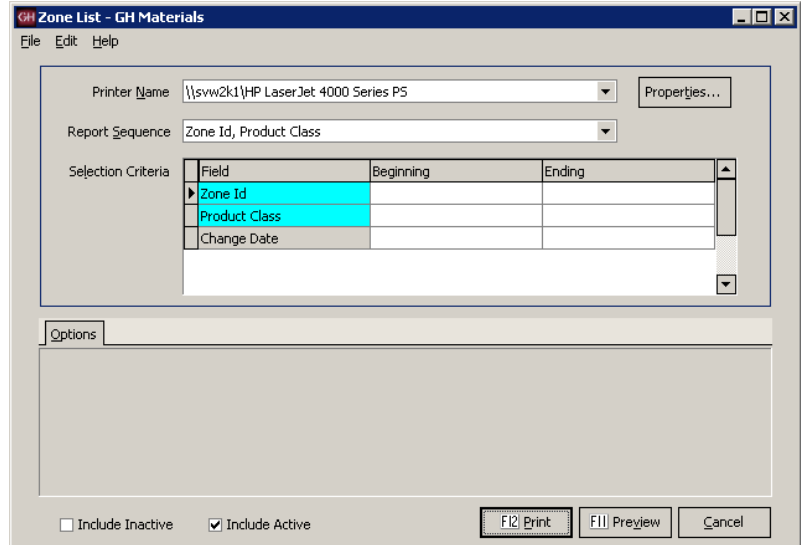
Plant Id	Screen Id	Loc Id	Name & Address	Phone	Plt Typ	Ticket Format	Bonus Rate
1	SPRINGFLD		Springfield Plant 1457 Main St. Springfield, MA 01105	413-781-1897	D		4.0000
----- Accounting Settings -----							
G/L Plant Mask		###-01	Last Ticket #	4304B	Plt Overhead (\$/CY)		8.75
			Ticket # Source	(none)	Adm Overhead (\$/CY)		4
			Last Invoice #	0	Delivery Cost(\$/HR)		72
			Invoice # Source	(none)	Batch Time(mins/d)		0
----- Dispatch Settings -----							
Batch Capacity		10	Batch Setup (min/d)	3	GPS Latitude		
Def. Load Size		0	Batch Load (sec/d)	33	GPS Longitude		
Plant Open Time		04:30	Plant Wash (min/d)	5	GPS Radius		
Plant Close Time		17:00	Job Setup (min/d)	10			
Batch Time(mins/d)		0	Job Wash (min/d)	15			
Reschedule Allow		5					

*Plant List – Detail with Accounting & Dispatch Information*

## Zone List

The Zone List is used to display zone information. Because Keystone Dispatch uses Zones not only as a function of timing (calculating time to and from a location), but as a pricing mechanism as well, the report focuses on the more complex (pricing) element.

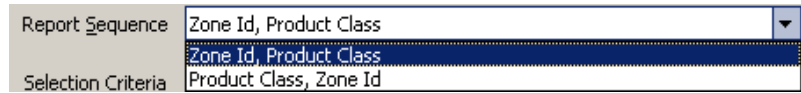
The sample below is based on a time-base delivery zone system, where the zone code represents the one-way time to the job.



Zone List Screen

## Report Sequence

For dispatch purposes, sorting by Zone Id is more useful than Product Class, which is used more as a function of pricing.



Zone List – Report Sequence Dropdown List

In Sequence By Zone Id, Product Class							
Zone		Product		Plant	Zone	Change	
Id	Description	Class	Description	Id	Charge	Date	
05	5 MINUTE ZONE						
10	10 MINUTE ZONE						
15	15 MINUTE ZONE						
20	20 MINUTE ZONE						
25	25 MINUTE ZONE						
30	30 MINUTE ZONE						

Zone List



## Menu Navigation – Reports

- Dispatch
  - Beginning of Day
  - Schedule
  - Order Maintenance
  - Ticket Printing
  - Truck Demand Graph
  - Concrete Calculator
  - End Of Day
  - File Maintenance
  - File Lists
  - Reports**
    - Detailed Yardage Report
    - Load Schedule Report
    - Plant Production Report
    - Driver Time/Yardage Analysis
    - Order Time/Yardage Analysis
    - Plant Time/Yardage Analysis
    - Blank Timefields Report
    - Late Time Report
    - Order Audit Trail
  - Utilities

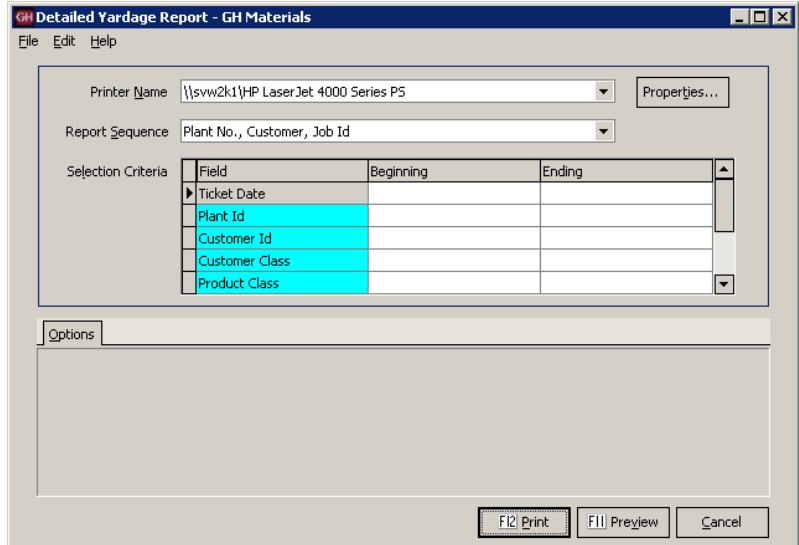
### Menu Overview

<b>Detailed Yardage</b>	Generates a list of all current and past delivery tickets, including material purchased and quantities, ordered as needed.
<b>Load Schedule</b>	Prints a list of all loads scheduled for a particular plant, date, order or customer.
<b>Plant Production</b>	Reports load count, material quantities and average load size by plant.
<b>Driver Time/ Yardage</b>	Details the actual and elapsed time of each ticket, broken down by driver.
<b>Order Time/ Yardage</b>	Details the actual and elapsed time of each ticket, broken down by order and/or customer.
<b>Plant Time/ Yardage</b>	Details the actual and elapsed time of each ticket, broken down by plant.
<b>Blank Timefields</b>	Lists all tickets with missing times in any phase of the delivery as specified by the user.
<b>Late Time Report</b>	Reports all deliveries that exceeded their allotted delivery time.
<b>Ticket Time Analysis</b>	Reports all tickets and their performance in meeting scheduled delivery times (for any given phase of ticket delivery).
<b>Order Audit Trail</b>	Generates a list of all changes made to order(s) based on criteria specified.

## Detailed Yardage Report

The Detailed Yardage Report lists all delivery tickets (current and history) based on the selection criteria.

