AssetWORKS

Fuel Process

User Guide

Version 24.x
Last Modified 24.0 | March 2024

Technical Support

AssetWorks provides several ways to connect with the Customer Support team. Be prepared to provide detailed information to the representative. If you are reporting an issue by email, include screen shots of your problem. This will provide the Customer Support representative with the information needed to respond quickly and effectively.

Customer Support is available Monday through Friday, 7:00 a.m. to 7:00 p.m., Eastern Time.

Telephone: 1-610-225-8300

Email: M5Support@AssetWorks.com

Website: https://community.assetworks.com/hc/en-us

The support website can be used to open issues, subscribe to user groups and download documentation, as well as to access the latest AssetWorks news. For secure access to the website, contact Customer Support by calling the number above.

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Contents

FUEL OVERVIEW

The Fuel and Fluid Management system tracks virtually any product that can be metered or pulsed. Fuel and fluid data can be interfaced to most commercial fuel management and dispensing systems.

FuelFocus M5 supports both internal product management – product managed using a client's installed fuel dispensing equipment and commercial products purchased externally.

Configuration choices for FuelFocus M5 depends on how products will be managed.

- Is there client-owned fuel dispensing equipment to be managed?
- Is an external vendor supplying consignment fuel using client owned fuel dispensing equipment?
- Is internal fuel to be to be inventoried or expensed?
- Are there external product purchases that will be interfaced?

This manual will be organized in sections to make it easier to go directly to the configuration section based on your installation choices. Please start with Section A for information about the general FuelFocus configuration steps. Then refer to remaining sections based on your implementation choices.

Section A - General FuelFocus Configuration

Whether you implement internal or external fuel or both, the following items need to be configured.

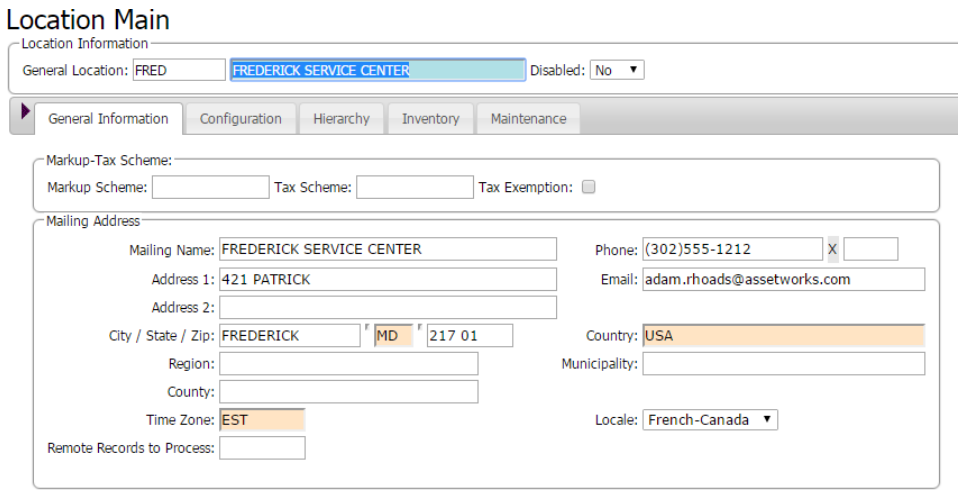
Fuel System Flags

It is extremely important to review all the M5 System Flags and set them for your organization. There is a separate document that describes the system flags related to FuelFocus.

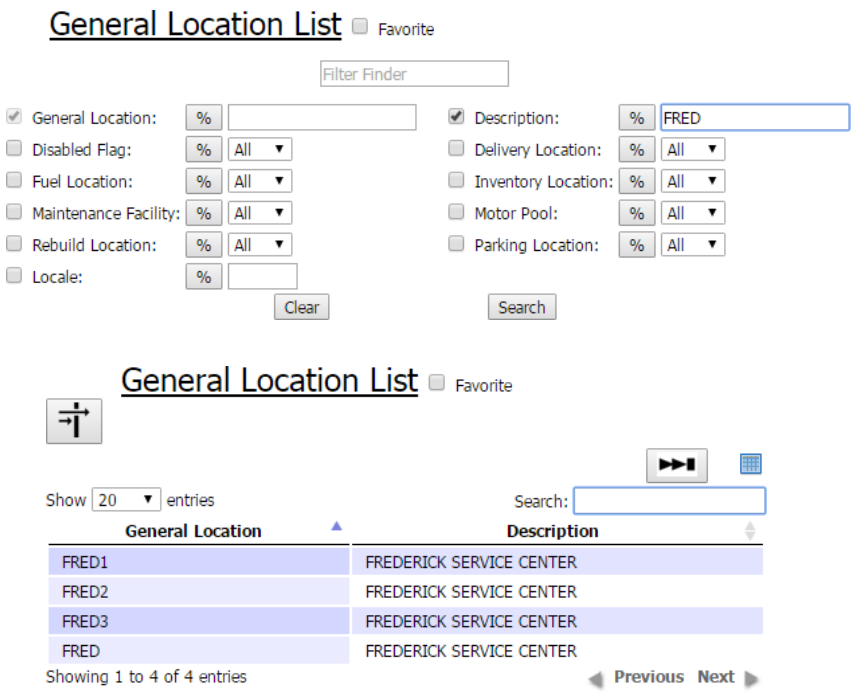
Fuel Locations

A fuel location is where vehicles obtain fuel and other consumable products. These consumable products may include gasoline, diesel fuel, oil, transmission fluid, and windshield wiper solution.

A new or previously established location must be defined as a Fueling Location using the Location Main frame.

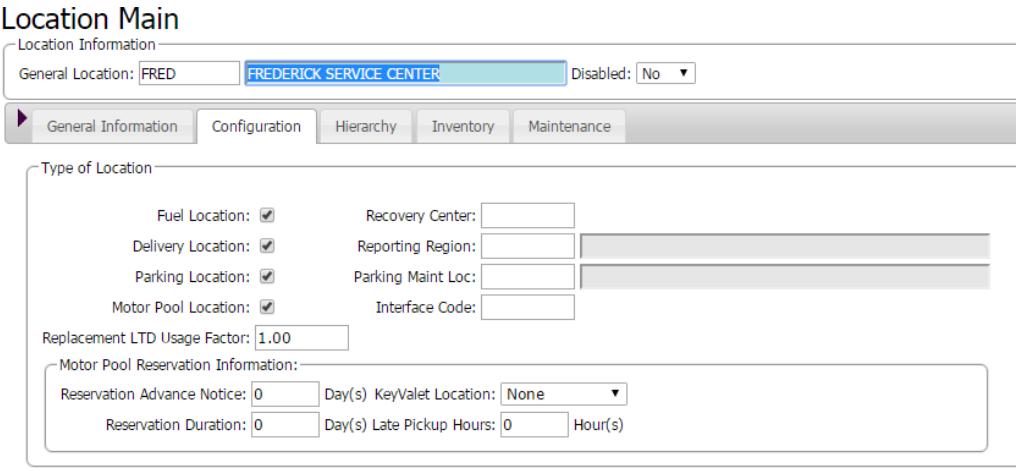


1. Open the Location Main frame.
2. To retrieve information about an existing fuel location. Enter the fueling location in the General Location field and press Tab. The location's description and address information display. To look up another fueling location, double-click or use the List of Values to perform a search, as applicable. The example below was created by selecting the MORE button on the LOV and selecting Yes on the Fueling Location criteria.



Double-click on the desired location.

3. Select the Configuration tab.

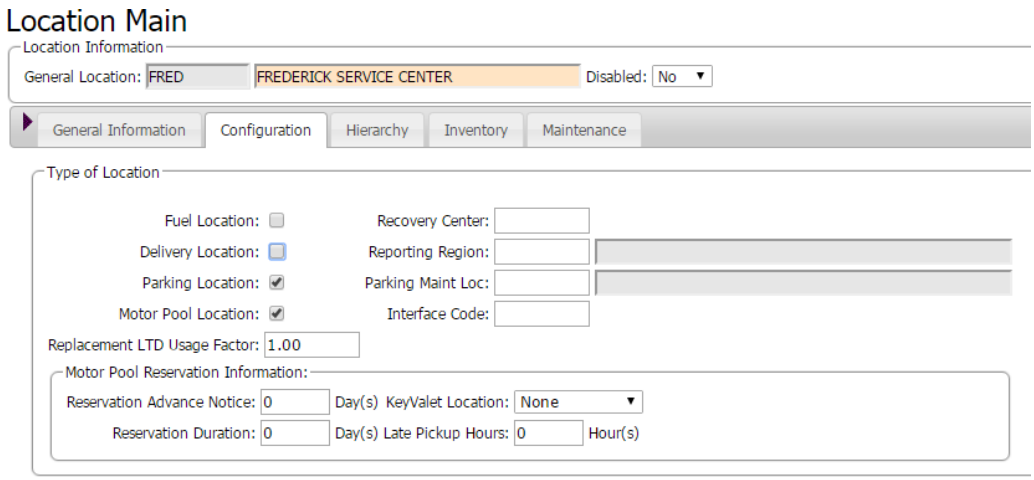


4. To make the location a fuel location, select the Fuel Location checkbox. The other fields are optional as a fueling location need not be a delivery, maintenance, motor pool or parking location. **Note:** The Recovery Center field is currently not used. If this is a new location, the user may want to select the General tab and complete the address fields.
5. Select the SAVE icon when complete.

Disabling a Fueling Location

If a fueling location is no longer going to be receiving and issuing fuel, that fueling location needs to be disabled.

1. To disable the fueling location, open the Location Main frame.



2. Enter the fueling location to be disabled in the General Location field and press Tab. The location's description and address information display.
3. Select the Configuration tab and select the Fuel Location checkbox.
4. Select the SAVE icon when complete.

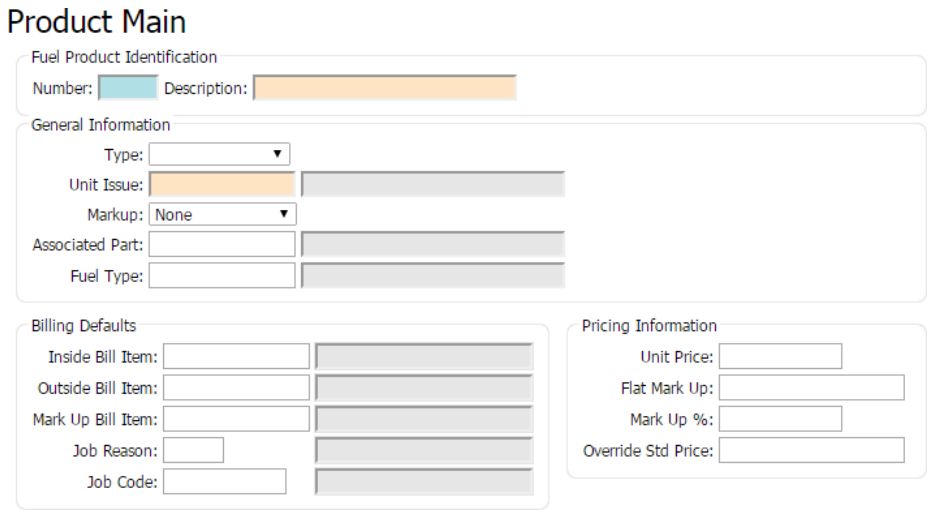
Product Configuration

The Production Main frame is used to maintain all valid fuel and products to be tracked in the M5 system. Use this frame to establish a valid product code for issue to units, departments or accounts. Fuel Products can include fuel, oil, hard parts, device controls or miscellaneous (for example, anti-freeze, washer fluid).

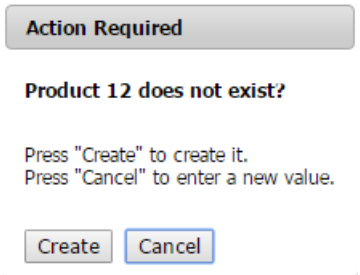
Within this frame, the user defines not only the product code with the actual product type (for example, fuel, oil, hard part, control device or miscellaneous), but also the pricing method for the product at this location. Will the product carry a flat mark up, percentage mark up or no mark up? This frame will also list the name of the billing item to later determine which accounts of the corresponding department should be billed. All products need to be defined in order to be associated with a tank, unit, or department.

The note at the bottom of the frame advises the user of the current price of the product unless overridden by a department specific price.

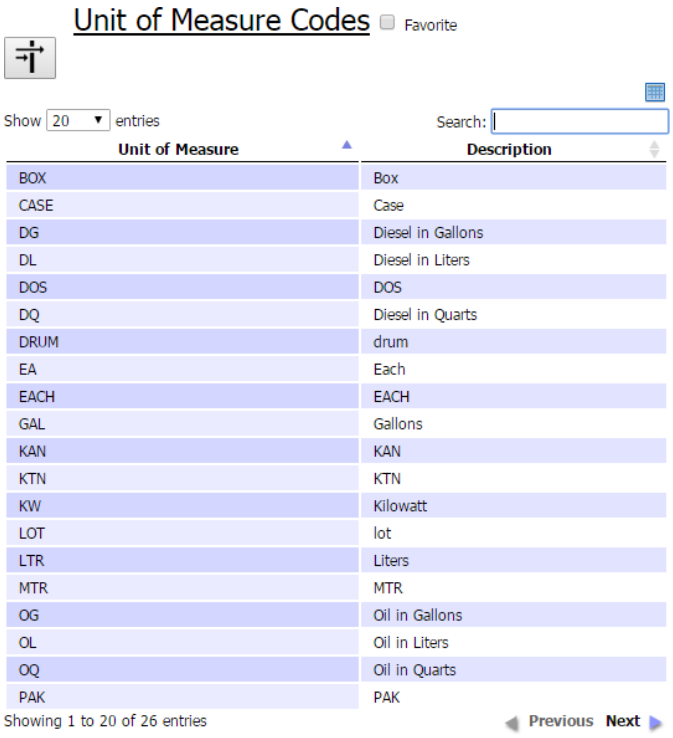
1. To create new products, open the Product Main frame.



2. Enter a two-character code for the new fuel product number in the Number field and press Tab. The Action Required window displays.



3. Select the Create button to enter a new product.
4. Enter the new product description in the Description field and press Tab.
5. Select the Product type from the dropdown menu. The choices are fuel, oil, hard part, misc., and device control.
6. Enter the unit of issue in the Unit Issue field and press Tab. To view a list of applicable issue types, double-click in the field.

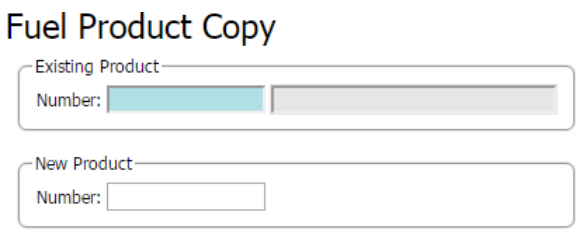


7. Double-click on the desired unit of issue.
8. Select the markup type if applicable, from the dropdown menu. A flat markup would indicate a certain dollar amount markup, whereas, a percentage markup would be a certain percentage markup of the total cost. Depending on what type of markup is selected here, determines what is entered in the Pricing Information section.
9. Associated Part – A valid part number can be selected here. This is used for a specific customer fuel interface.
10. Fuel Type – Use the dropdown to select a valid fuel type. This is used with Carbon Footprint Reporting.
11. Enter billing default items if applicable. By entering a billing item in either of the Inside Bill Item or Outside Bill Item fields indicates to M5 that this product will be billed and indicated as such on the billing reports. Use the billing item Fuel Chgs.
12. Enter the price per unit in the Unit Price field and press Tab.
13. To markup any product by $.20, enter .20 in the Flat Markup field and press Tab.
14. To enter a percentage markup, enter it in the Percentage Markup field and press Tab. For example, if the markup percentage is 10 and the cost of the product is $5.00, then the markup would be 50 cents (5 x .10).
15. If System Flag 5140 is set to Y, then the Override Std. Price field will display. If you wish to enter a price to override the standard price, enter it here.
16. Select the SAVE icon to save any changes.

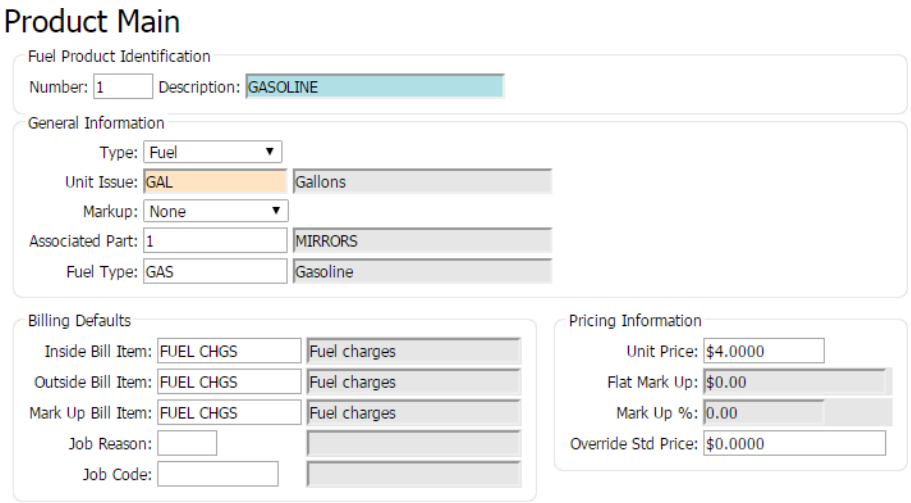
Copying one Product to Another

The Product Copy frame allows the user to copy the product information from a similar product to a new product number. This saves time during the data entry process.

1. Open the Product Copy frame.



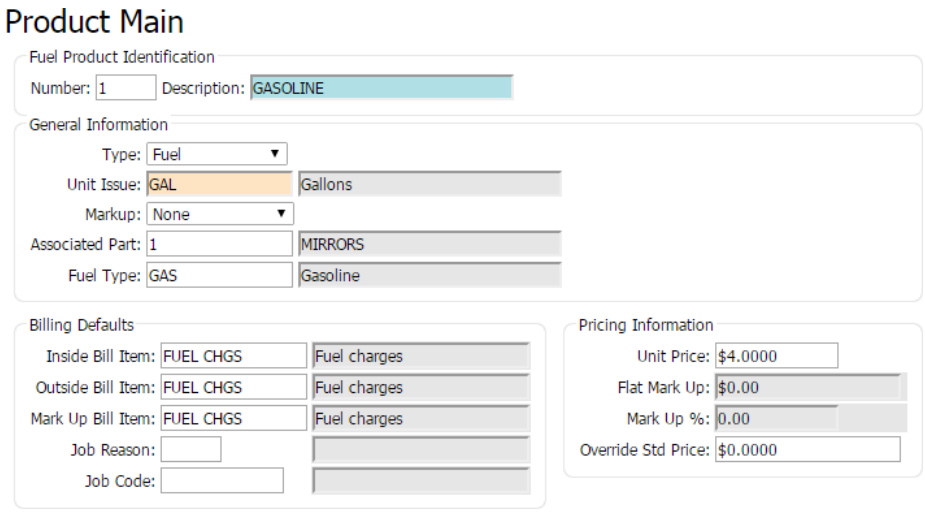
2. Enter the fuel product number that you are copying from in the Number field and press Tab. The product's description will display to the right. If needed, a search can be done on products by either double-clicking or using the Binoculars icon.
3. Enter the new fuel product number that you are copying the existing product into the New Product Number field and press Tab.
4. Select the SAVE icon to save the new product number.
5. The Product Main frame will appear and the new product information can be entered accordingly.