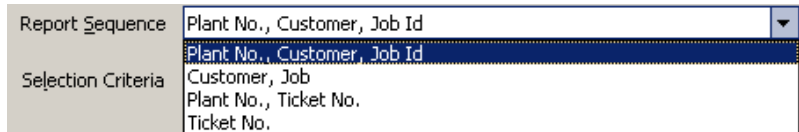
This report can be used to measure plant, productivity, customer activity (overall or by job) within any date or plant range desired.



*Detailed Yardage Report Screen*

### Report Sequence

When looking up information about by customer, the second option works best. The other options are for reporting on plant productivity.



*Detailed Yardage Report – Report Sequence Dropdown List*

In Sequence By Plant No., Ticket No.												
Ticket Date 6/2/2007 only												
Cust No.	Job Id	Order Code	Ticket Date	Ticket Time	Ticket No.	Product Id	Description	Qty Sold	Tax Auth	Tax Cd	Tkt Src	
PLANT 1												
NAT200	HILTON HOMEWOOD	1112	6/2/2007	03:54	42889	401630	4000 PSI-1"-FA-N	9.00	CY	MA	Y	Inv
NAT200	HILTON HOMEWOOD	1112	6/2/2007	04:02	42890	401630	4000 PSI-1"-FA-N	9.00	CY	MA	Y	Inv
NAT200	HILTON HOMEWOOD	1112	6/2/2007	04:09	42891	401630	4000 PSI-1"-FA-N	9.00	CY	MA	Y	Inv
NAT200	HILTON HOMEWOOD	1112	6/2/2007	04:15	42892	401630	4000 PSI-1"-FA-N	9.00	CY	MA	Y	Inv
NAT200	HILTON HOMEWOOD	1112	6/2/2007	04:21	42893	401630	4000 PSI-1"-FA-N	9.00	CY	MA	Y	Inv
NAT200	HILTON HOMEWOOD	1112	6/2/2007	04:28	42894	401630	4000 PSI-1"-FA-N	9.00	CY	MA	Y	Inv
NAT200	HILTON HOMEWOOD	1112	6/2/2007	04:34	42895	401630	4000 PSI-1"-FA-N	9.00	CY	MA	Y	Inv
NAT200	HILTON HOMEWOOD	1112	6/2/2007	04:40	42896	401630	4000 PSI-1"-FA-N	9.00	CY	MA	Y	Inv
NAT200	HILTON HOMEWOOD	1112	6/2/2007	04:48	42897	401630	4000 PSI-1"-FA-N	9.00	CY	MA	Y	Inv

*Detailed Yardage Report*

## Load Schedule Report

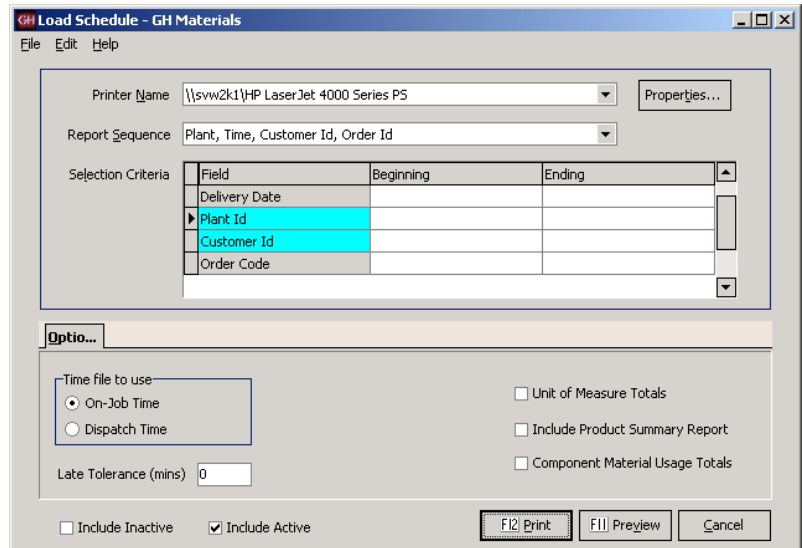
The Load Schedule Report gives insight into each delivery load. It can be run to review the past, current day or future orders.

Individual load appear with their most recent status (note: historical reports will show ARPLT (arrive plant) for all orders).

Current deliveries (where the truck has not returned) will appear in *italics* and the return time is projected.

Completed deliveries use the actual return time. Any order that returned late will appear with an asterisk if it falls outside the Late Tolerance value.

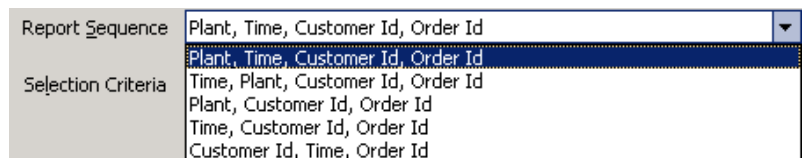
Additional subtotals are available, such as the unit of measure totals, product summary and component (raw material) usage.



Load Schedule Report Screen

## Report Sequence

When looking up information about by customer, the second option works best. The other options are for reporting on plant productivity.



Load Schedule Report – Report Sequence Dropdown List

In Sequence By Plant, Time, Customer Id, Order Id  
Delivery Date 6/2/2007 only  
Sorted by On-Job time.

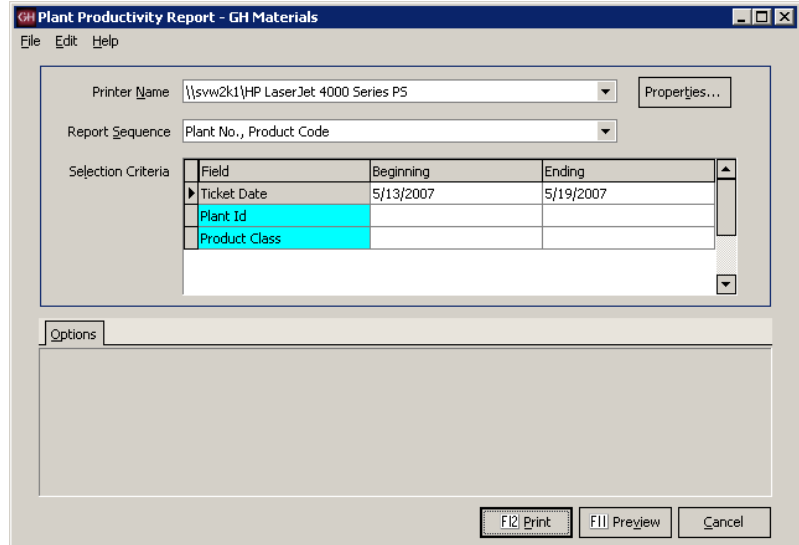
Plt No.	Load Time	On Job Time	Status Code	Return Time	Customer Name	Order Id	Job Id	Load No	Load Size	Product Code
1	06/02 03:47	04:00	ARPLT	04:35	Nationwide Concrete Constructi	1112	HILTON HOMEWOOD	9.00	1	401630
1	06/02 04:05	04:18	ARPLT	04:59	Nationwide Concrete Constructi	1112	HILTON HOMEWOOD	9.00	2	401630
1	06/02 04:15	04:28	ARPLT	04:54	Nationwide Concrete Constructi	1112	HILTON HOMEWOOD	9.00	3	401630
1	06/02 04:25	04:38	ARPLT	05:01	Nationwide Concrete Constructi	1112	HILTON HOMEWOOD	9.00	4	401630
1	06/02 04:35	04:48	ARPLT	05:13	Nationwide Concrete Constructi	1112	HILTON HOMEWOOD	9.00	5	401630
1	06/02 04:45	04:58	ARPLT	05:15	Nationwide Concrete Constructi	1112	HILTON HOMEWOOD	9.00	6	401630

Load Schedule Report

## Plant Productivity Report

The Plant Productivity Report is designed to show loads shipped, quantity sold and average load size for any given plant, broken out by mix.