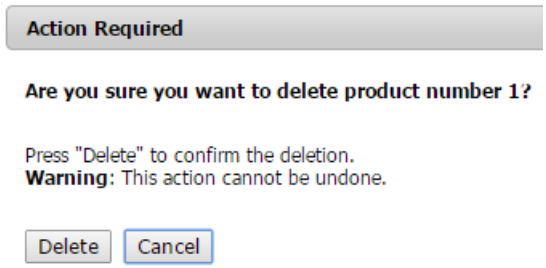
6. Follow the instructions in Creating Products.
7. Select the SAVE icon when complete.

Deleting/Removing a Product

Use the Product Main frame page to remove or delete a product if it is no longer used.



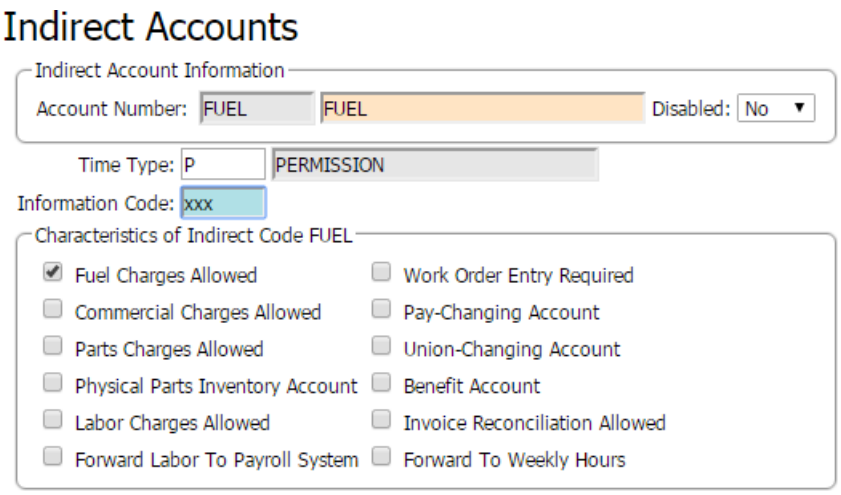
1. Enter the product code to be deleted in the Number field and press Tab. All data for that product displays.
2. Select the Delete icon. The Action Required window displays.



Indirect Account Codes

Indirect account codes are used to charge expenses that cannot be charged directly to a unit, department, or component. These charges are typically considered overhead expenses. For example, fuel may be charged to an indirect account when consumed in devices such as starting units and lawn mowers; lost dollars such as a negative inventory variance or fuel loss are accounted for using indirect account codes.

1. To create a new indirect account, select the Indirect Account Codes frame.

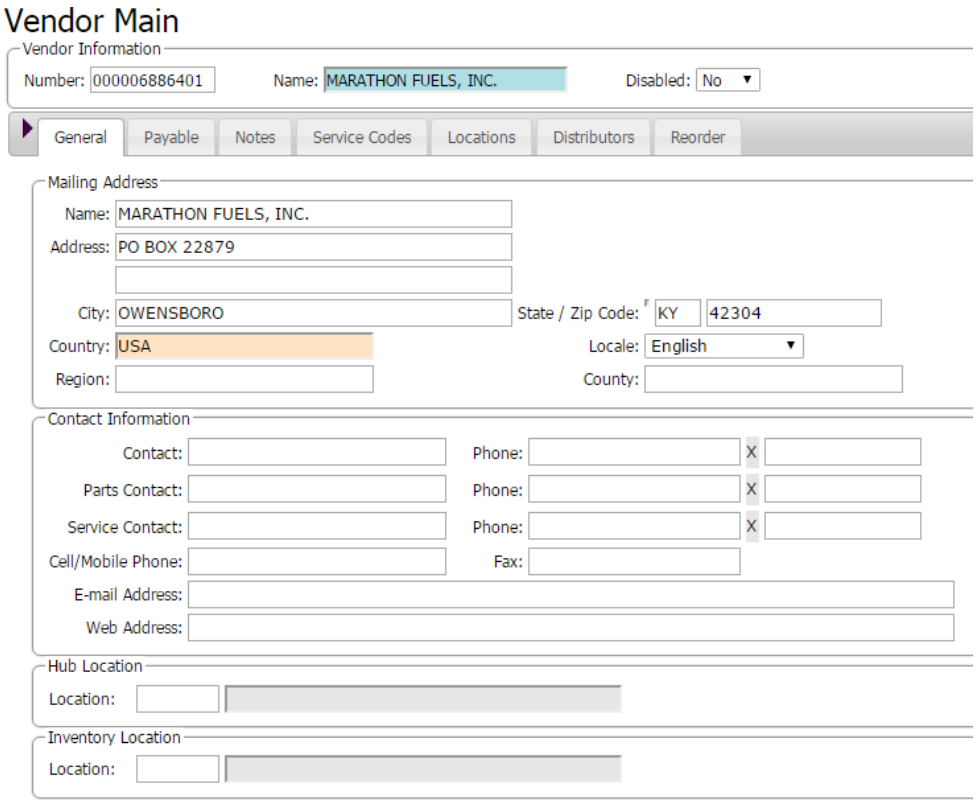


2. Enter the account number code. Press Tab.
3. Enter description for the account number. Press Tab.
4. Select the Fuel Charges Allowed checkbox.
5. Select the SAVE button.

Fuel Vendors

Vendors are defined for use in fuel when ordering products, receiving products, issuing Commercial Fuel. Vendors are identified by unique alphanumeric identification. Information is tracked which allows for contact with the vendor (name, address, phone number, contact name), taking advantage of any discounts the vendor allows and terms of payment.

Use the Vendor Main frame to add, modify, display or delete information about a vendor. This frame also includes the ability to disable and then to enable a vendor. This is particularly appropriate for vendors who lose a contract and are not used during the current contract term, but who continue to bid, and perhaps win the contract back the following year. You can copy the information from one vendor to another using the Vendor Copy frame.



1. Open the Vendor Main frame
2. Enter a vendor number in the Number field. This is a required field. Press Tab.
3. Enter a vendor name in the Name field. This is a required field. Press Tab.
4. Complete the mailing address information. Press Tab.
5. Complete the contact information. Press Tab.
6. Complete any additional information required on the other tabs.
7. Select the SAVE icon.

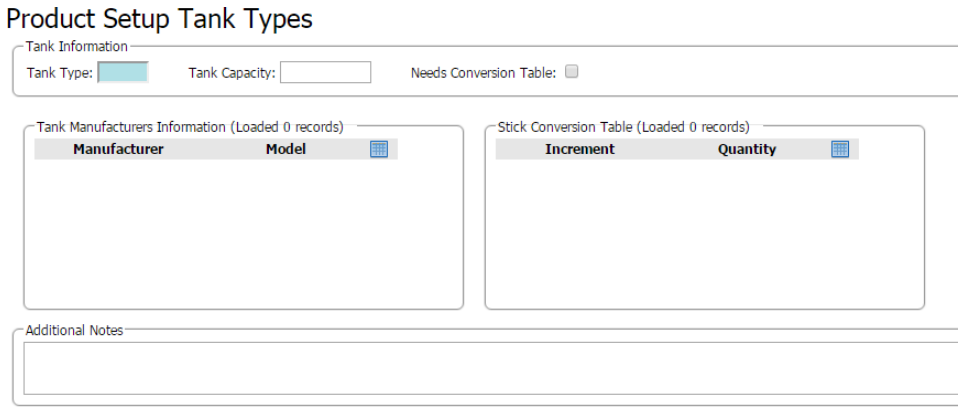
Section B - Fuel Hardware Configuration for Internal Fuel

This section describes the hardware configuration that must be done in the M5 application.

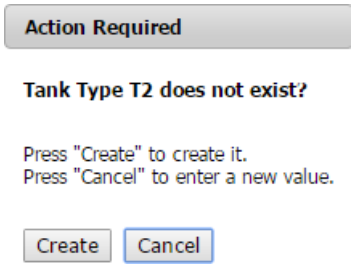
Product Setup Tank Types

The Product Setup Tank Types frame is used to define the physical characteristics of the tank itself, such as the size, model number and the capacity. Tanks must be defined before products can be associated to the individual tanks.

1. Open the Product Setup Tank Types frame.



2. Enter up to a three-character code in the Tank Type field and press Tab. The Action Required window displays.

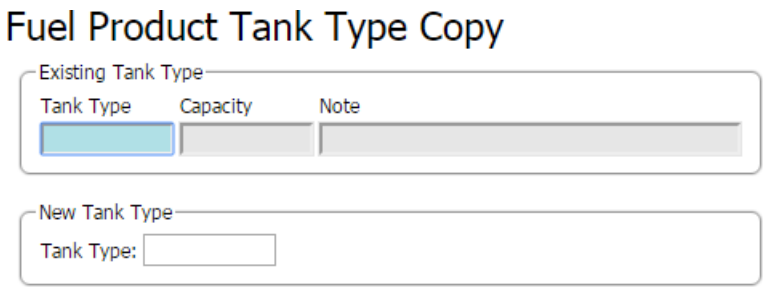


3. Select the Create button in order to continue.
4. Enter the tank's maximum capacity in the Capacity field and press Tab.
5. Enter the tank's manufacturer make name in the Make field.
6. Enter the tank's manufacturer model number in the Model field.
7. Select the Sticking Conversion Table and enter a stick reading number (as an increment).
8. Enter the quantity which corresponds to the stick reading number in the Quantity field.
9. To enter tank type notes, select Note Editor from the toolbar and enter notes.
10. Select the SAVE icon to save the new tank information.

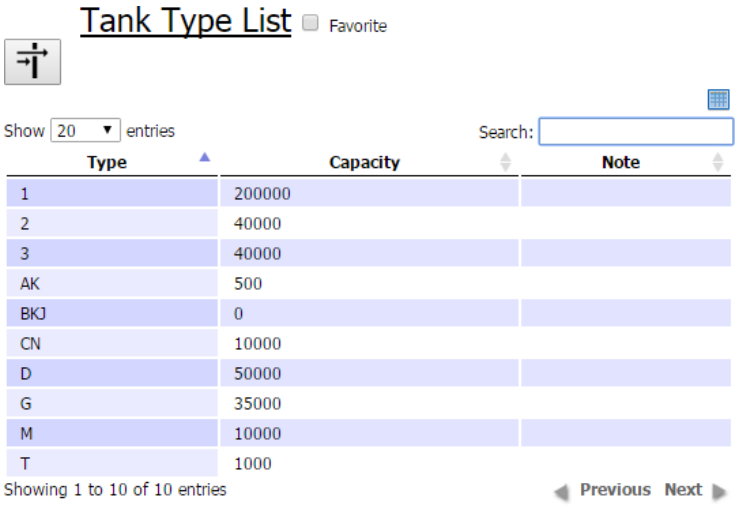
Copying Product Tank Types

After tank types for one location are set up, that tank type can then be copied to other fueling locations. Be sure to be in the fueling location that you want the new copied tank type to be in.

1. Open the Product Location Tank Type Copy frame.

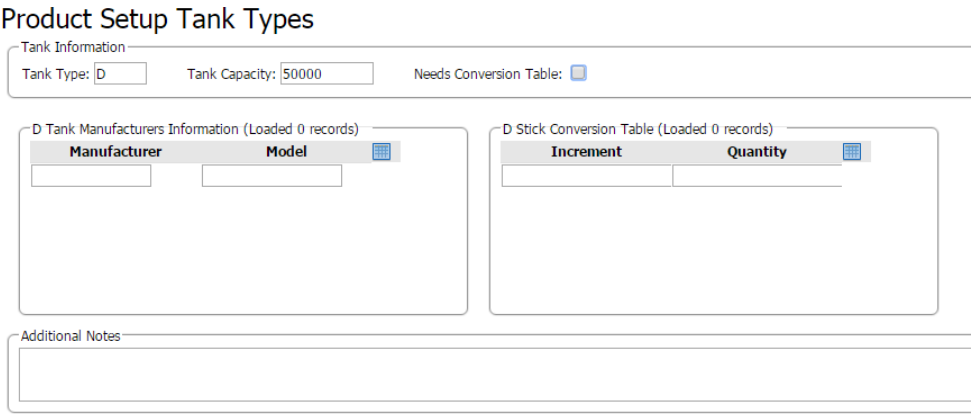


2. Enter the tank type to be copied or double-click in the Tank Type field in order to view the possible tank types.



3. Double-click on the desired tank type to be copied.

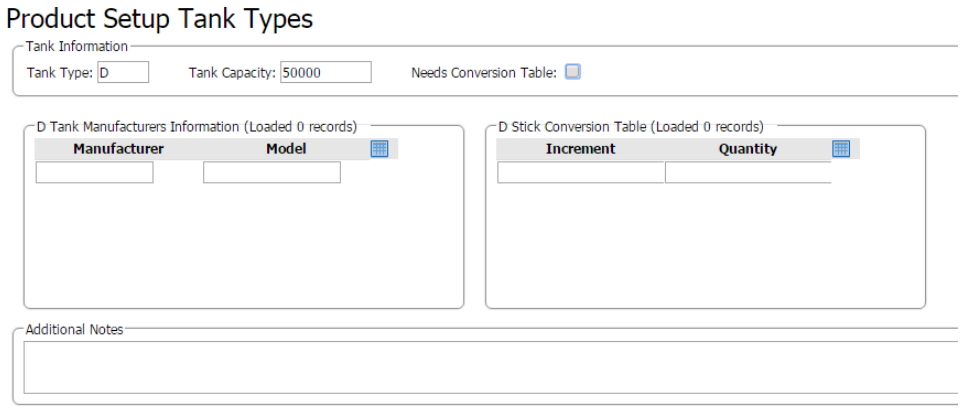
4. The Product Setup Tank Types frame will display with the new tank type displayed. Press Tab. All information from the tank type being copied will display, allowing for any changes to be made.



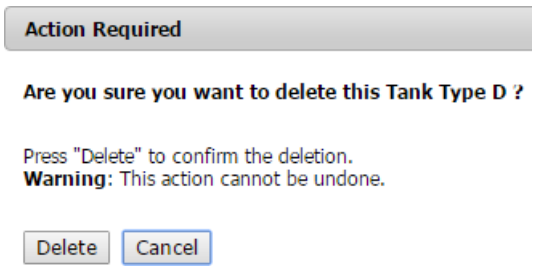
5. Select the SAVE icon when complete.

Deleting a Tank Type

1. Open the Product Setup Tank Types frame.



2. Enter the tank type to be removed in the Tank Type field and press Tab. The tank type information will display. If a search is needed, proceed to either double-click or use the Binoculars icon.
3. Select the DELETE icon, the Action Required window displays.



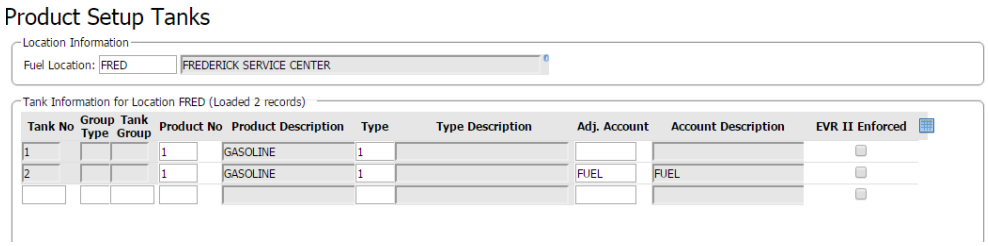
4. Select the Delete button to continue to delete that tank type.

Product Setup Tanks

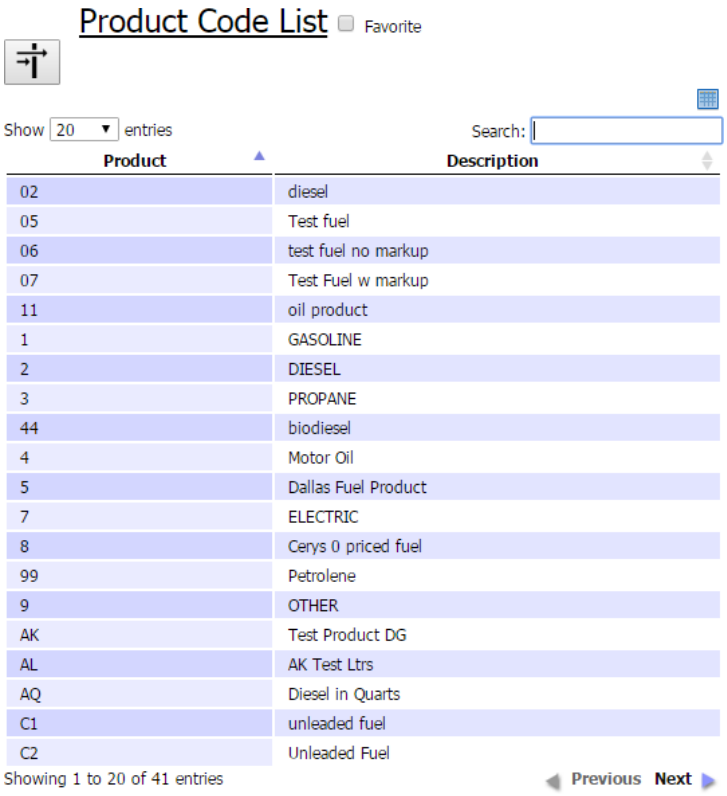
After the tank types and products have been defined, the individual tanks and products in the tanks need to be established for a fueling location by using the Product Setup Tanks frame.

In this frame, the user establishes the relationship between the user-defined tank numbers and the product to be stored within that tank. The Tank Number itself should be specific to that location but need not be previously defined in the system. The Tank Type, however, must be previously defined as must the product.