The example below shows a sample report for the week of 5/13/2007.



*Plant Productivity Report Screen*

Product Code	Description	Loads Shipped	Avg. Size	Quantity Sold
PLANT 1				
PRODUCT CLASS	RM			
3000PERF-N	3000-PSI Concrete Normal	23	7.70	177.00 CY
301340	3000 PSI-3/8-FA-R	2	5.50	11.00 CY
301630	3000 PSI-1"-FA-N	6	6.33	38.00 CY
302630	3000 PSI 4.5 Sk.+ 1"-N	3	6.00	18.00 CY
302645	3000 PSI 4.5 Sk.+R-A	81	7.58	613.75 CY
305645-A	TXDOT Class "A" Concrete	9	8.89	80.00 CY
401630	4000 PSI-1"-FA-N	20	9.00	180.00 CY
401635RPC	4000 PSI Concrete	1	3.00	3.00 CY
503365	5000 PSI 7 Sk. 3/8"-A-997	2	7.50	15.00 CY
863345-G	4500 PSI 7.0 Sk. + -3/8"-R-A	13	7.92	103.00 CY
		=====	=====	=====
	Total Product Class RM	160	7.74	1238.75
		=====	=====	=====
	Total Plant 1	160	7.74	1238.75

*Plant Productivity Report*

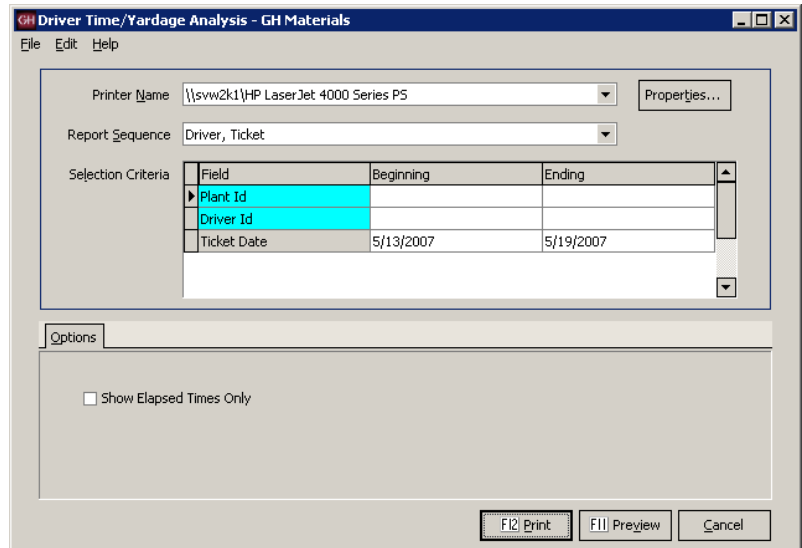
## Driver Time/Yardage Analysis

This report is designed to review the status times of each driver's ticket. It is intended to show driver productivity.

There are two reporting modes available – actual time and elapsed time.

The first report is a sample of actual time and is the default setting for this report. It shows the time that each load went through each delivery stage. Where no time is available, it leaves a blank.

The second report shows the elapsed time in each stage.



Driver Time/Yardage Analysis Screen

## Report Sequence

The report can be run to subtotal by plant or just driver.



Driver Time/Yardage Analysis – Report Sequence Dropdown List

Truck No.	Ticket No.	Ticket Date	Order Code	Qty Sold	Product Id	Beg Batch	End Batch	Lv Plant	Arr Job	Beg Pour	End Pour	Lv Job	Ret Plt	Pour Rate	Total Mins
PLANT 1															
DRIVER BILL															
77	42145	5/14/2007	924	2.25	302645	10:07		10:22	10:54			11:32	12:17		130
77	42153	5/14/2007	929	1.75	302645	12:27		12:42	13:17			13:47	13:54		87
77	42160	5/14/2007	933	3.00	401635RPC	14:45		14:54	15:29			16:15	16:22		96
77	42169	5/15/2007	923	6.50	302645	08:03		08:18	08:33			10:23	10:26		142
77	42233	5/16/2007	917	9.00	302645	12:08			13:25				14:39		151
77	42244	5/17/2007	969	9.00	302645	08:55							11:14		138

Driver Time/Yardage Analysis – Actual Time mode

Truck No.	Ticket No.	Ticket Date	Order Code	Qty Sold	Product Id	Batch Time	Wash Time	To Job	Wait Time	Pour Time	Wash Out	To Plt	Pour Rate	Total Mins
PLANT 1														
DRIVER BILL														
77	42145	5/14/2007	924	2.25	302645		14	32			37	45		130
77	42153	5/14/2007	929	1.75	302645		14	35			30	7		87
77	42160	5/14/2007	933	3.00	401635RPC		9	35			45	7		96
77	42169	5/15/2007	923	6.50	302645		15	15			110	2		142
77	42233	5/16/2007	917	9.00	302645			77				74		151
77	42244	5/17/2007	969	9.00	302645							138		138

Driver Time/Yardage Analysis – Elapsed mode

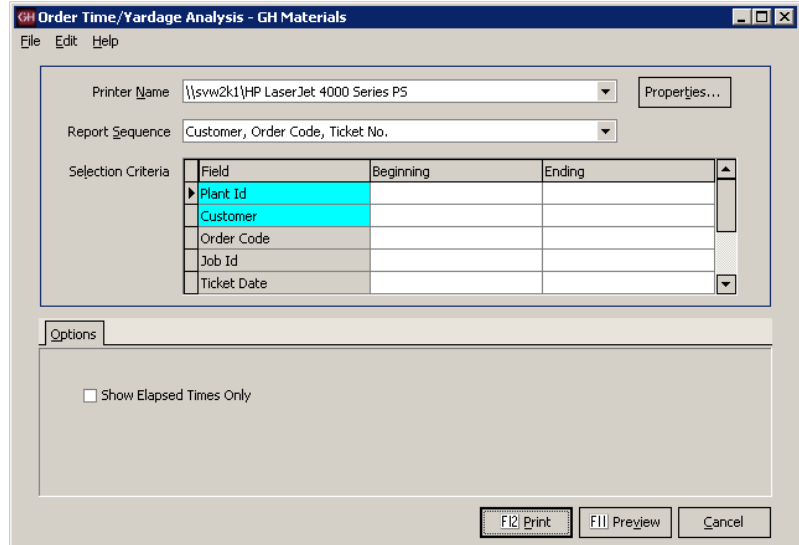
## Order Time/Yardage Analysis

This report is designed to review the status times of each ticket within an order. It is intended to show an order's delivery history and productivity.

There are two reporting modes available – actual time and elapsed time.

The first report is a sample of actual time and is the default setting for this report. It shows the time that each load went through each delivery stage. Where no time is available, it leaves a blank.

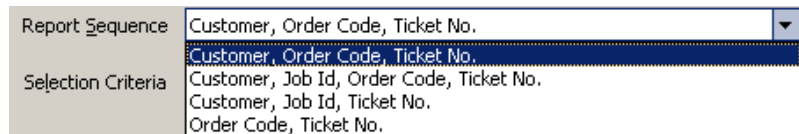
The second report shows the elapsed time in each stage.



Order Time/Yardage Analysis Screen

### Report Sequence

The report can be run to subtotal by each customer's order or job information in various ways.



Order Time/Yardage Analysis – Report Sequence Dropdown List

Ticket No.	Ticket Date	Truck No.	Qty Sold	Product Id	Beg Batch	End Batch	Lv Plant	Arr Job	Beg Pour	End Pour	Lv Job	Ret Pit	Pour Rate	Total Mins
CUSTOMER NAT200														
ORDER 787														
42191	5/16/2007	69	9.00	401630	04:46		04:55	05:08			05:50	05:51		65
42192	5/16/2007	75	9.00	401630	04:54		05:04	05:14			05:35	05:37		43
42193	5/16/2007	85	9.00	401630	05:07						05:52	05:53		45
42194	5/16/2007	78	9.00	401630	05:13		05:22	05:32			06:10	06:12		59
42195	5/16/2007	66	9.00	401630	05:34						06:23			49

Order Time/Yardage Analysis – Actual Time mode

Ticket No.	Ticket Date	Truck No.	Qty Sold	Product Id	Batch Time	Wash Time	To Job	Wait Time	Pour Time	Wash Out	To Pit	Pour Rate	Total Mins
CUSTOMER NAT200													
ORDER 787													
42191	5/16/2007	69	9.00	401630		9	12			42			65
42192	5/16/2007	75	9.00	401630		10	10			20	2		43
42193	5/16/2007	85	9.00	401630						45			45
42194	5/16/2007	78	9.00	401630		9	10			37	2		59
42195	5/16/2007	66	9.00	401630							49		49

Order Time/Yardage Analysis – Elapsed mode

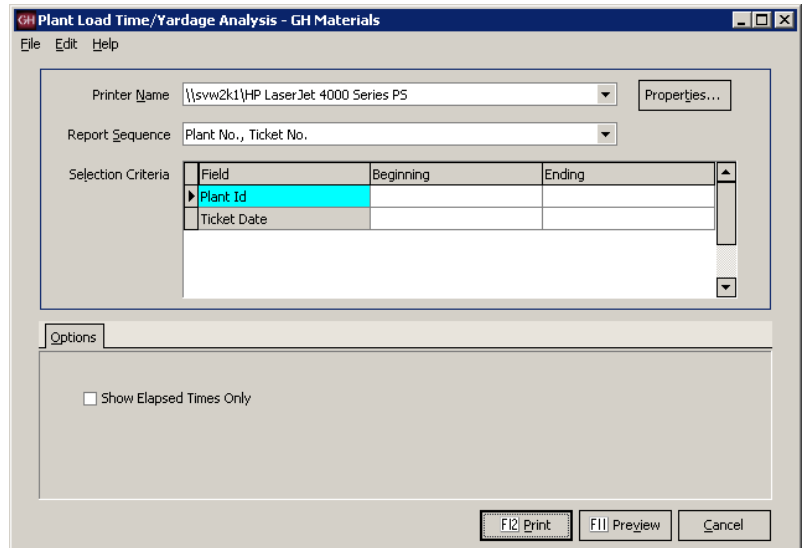
## Plant Time/Yardage Analysis

This report is designed to review the status times of each ticket generated at each plant. It is intended to show the plant's delivery history and productivity.

There are two reporting modes available – actual time and elapsed time.

The first report is a sample of actual time and is the default setting for this report. It shows the time that each load went through each delivery stage. Where no time is available, it leaves a blank.

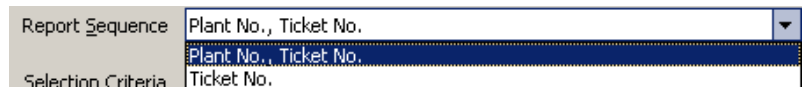
The second report shows the elapsed time in each stage.



*Plant Time/Yardage Analysis Screen*

## Report Sequence

The report can be run to subtotal each plant, or simply list tickets.



*Plant Time/Yardage Analysis Report – Report Sequence Dropdown List*

Ticket No.	Ticket Date	Order Code	Truck No.	Qty Sold	Product Id	Beg Batch	End Batch	Lv Plant	Arr Job	Beg Pour	End Pour	Lv Job	Ret Plt	Pour Rate	Total Mins
PLANT 1															
42135	5/14/2007	926	76	7.00	863345-G	07:31		07:44	08:09			09:32	09:42		131
42137	5/14/2007	921	68	8.00	301630	08:07		08:18	08:31			10:11	10:13		126
42138	5/14/2007	912	78	9.00	302645	08:15		08:24	08:57			09:37	09:57		101
42140	5/14/2007	928	80	7.00	503365	09:11		09:22	10:07			11:28	12:13		181
42141	5/14/2007	926	85	7.00	863345-G	09:13		09:23	09:46			10:33	10:46		92
42142	5/14/2007			0.50	021859										
42143	5/14/2007	927	76	5.00	302630	09:43		09:52	10:04			11:07	11:12		89

*Plant Time/Yardage Analysis – Actual Time mode*

Ticket No.	Ticket Date	Order Code	Truck No.	Qty Sold	Product Id	Batch Time	Wash Time	To Job	Wait Time	Pour Time	Wash Out	To Plt	Pour Rate	Total Mins
PLANT 1														
42135	5/14/2007	926	76	7.00	863345-G		13	25			82	10		131
42137	5/14/2007	921	68	8.00	301630		11	12			100	2		126
42138	5/14/2007	912	78	9.00	302645		9	32			40	20		101
42140	5/14/2007	928	80	7.00	503365		11	45			80	45		181
42141	5/14/2007	926	85	7.00	863345-G		10	22			47	12		92
42142	5/14/2007			0.50	021859									
42143	5/14/2007	927	76	5.00	302630		9	12			62	5		89

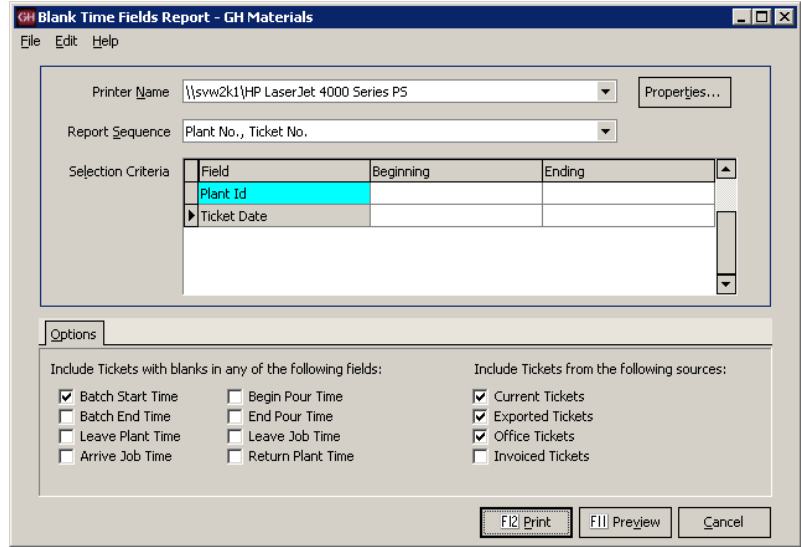
*Plant Time/Yardage Analysis – Elapsed mode*

## Blank Time Fields Report

This report is a diagnostics report designed to show tickets that are missing time values in any delivery phase selected by the user.