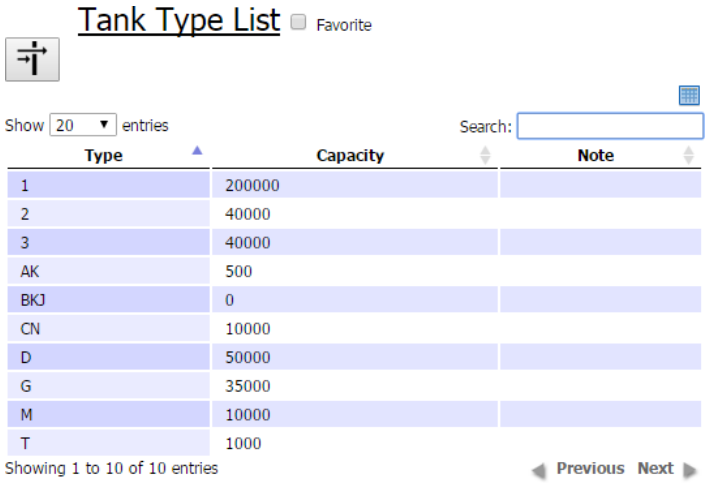
1. Open the Product Setup Tanks frame.



2. Enter the fueling location you are adding the product to in the Fuel Location field and press Tab. If necessary, either double-click in the field or use the Binoculars icon to perform a search of all fueling locations.
3. Enter up to a two-digit tank number in the Tank No field and press Tab.
4. Enter the product in this tank in the Product No field and press Tab. If you need to look up the various products, either double-click or use the Binoculars icon.

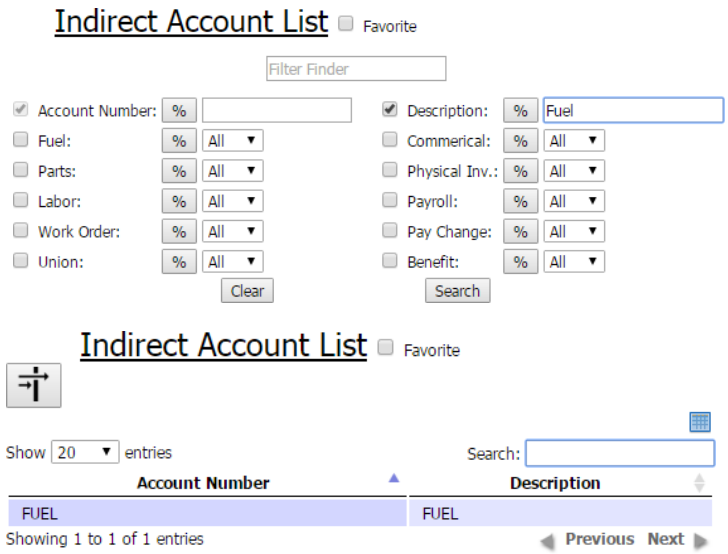


5. Double-click on the correct product. The product's description displays.
6. Proceed to enter the tank type associated with this tank in the Type field or perform a lookup to view the various tank types.



7. Double-click on the desired tank type.

8. In the Account Adj. column, enter a valid Indirect Account number and its description will display. This account number is used to charge the potential quantity-on-hand discrepancy when an inventory is done for this product. If you do not know the indirect account number, double-click in this field to search for the appropriate number. In the example below, select the MORE button and set the Fuel criteria to yes; meaning, display only those indirect accounts that fuel can be charged to.



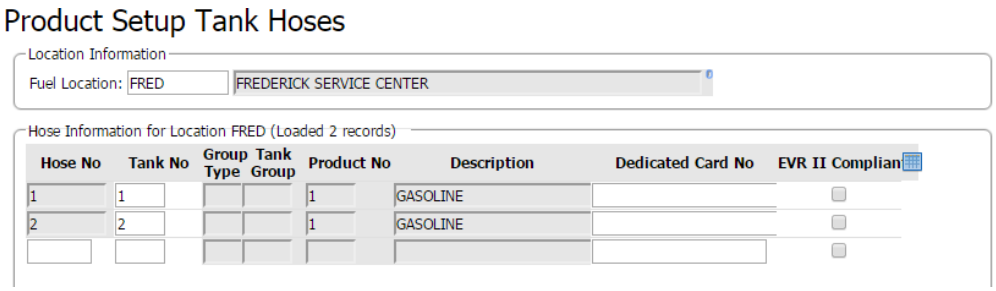
9. Double-click on the desired account number.
10. EVRII Enforced – Enhanced Vapor Recovery (EVR) Indicates if the tanks have been fitted with emissions control equipment at the dispensing facilities in California. Vapor recovery systems collect gasoline vapors that would otherwise escape into the air during bulk fuel delivery (Phase I) or fuel storage and vehicle refueling (Phase II). These vapors are a major culprit in the formation of smog.
11. Continue to enter as many tanks and products as required by the fueling location and then select the SAVE icon when done.

Product Location Tank Hose Settings

After the tanks have been established and the product assigned to that tank, the user now needs to indicate to the system which hose is associated with which tank and product combination. This is done using the Product Location Tank Hose Settings frame.

The Hose Number is user-defined but needs to correlate with a valid Tank and Product number combination.

1. Open the Product Location Tank Hose Settings frame.



2. Enter the location that the tanks are in the Fuel Location field and press Tab. The fueling location's description will appear to the right. Again, if a lookup is required, double-click in the field or use the Binoculars icon.
3. Enter the user-defined hose number in the Hose No field and press Tab. You can have more than one hose per tank.
4. Enter the tank number of the tank you are associating the hose to in the Tank No field and press Tab. The product and product description will display. If you need to see which tanks are available at the entered location, proceed to perform a lookup.
5. Proceed to enter any other hoses for either the same tank or other tanks at the entered location.
6. Dedicated Card No – Enter the dedicated fuel card no if required.
7. EVRII Compliant – Indicates if the hoses are Enhanced Vapor Recovery Compliant (EVR) for the State of California.
8. Select the SAVE icon when complete.

Fuel Island Control Unit Setup

The Island Control Unit controls such items as:

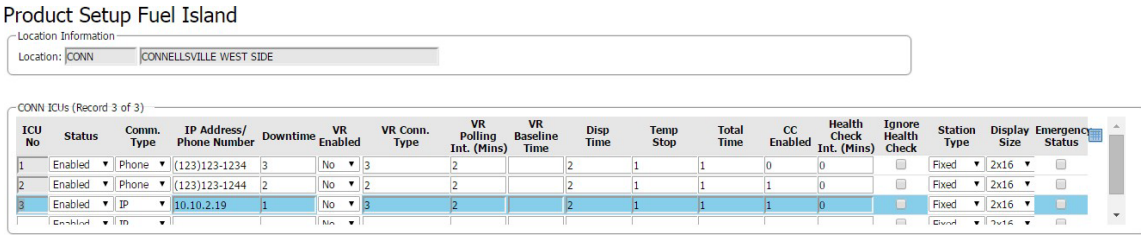
- Connection information from pumps and hoses.
- Time parameters for start/stop fueling.
- May control intervals for Tank Level Sensing (Veeder Root) connections.

Island Control Unit (Real Time) – Setup

The Roseman ICU is a real time interface to M5. Prior to the initialization of the ICU, the settings for the pump must be set up in M5 by using the Product Location Island Setup frame. Upon installation of FuelFOCUS, AssetWorks personnel will assist in setting up this page.

ICU Section

1. Open the Product Location Island Setup frame.

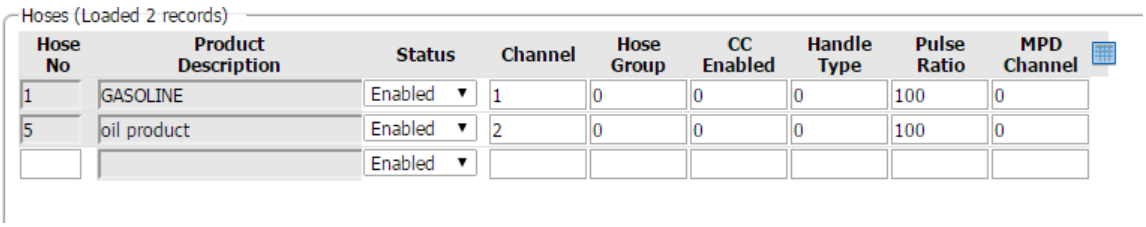


2. Enter the valid fueling location of the ICU in the Location field and press Tab. The description of the location will display.
3. Enter the ICU No. Press Tab.
4. The Status will automatically default to enable. If you want to disable the ICU use the dropdown menu to change the status to disabled. Press Tab.
5. Comm Type defaults to IP. If you want to use phone type use the dropdown menu to change the type to phone. Press Tab.
6. If the Comm Type is IP, then enter the IP address in the next field. Press Tab. If the Comm Type is Phone, then enter the phone number in this field. Press Tab.
7. The Downtime field is not used.
8. In the VR Enabled field, change to Yes, if M5 is to automatically poll the Veeder Root system, else leave this field set at No.
9. In the VR Conn Type field enter COM4 for a serial connection or the IP Address for a TCP/IP connection.
10. In the VR Polling Init field enter how often you want the ICU to take a reading from the VR in minutes.
11. The ICU will use the baseline time plus the interval to determine when the polling will occur. It will not reset the baseline every time the ICU software is restarted. If there is not a baseline set, the ICU will do what it does today for VR polling. It will hold time only. The format is hours and minutes (HH:MM) allowing for even

number hour factors. The minimum value is "00:00" the maximum value is "23:50". Valid minute values are (00, 25 & 50). Valid hour values are (0, 1, 2, 4, 6, 8, 12 & 24).