All time fields are listed in two columns on the left side of the Options tab. Any tickets containing a blank in any of the checked fields will appear on the report.

The column to the right is used to determine the scope of the report. A dispatcher may only care about current delivery tickets, while a manager may want to see all tickets, regardless of their status.



*Blank Time Fields Report Screen*

## Report Sequence

The report can be run to subtotal each plant, or simply list tickets.



*Blank Time Fields Report – Report Sequence Dropdown List*

Ticket No.	Ticket Date	Order Code	Truck No.	Qty Sold	Product Id	Beg Batch	End Batch	LV Plant	Arr Job	Beg Pour	End Pour	LV Job	Ret Plt	Pour Rate	Total Mins
PLANT 1															
42142	5/14/2007			0.50	021859										
42149	5/14/2007			0.50	021052										
42149	5/14/2007			0.50	041061										
42154	5/14/2007			0.25	041061										
42155	5/14/2007			2.00	041061										
42178	5/15/2007			1.00	021052										
42243	5/17/2007			1.00	041061										
42246	5/17/2007			2.00	041061										
101708	5/15/2007			9.00	3000PERF-N										

*Blank Time Fields Report*



## Late Times Report

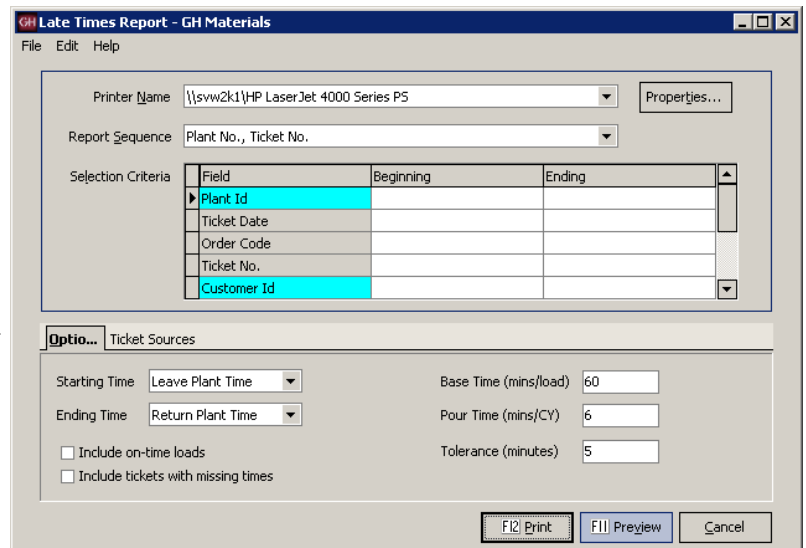
This report is designed to report tickets which may be subject to late charges based on the company's time allowances.

On the left side of the Options tab, the user selects how the time is calculated, since some operations use batching time, while others don't start the clock until the truck leaves the plant.

Two additional options allow the user to see the on-time loads (thus giving a complete list of tickets), while another shows tickets that may not have values and thus are not able to be calculated.

On the right side, the base (per load) time, as well as the per yard times are entered. The user may also enter a tolerance for late jobs. For example, the user may only wish to see loads that are later than 15 minutes.

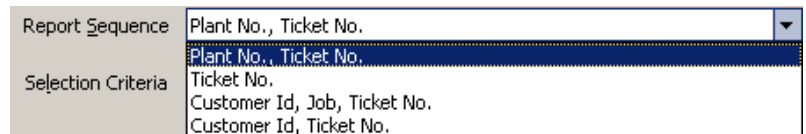
Note that there is also a Ticket Sources tab, allowing users to select which tickets should be included on the report.



Late Times Report Screen

## Report Sequence

The report can be run multiple ways, allowing analysis by plant, job or customer.



Late Times Report – Report Sequence Dropdown List

Pl No	Ticket No	Customer Id	Job Id	Order Code	Tkt Date	Truck No.	Qty Sold	Product Id	Leave Plant	Return Plant	Pour Rate	Allow Mins	Act Mins	Late Mins
In Sequence By Plant No., Ticket No. Minutes derived from Leave Plant time and Return Plant time. Base Time Allowance : 60 minutes/load Pour Time Allowance : 6 minutes/yard Tolerance : 5 minutes														
1	42925	CSH013	N 281 ENCINO	840	06/04	85	9.00	302645	06:59	10:46		114	228	114
1	42926	CSH013	N 281 ENCINO	840	06/04	78	9.00	302645	06:54	10:59		114	246	132
1	42928	CSH013	N 281 ENCINO	840	06/04	80	9.00	302645	06:52	11:10		114	259	145
1	42934	CSH013	N 281 ENCINO	840	06/04	79	9.00	302645	05:06	11:53		114	407	293
1	42962	LAN002	L 110 LW 469000110	1100	06/04	77	9.00	302645	11:55	14:07		114	133	19
1	42974	LAN002	L 112 LW 469000112	1115	06/04	68	3.00	302645	12:58	14:58		78	121	43
1	42977	LAN002	L 111 LW 469000111	1101	06/04	85	9.00	302645	13:04	15:12		114	128	14

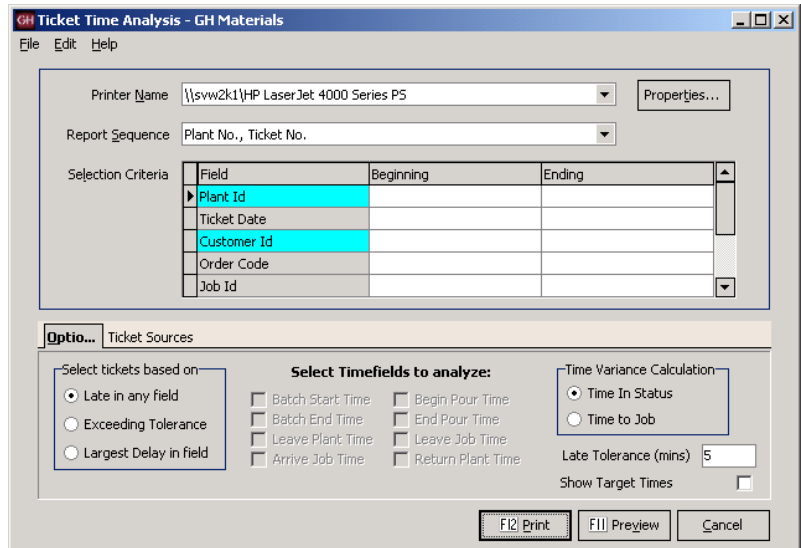
Late Times Report

## Ticket Time Analysis

This report is designed to assist in in-depth investigations of time performances. The report uses both individual and cumulative data for each load, allowing the user to make accurate interpretations even when missing some individual data.

The report can be run to focus on large or small scale trends, identifying overall delays, or focused to individual time status readings.

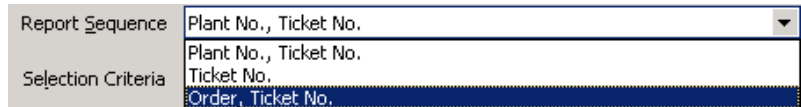
Using current and historical data, this report can offer valuable insight into operations and on-time performance.



Ticket Time Analysis Screen

### Report Sequence

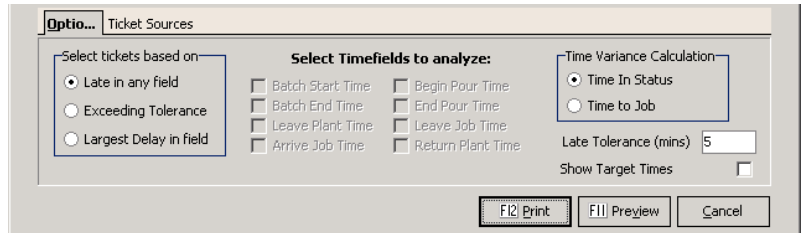
Running this report by Plant and Ticket gives a plant manager a good overview of the plant's performance, while running by Order is handy for customer service and review.



Ticket Time Analysis – Report Sequence Dropdown List

### Options Tab

The options selected on this tab offer a great deal of control in generating reports. It is vital to understand how each option works to avoid confusion when reading and interpreting the report.



Ticket Time Analysis – Options Tab

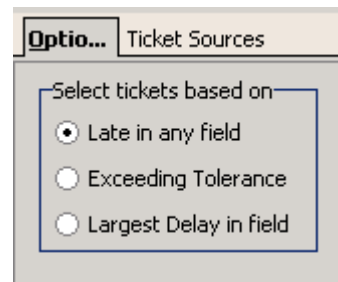
### Selecting tickets

This selection allows the user to determine which tickets appear on the report. With ALL selections, the result is still subject to the Late Tolerance value (for the examples below, a 5 minute late tolerance is assumed, however the user may change the value at any time).

**Late in any field** will include any ticket which was late in any job status (batch time, leave plant, etc.)

**Exceeding Tolerance** allows the user to select which tickets get flagged based on the field that experienced the delay. Any ticket delayed by more than the Late Tolerance in a selected field is shown.

**Largest Delay in Field** shows all tickets that exceeded the Late Tolerance and where the longest delay was in the selected field(s).



Ticket Time Analysis – Ticket Selection

### Selecting Time fields to analyze

Time field selections works in conjunction with the **Exceeding Tolerance** and **Largest Delay in Field** options.

While the report will show all time fields, the selected time fields determine which tickets appear on the report.

At least one time field must be selected for comparison purposes.

**Select Timefields to analyze:**

<input type="checkbox"/> Batch Start Time	<input type="checkbox"/> Begin Pour Time
<input type="checkbox"/> Batch End Time	<input type="checkbox"/> End Pour Time
<input type="checkbox"/> Leave Plant Time	<input type="checkbox"/> Leave Job Time
<input checked="" type="checkbox"/> Arrive Job Time	<input type="checkbox"/> Return Plant Time

*Ticket Time Analysis – Time field Selection*

### Time Variance Calculation

Next to each field on the report is a number in parenthesis, with a positive number reflecting a status ahead of schedule and a negative number representing delays (eg: +10 means 10 minutes early, -10 means 10 minutes late).

The Time Variance selection determines how this number is calculated.

**Time To Job** calculates the variance time based on the actual time in a status compared against what was the target time. In this model, delays affect all subsequent status times. For example, if a truck arrives 10 minutes late on the job, the impact of those 10 minutes will show on all remaining times.

**Time In Status** calculates the variance of each time status by comparing the actual elapsed time within a time status against what as projected. Using this model, a truck that arrived 10 minutes late will show -10, however if it took the expected elapsed time to pour, that time field would show 0. Note: The option to show target times is disabled when this option is chosen, as the time target time is less important that the actual projected elapsed time.

**Time Variance Calculation**

Time to Job  
 Time In Status

Late Tolerance (mins)

Show Target Times

*Ticket Time Analysis – Time Variance Calculation*

### Late Tolerance

The Late Tolerance determines how strictly the report should define “late”. This allows the user to determine how much oversight is needed. For example, a report with 30 minutes tolerance is only going to show loads that were delayed a half-hour or more – a significant problem. A report with only a 5 minute tolerance (the default) will show those same 30 minute late orders, as well as other orders that were late by more than 5 minutes.

# Keystone Dispatch System

## Show Target Times

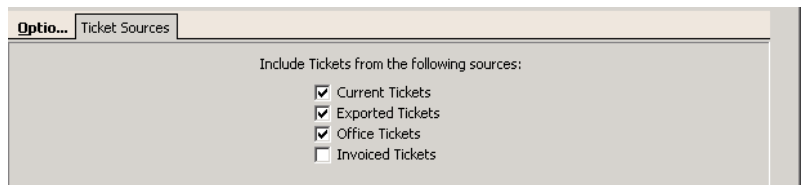
When the **Time In Status** variance is selected, the user can opt to display the target times immediately under the actual times on the report.

*Note: The addition of Target times as well as a blank separator line will cause the resulting report to be approximately three times as long.*

Showing target times is not an option with the **Time To Job** setting, as the target time is not used in calculating the variance.

## Ticket Sources Tab

This selection allows the user to determine where to draw the tickets information. By default it selects unbilled tickets, expecting to run on current data only.



*Ticket Time Analysis – Ticket Sources*

Plt No.	Ticket No.	Order Code	Truck No.	Begin Batch	End Batch	Leave Plant	Arrive Job	Begin Pour	End Pour	Leave Job	Return Plant	Largest Delay
1	42311	980	78	06:44 (-22)		06:51 (-16)	07:06 (-6)			07:39 (-4)	07:54 (+5)	Batching
1	42320	980	75	07:45 (-10)		07:48 (0)	08:16 (-3)			09:06 (-18)	09:21 (-8)	Lv job
1	42321	989	85	07:51 (-7)		08:01 (-5)	08:26 (-10)			09:19 (-38)	09:34 (-33)	Lv job

*Ticket Time Analysis Report*

In this example, three loads were shipped. The first departed 22 minutes late, but made up some time on the way to the job (only arriving 6 minutes late), poured and washed out slightly ahead of schedule, leaving the job only 4 minutes late. It made up the time on the way to the plant, arriving 5 minutes **ahead** of schedule. In the right-most column, it identified the largest delay as being in batching.