12. In the Disp Time field enter how many seconds from the time you enter the fuel card information and receive authorization at the ICU until you start the hose.
13. In the Temp Stop field enter how many seconds you can stop fueling and still be able to restart fueling again.
14. In the Total Time field, enter in seconds how long from time to start to stop fueling.
15. In the CC Enabled field, entered 0 = NO or 1 = Yes if the ICU is credit card enabled.
16. Station Type – Used to indicate if this ICU is mounted on a pedestal or is a portable ICU.
17. Repeat steps 2-13 to add additional ICU information for a location.
18. Select the SAVE icon.

Hoses Section

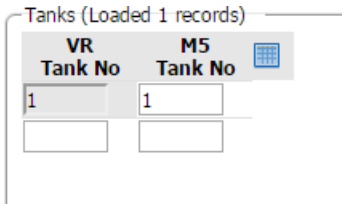

Hoses (Loaded 2 records)

Hose No	Product Description	Status	Channel	Hose Group	CC Enabled	Handle Type	Pulse Ratio	MPD Channel
1	GASOLINE	Enabled	1	0	0	0	100	0
5	oil product	Enabled	2	0	0	0	100	0
		Enabled						

1. Highlight the ICU you want to set up hoses for.
2. Enter the Hose Number or Pump number that is to be entered at the ICU when wanting to authorize a product. Press Tab.
3. Description will populate based on the hose that was selected.
4. Enter a status of enabled or disabled. Press Tab.
5. Enter the Channel Information. This is the position where the hose or pump is wired into the ICU. ICU's could be 4 hose, 8 hose, 12 hose or 16 hose.
6. In the Hose Group - If set at zero then the hoses are not grouped together. If you want to authorize other commodities when entering in a hose number then you would set the grouping to 1. For example, if you authorize unleaded gasoline but you also want the ability to dispense oil, ATF and antifreeze based on this authorization you would set the grouping for those hoses or pumps to 1. You could do this for multiple lanes if necessary.
7. CC Enabled - Is the hose/pump credit card enabled? 0 = No and 1 = Yes
8. Handle Type = 0 is for a normal handle type, setting it to handle type = 1 allows the ICU to think the handle is always on. This would be used for a commodity that does not have a handle.
9. Pulse Ratio Pulses = This is for the pulse ratio for the pulsar. How many pulses = 1 gallon? Most configurations are 10.
10. MPD Channel - retail pump - This column plus the Channel column together make it unique for retail purposes.

11. Repeat steps 2 – 10 for additional hose or pump setups.
12. Select the SAVE icon.

Tanks Section



This is where you show the relationship to the M5 Tanks to the Veeder Root Monitoring System.

1. VR Tank No. – Enter the Veeder Root Tank Number.
2. M5 Tank No. – Enter the M5 Tank Number.
3. Select the SAVE icon.

Events Section

This is where you can set up an ICU event to notify you when it occurs at the fuel island. There are four ICU events – PulserFailure, LowBattery ICUHealth and TankAlarm.
LowBattery is only for WAF equipped ICU and TankAlarm would only apply if the Tank Monitoring System is connected to the ICU.

ICU "Health" Checks

Instead of FuelFocus sending a request to the ICU, the ICU will send, on a schedule defined for each ICU, an XML message to the FuelFocus server to get the status or health of the ICU. The ICU will report when it last issued product. The FuelFocus server will then know that the ICU is ONLINE and functioning. If the ICU has not sent a message to the FuelFocus server at the most recently scheduled interval, the ICU must not be ONLINE and needs some attention.

The ICU Health check can be defined on the Product Setup Fuel Island frame for each ICU at a specific fueling location. Two new columns were added and are:

- **Health Check Int. (Mins)** – How often the ICU sends FuelFocus a message.
- **Ignore Health Check** – Disables health checks altogether.

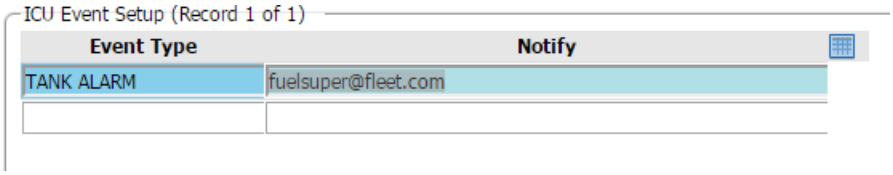
The health check in minutes can be set to a minimum of two and a maximum of 1440 (24 hours). An entry of zero (0) effectively disables the health check.

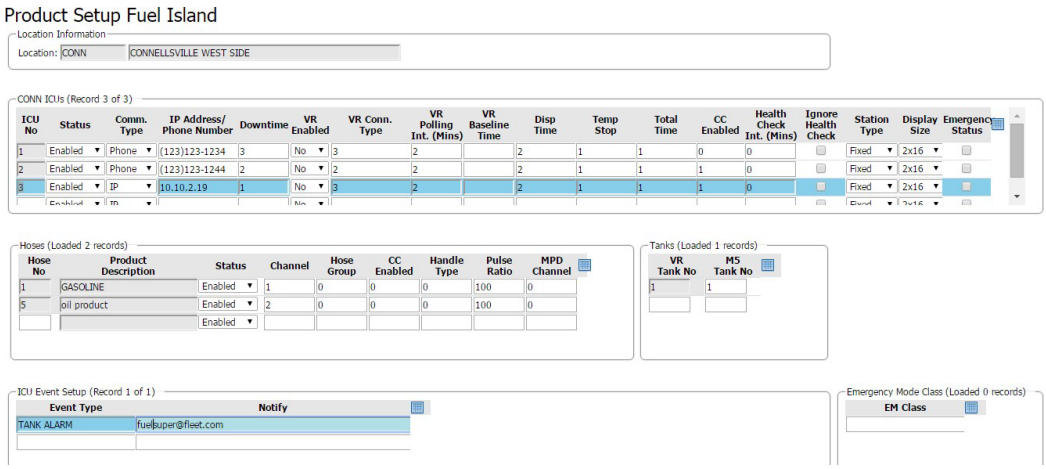
By selecting the Ignore Health Check checkbox the email notifications will not go out. This is helpful in the situation where an ICU will be down for an extended period of time for repair.

In order for FuelFocus to know who to send the health checks to, an ICU event called ICUHEALTH must be created in the ICU Event Code frame.

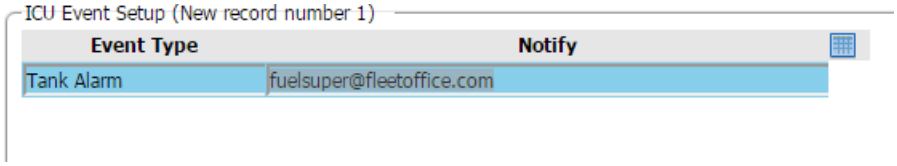
The ICU event code is then added to the Fuel Island Setup frame for each ICU at the fueling location. The user must enter the fueling location, select the ICU and enter the ICU Event code and corresponding email address in the ICU Event section on the Fuel Island Setup frame.

13. Setup the ICU Event Codes that pertain to your operation.





14. Add the Event Type
15. Add the Notify email address of the person to be notified when the event occurs.



16. Select the SAVE icon.

    Note: Notifications must be enabled for the event to be emailed (Notification Manager).

Setting up work request messages at the ICU

During the PreAuth transaction, the FuelFocus server sends a message to the ICU about pending work requests.

1. System checks System Flag 5103. If it is set to Y, then
2. System Flag 5104 is checked. It says what priority work requests will generate a message.
   System Flag 5104 -This flag will determine which work requests to display on the ICU based on the work request priority. For example: If the value is "5" then only priority 5 work requests will be returned to the ICU. If the value is 5+ then any work request with a priority of 5 or greater will be returned to the ICU. If the value is 5- then any work request with a priority of 5 or less will be returned to the ICU. This flag will not work unless module flag 5103 is set to a value of "Y".

3. System Flag 5105 is checked to see how "current" the work requests need to be. This flag will determine which work requests to display on the ICU based on the work request due date. For example: If the value is "0" then all work requests that are due today or previous to today will be returned to the ICU. If the value is "2" then all work requests that are due 2 days from now or previous will be returned to the ICU. This flag will not work unless module flag 5103 is set to a value of "Y".

   If there are any WR that meet the above criteria, the system sends a message as part of the Preauthorization response. If more than one WR meets the criteria, they will all be concatenated (strung together) as one message. The ICU will then display the entire message as long as the authorization is granted.
   Message Example - Job 06-PM-PMB is due on 15-May 2008.

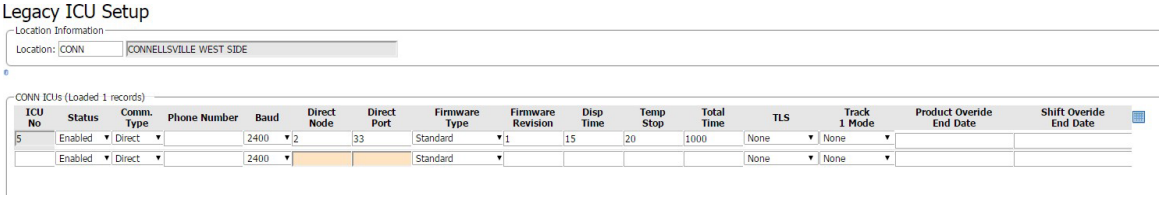
Deny Fuel if Job Is Overdue

If a work request is overdue and not yet on a work order, to deny fuel during the preauthorize function at the ICU. The number of days overdue is set by a system flag.