The second load was batched 10 minutes late, and while 7 minutes were made up in transit (arriving only 3 minutes late), delays on the job resulted in the truck leaving 18 minutes late. The driver was able to make up 10 minutes of that in transit, returning only 8 minutes late. Even though the system did not have begin and end pour values, the system identified the problem as being late in leaving the job.

The third load encountered similar on-job problems. It was batched 7 minutes late, lost a few minutes in transit, arriving 10 minutes late. However an additional 28 minutes were lost before leaving the job, resulting in being 38 minutes behind schedule before returning to the plant.

Plt No.	Ticket No.	Order Code	Truck No.	Begin Batch	End Batch	Leave Plant	Arrive Job	Begin Pour	End Pour	Leave Job	Return Plant	Largest Delay
1	42311	980	78	06:44 (-22)		06:51 (-16)	07:06 (-6)			07:39 (-4)	07:54 (+5)	Batching
			TARGET	06:21	06:30	06:34	06:59	07:09	07:19	07:34	08:00	
1	42320	980	75	07:45 (-10)		07:48 (0)	08:16 (-3)			09:06 (-18)	09:21 (-8)	Lv job
			TARGET	07:34	07:43	07:47	08:13	08:23	08:32	08:48	09:13	
1	42321	989	85	07:51 (-7)		08:01 (-5)	08:26 (-10)			09:19 (-38)	09:34 (-33)	Lv job
			TARGET	07:44	07:50	07:56	08:16	08:26	08:26	08:41	09:01	

*Ticket Time Analysis – with Target Times*

This example is the same data as the previous report, except with target times displayed. In cases where data is missing (in this example, the begin and end pour times), seeing the times projected by the system might offer some insight. For example, in all three cases, 10 minutes were allocated between the time the truck arrived on the job and the pour began. Was this reasonable?

In the third job, the begin and end pour were projected to end at the same time, this is likely the source of the delay in the third load. While Keystone flagged this truck as 33 minutes lately, clearly the issue was in how the dispatcher estimated the job.

Plt No.	Ticket No.	Order Code	Truck No.	Begin Batch	End Batch	Leave Plant	Arrive Job	Begin Pour	End Pour	Leave Job	Return Plant	Largest Delay
1	42311	980	78	06:44 (-22)		06:51 (+5)	07:06 (+15)			07:39 (+1)	07:54 (+11)	Batching
1	42320	980	75	07:45 (-10)		07:48 (+9)	08:16 (+6)			09:06 (-15)	09:21 (-5)	Lv job
1	42321	989	85	07:51 (-7)		08:01 (+1)	08:26 (-3)			09:19 (-28)	09:34 (-23)	Lv job

*Ticket Time Analysis – Time To Job*

This sample is the same data as before, except displayed with the Time To Job method in calculating the variance. Because the variances are calculated within each time status, the results appear dramatically different.

Note: The variance next to begin batch is the same in both reports – this indicates how many minutes early or late that the job was batched from its projected time.

As noted earlier, the first load was batched 22 minutes late, arriving on the job only 6 minutes late. Using the Time To Job method, the report indicates that the first load saved 5 minutes leaving the plant and 15 more minutes in arriving at the job. Another minute was saved during the pour, and 11 more in transit back to the plant.\

The second load shows delays in batching, on-job and returning, but time savings in leaving the plant and arriving at the job.

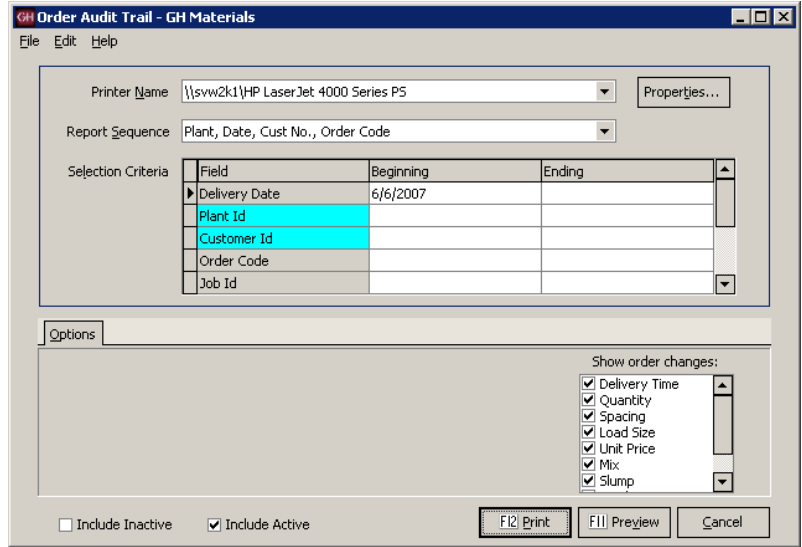
The third load shows small delays in batching and arriving on the job, with significant delays before leaving and returning to the plant.

## Order Audit Trail

This report is designed to provide an audit trail of all order changes. The report is designed to help troubleshoot problems with orders, diagnose “difficult” customers and even assist in loss prevention.

On the Options tab, there is a checkbox of the types of changes which should appear on the report. For the sample below, all changes were requested.

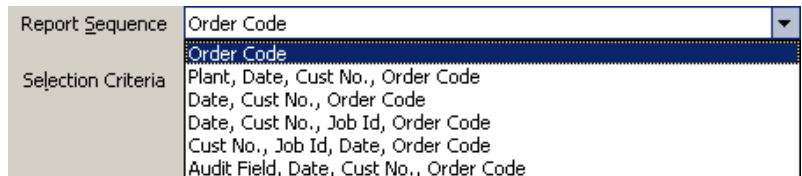
It is common to run the report based on what is being investigated. Changing a unit price is not important in determining why there was a problem with deliveries, but is key as part of loss prevention.



Order Audit Trail Screen

## Report Sequence

Running this report by order code is an excellent way to review what may have led to problems or confusion on a given order. .



Order Audit Trail – Report Sequence Dropdown List

In Sequence By Order Code									
Delivery Date 6/6/2007 only									
Order Code	Order Date	Plt No.	Customer Name	Job Id	Change Item	Change Date & Time	User Id	Old Value	New Value
1107	06/06/07	1	Hawkins Construction	NO. PATRICIA	Qty Ordered	06/05 10:34:13	JULIAN	100.00	50.00
1111	06/06/07	1	Cash Sale (Javier Hd	HIDALGO CTY PRE #3	Qty Ordered	06/05 10:00:27	JAVIER	3.00	20.00
1111	06/06/07	1	Cash Sale (Javier Hd	HIDALGO CTY PRE #3	Qty Ordered	06/05 10:00:39	JAVIER	3.00	1.00
1111	06/06/07	1	Cash Sale (Javier Hd	HIDALGO CTY PRE #3	Mix Code	06/07 12:00:00	JON	RM3000	RM3500
1127	06/06/07	1	Landmark Valley Home	LOT 113 4690001131	Qty Ordered	06/05 10:49:30	JULIAN	60.00	45.00

Order Audit Trail Report

## Menu Navigation – Utilities

- [-] Dispatch
  - ... Beginning of Day
  - ... Schedule
  - ... Order Maintenance
  - ... Ticket Printing
  - ... Truck Demand Graph
  - ... Concrete Calculator
  - ... End Of Day
  - + File Maintenance
  - + File Lists
  - + Reports
  - Utilities
    - ... Void Tickets
    - ... Re-Print Tickets
    - ... Re-Transfer Tickets

### Menu Overview

<b>Void Tickets</b>	Voids a delivery ticket, restoring correct quantities and schedules.
<b>Re-Print Tickets</b>	Generates additional paper copies of tickets without attempting to re-batch the ticket(s).
<b>Re-Transfer Tickets</b>	Creates another ticket transfer file to transmit to the office.