- System flag 5200 - “Days to deny fuel on ICU for overdue Work Requests”. The value of this flag and the values of system flags 5201 and 5202 will deny fuel for overdue work requests on the ICU for real-time FuelFocus customers. A blank value will turn off the check for overdue work requests. Any numeric value that is zero or greater will denote a grace period that will allow for the authorization of fuel for overdue work requests.
- System flag 5201 – “Date used to deny fuel on ICU for overdue Work Requests”. The value of this flag will use the work request earliest, due or latest date to deny fuel on the ICU for overdue work requests. This flag can be set to "E" (Earliest), "D" (Due) or "L" (Latest) date.
- System flag 5202 – “Deny fuel on ICU for overdue Work Requests based on Priority”. This flag will determine which work requests to deny on the ICU based on the work request priority. For example: If the value is "5" then only priority 5 work requests will be returned to the ICU. If the value is 5+ then any work request with a priority of 5 or greater will be returned to the ICU. If the value is 5- then any work request with a priority of 5 or less will be returned to the ICU. This flag will not work unless module flag 5200 is set.

Island Control Unit (Polled) – Legacy

The legacy ICU is not real time. The data is polled, sending to and receiving from the ICU by using a modem or a network connection such as a Digi Board. Upon installation of FuelFOCUS, AssetWorks personnel will assist in setting up this page.



Each ICU is assigned a location, unique, user-specified number between 1 and 99. The method and parameters for establishing a communications link to each ICU is specified on this frame.

ICU Section

1. Open the Legacy ICU Setup frame.
2. Enter a fuel location in the location field and press Tab.
3. Enter a location-unique ICU number. Press Tab.
4. Press Tab to accept the default of Enabled in the ICU Status field or use the dropdown menu to select Disabled in the ICU Status field. Press Tab.
5. Press Tab to accept the default of Direct (a direct RS-232 line) Connect Type field or use the dropdown menu to select Modem in the Connect type field and press

Tab. The setting of this flag determines which of the other parameters are required or are valid.

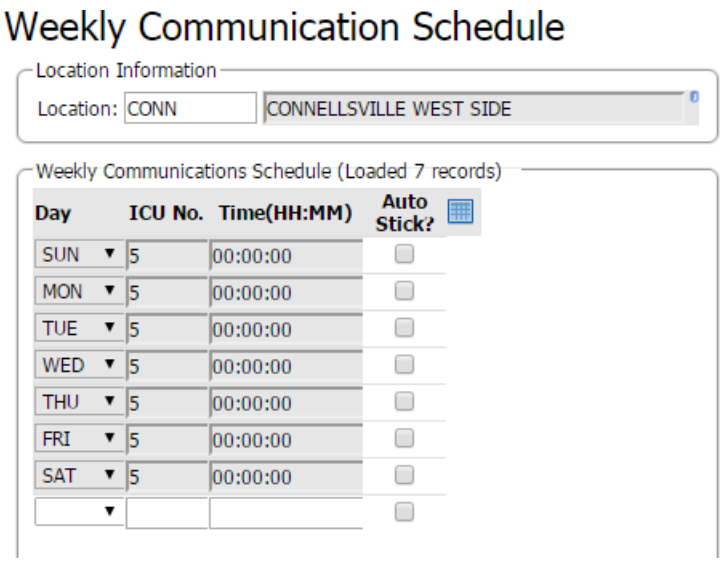
6. If the connect type in the Connect Type field is set to Modem, you must enter the phone number used to call the ICU in the Modem Phone No field. Press Tab.
7. Press Tab to accept the default modem baud rate in the Baud field or use the dropdown menu to select the proper baud rate in the Baud field. Press Tab.
8. If the Connect type in the Connect Type field is set to Direct (a direct RS-232 line), you must enter both the VMS Node type in the Direct Node field and the VMS Port type in Direct Port field to which the ICU is directly connected. Press Tab.
9. Select the firmware type. Use the dropdown menu to select the proper firmware type. Press Tab.
10. Enter the Firmware revision. Press Tab.
11. In the Temp Stop field enter how many seconds you can stop fueling and still be able to restart fueling again. Press Tab.
12. Temp Stop – How many seconds you can stop fueling before you can start again. Press Tab.
13. Total Time – In seconds, how long from time to start to stop fueling. Press Tab.
14. TLS – Use the dropdown menu to select the Tank Leveling Sensor you will be using. Press Tab.
15. Track 1 Mode – Use the dropdown menu to the select Track 1 Mode. Press Tab.
16. Product Override End – Not used anymore.
17. Shift Override End – Not used anymore.
18. Repeat steps 2-17 to add additional ICU information for a location.
19. Select the SAVE icon.

Hoses

1. Highlight the ICU for which you want to define a hose.
2. Enter an ICU-unique hose number. Press Tab.
3. Use the dropdown menu and select the status of the hose in the Hose State field. The values are Enabled or Disabled. Press Tab.
4. Enter the DCM channel number that controls the hose in the DCM Channel Number field. Press Tab.
5. Enter the Handle Type. Press Tab.
6. Enter the Pulse Ratio. Press Tab.
7. Repeat steps 1-6 to add additional ICU to hose connections.
8. Select the SAVE icon.

Weekly Communication Schedule

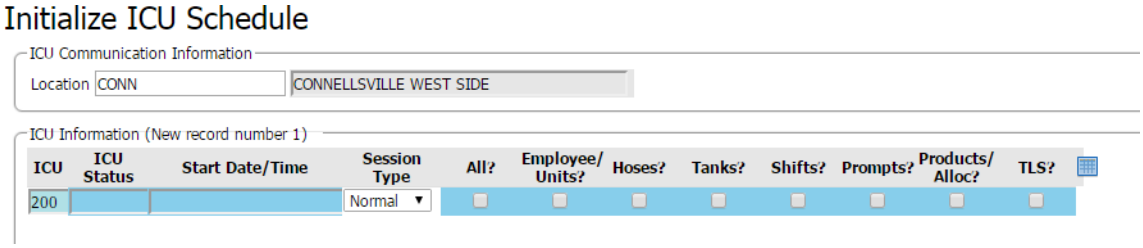
This frame is used to set the weekly polling schedule.



1. Open the Weekly Communications Schedule frame.
2. Use the dropdown to select the day of the week. Press Tab.
3. Enter the ICU No. Press Tab.
4. Enter the time and hour of day that you want to schedule in the Time(HH:MM) field. Press Tab.
5. If the ICU at the location has a tank level sensor wired to it, you can request a stick reading during the schedule session by entering Y in the Auto stick? field.
6. Repeat steps 2 - 5 until you have all items entered.
7. Select the SAVE icon.

Initialize ICU Schedule

In order for setup to populate the ICU with validate information, the ICU must be initialized.

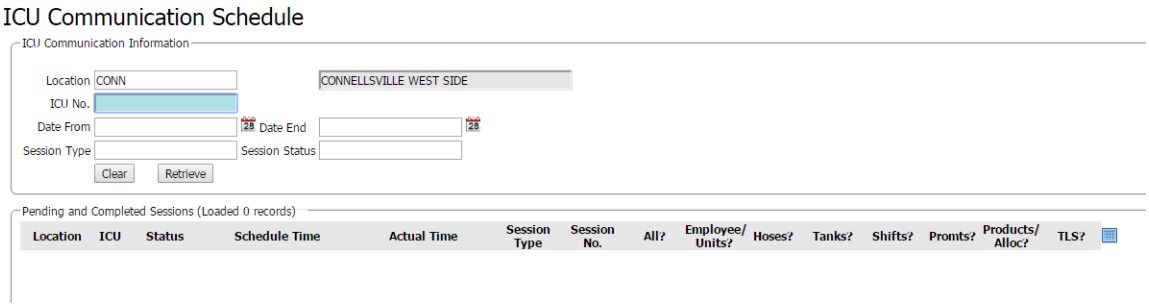


1. Open the Initialize ICU Schedule frame.
2. Enter the Fuel location in the location field. Press Tab.

3. Enter the ICU number. Press Tab.
4. The status of the ICU displays in the Status field.
5. Enter a Start Date/Time. Press Tab.
6. The Session Type field defaults to Normal. Uses Normal for a normal session update. Use the dropdown menu to select Init for initialize. Press Tab. The ICU collects transactions that have occurred and downloads new meter updates.
7. If you want to populate the ICU with all pertinent files, select the All? checkbox.
8. If you only want to populate the ICU with only certain pertinent files, select the appropriate checkbox.
    - The *Employee and Units?* field populates the ICU with all employee, department and unit information.
    - The *Hose?* field populates the ICU with hose information.
    - The *Tank?* field populates the ICU with tank number information.
    - The *Shift?* field populates the ICU with employee shift information.
    - The *Prompts* field populates the ICU prompts.
    - The *Products and Alloc?* field populates the ICU with product and product allocation information.
    - The *TLS?* field populates the ICU with stick reading information.
9. Repeat steps 1-8 for each ICU session.
10. Select the SAVE icon.

ICU Communication Schedule

The ICU Communication Schedule frame allows you to view the status of communication sessions within your query selection.