## Void Ticket

There are numerous reasons to void a ticket, such as accidental shipment of an incorrect order, batch control malfunction, etc.

Void Ticket is used to reverse some problems.

By entering the customer, ticket and reason for the void, the delivery ticket is voided (never deleted – it will pass to the billing system as a void ticket).

This will restore the quantity delivered fields, projected loads and schedule screen to the correct values.

Customer Id	CASH100
Ticket No.	43047
Void Reason	Dispatched wrong order
Name	Cash Sales
Ticket Date	9/1/2007
Ticket Total	495.60

*Void Ticket*



## Re-Print Ticket

Sometimes additional copies of delivery tickets are needed without shipping additional loads.

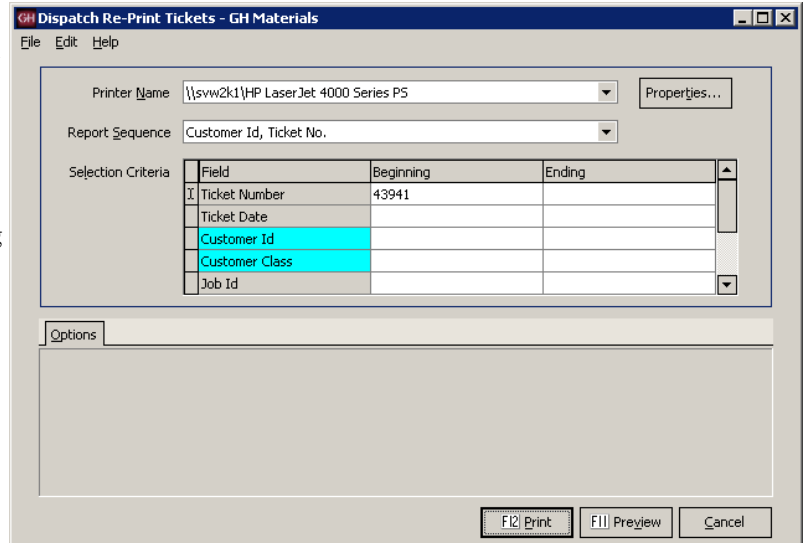
This could be due to a lost/destroyed ticket or requirements for additional copies due to regulatory or contractual requirements.

Re-Print Ticket fills this need. After selecting the plant, a screen appears allowing the dispatch to select which ticket(s) need to be re-printed.

Note: This function allows multiple tickets to be re-printed. In the sample to the right, a single ticket will be re-printed.

It is also possible to re-print ALL a customer's delivery tickets by date, or job.

Warning: NEVER simply press F12. This will cause Re-Print tickets to regenerate ALL delivery tickets since the last time End-Of-Day was run.

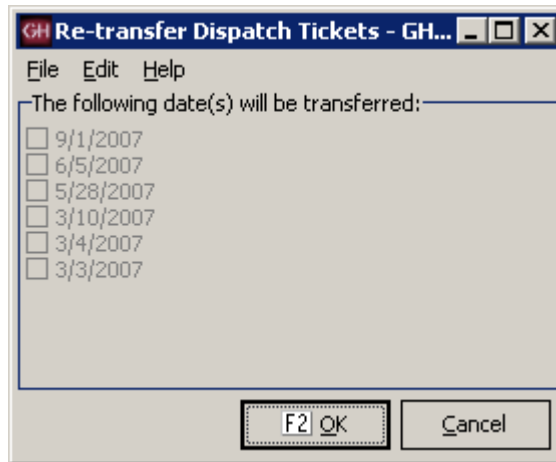


*Re-Print Ticket*

## Re-transfer Dispatch Tickets

This option is only available on stand-alone dispatch systems. It allows the dispatch site to create another export file of tickets for the date(s) selected based on the dates selected by the user.

(Stand-alone systems only)



*Re-Transfer Dispatch Tickets Screen*

# Appendix A - Delivery Zones

## Zone Methods

There are three commonly used methods for identifying delivery zones, one of which is likely employed at your plant. While changing Dispatch software is an already an upheaval to your organization, now may also be the ideal time to review other business processes and procedures with an eye towards the benefits such changes can bring.

The following review of delivery zone methodology is offered to show the different methodologies commonly employed and the advantages and disadvantages of each. Keystone Dispatch supports each method.

- **Time-Based times**

This is the most commonly used method, as it is easy to set up and simple to use.

The zones are established as the minutes it takes to get to the delivery location. Identifying the delivery location is unimportant, so long as the Dispatcher knows how long it takes to get there.

When keying in an order, the user simply types in the value (or code) for the time it takes to get to the job based on his experience on jobs in that vicinity.

### Advantages

- Fastest to set up (15-20 database entries)
- Delivery time doesn't vary by plant

### Disadvantages

- Requires dispatcher to know the area
- No delivery area reporting capabilities.

- **Delivery-based zones**

This method is less commonly used because it requires additional setup. It is simple to use once in place.

The zones are established as the location where the material is being shipped. Typically the name of the town or neighborhood is used. This requires less knowledge of the delivery times, often allow non-dispatch personnel to take orders with a minimal amount of training.

When keying in an order, the user simply types in the code for the delivery neighborhood. The time required to reach that neighborhood is stored in the database. Multiple plants can use the same codes for each neighborhood, as different travel times can be entered for each plant.

### Advantages

- Delivery area identified for later reporting.
- Non-dispatch personnel can take orders.
- An order shipped from more than one plant won't need to be edited to reflect different travel times.

### Disadvantages

- Longer setup (potentially hundreds of entries)
- Must enter all delivery locations for ALL plants.
- User must learn or lookup codes for areas.

## Keystone Dispatch System

- **Map-based zones**

This method is similar to the delivery-based model however uses map coordinates to identify locations rather than coding each area.

The zones are based on a common map. Some maps are based on a large grid, while others take the local geography into account to build custom maps based on delivery time experience.

When keying in an order, the user enters the code for the delivery area. The time required to reach that area is stored in the database. Multiple plants can use the same codes, as different travel times can be entered for each plant.

### Advantages

- Delivery area identified for later reporting.
- Non-dispatch personnel can take orders.
- An order shipped from more than one plant won't need to be edited to reflect different travel times.

### Disadvantages

- Longer setup (fewer entries than the delivery-based method, but more than time-based)
- Must enter all delivery locations for ALL plants.
- User must learn or lookup codes for areas.