1. Open the ICU Communications Schedule frame.
2. Enter your selection criteria:
    - Location
    - ICU No.
    - Date From
    - Date End

- Session Type
- Session Status

3. Select the Retrieve button

The following details display:

- The *Location* field displays the location of the session.
- The *ICU No* field displays the ICU number at the location.
- The *Status* field displays the status of the session.
- The Scheduled time field displays the Scheduled time of the session.
- The Actual time field displays the actual time that the session occurred.
- The Type field displays the type of session.
- The Session No field displays the communication session number.

Session Status

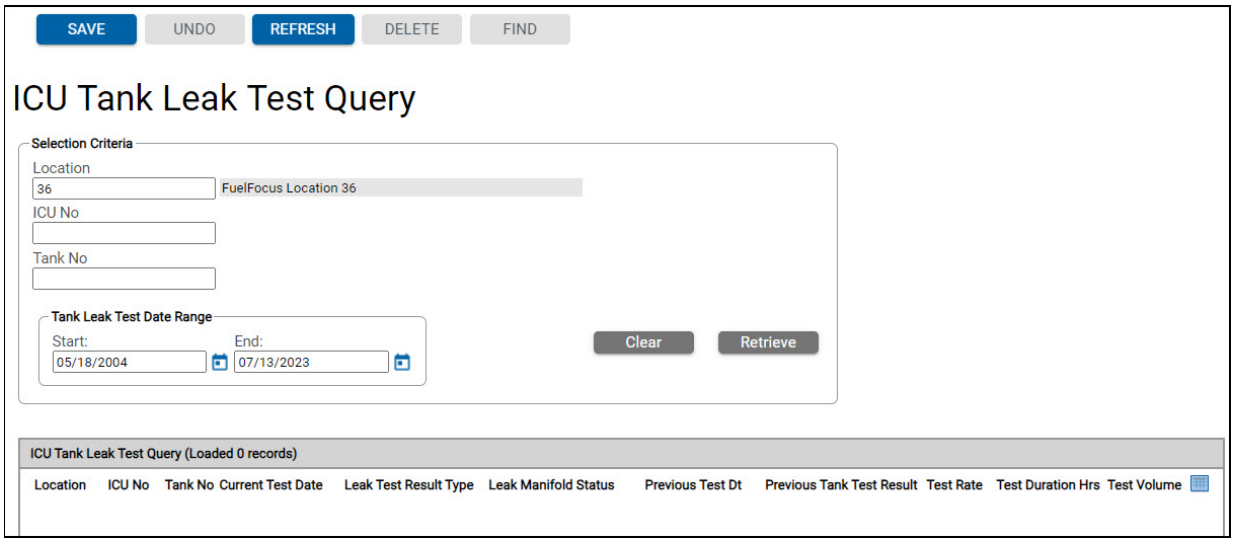
Status	Description	Long Description
HT	Halted (T)	Session halted during or after transfer packets.
HB	Halted (B)	Session halted during or after build packets.
I	Init ICU	Session is creating export entries for initializing an ICU.
H	Halted	Session halted.
HR	Halted (R)	Session halted during process packets.
FI	Failed (I)	Session aborted due to error in Init ICU.
TW	Wait (T)	Session is waiting to exchange packets with the ICU.
RS	Killed	Session halted because it was waiting and another session was due.
T	Transfer	Session is exchanging packets with the ICU.
D	Halted (D)	Session aborted because another session is in progress for this ICU.
HI	Halted (I)	Session halted during or after Init ICU.
F	Failed	Session aborted due to error.
FR	Failed (R)	Session aborted due to error in process packets.
P	Pending	Session is pending.

C	Complete	Session completed successfully.
FT	Failed (T)	Session aborted due to error in transfer packets.
R	Process	Session is processing packet received from the ICU.
B	Building	Session is building packets.
FB	Failed (B)	Session aborted due to error in build packets.
S	Server	Session has been sent to the server.

ICU Tank Leak Test Query

The ICU Tank Leak Test Query frame allows you to view the ICU Tank Leak Test data.
You can filter criteria to generate the query results within the **ICU Tank Leak Test Query** i-frame.
Results matching your criteria displays the following fields:

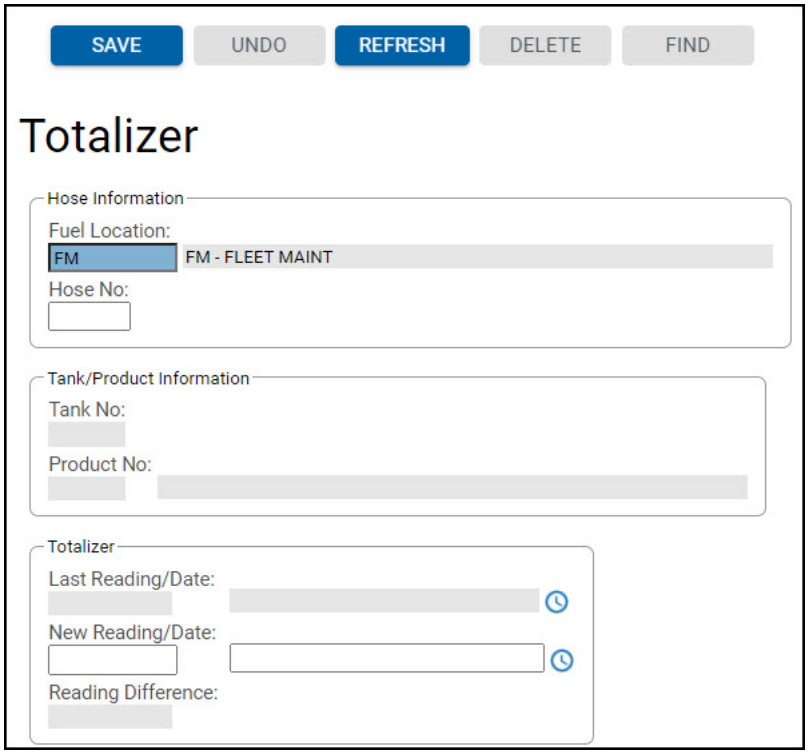
- Location
- ICU No
- Tank No
- Current Test Date
- Leak Test Result Type
- Leak Manifold Status
- Previous Test Dt
- Previous Tank Test Result
- Test Rate
- Test Duration Hrs
- Test Volume



Totalizer

The Totalizer frame is used to maintain the total number of gallons of fuel that has been pumped for a particular hose and tank.

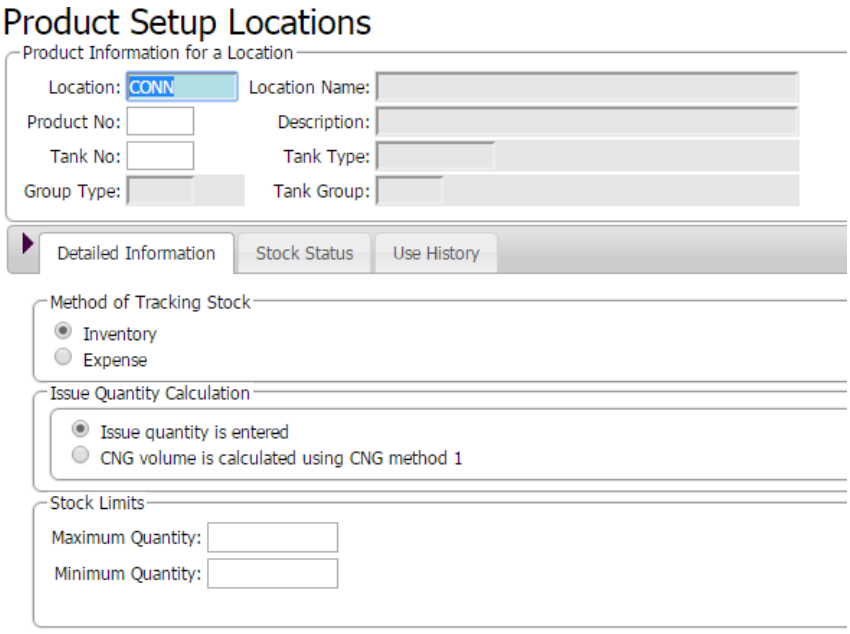
1. Open the Totalizer frame. The login location displays in the Fuel Location field.
2. Enter the hose number of the hose to be updated in the Hose No field and press Tab.
3. The tank number displays in the Tank No field with the product number in the Product No field. The product's last hose totalizer reading and date of the reading displays in the Last Reading/Date field. The cursor is on the New Reading/Date field.
4. Enter the newest reading and date of the reading in the New Reading/Date fields and press Tab. The difference between the last reading and current reading displays in the Reading Difference field.
   Note: The Last Reading/Date fields are blank the first time you enter a hose totalizer reading.
5. Select the SAVE icon when complete.



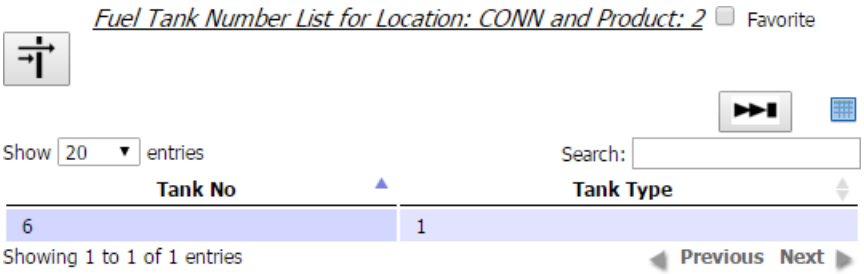
Section C - Product Configuration

Product Setup Locations

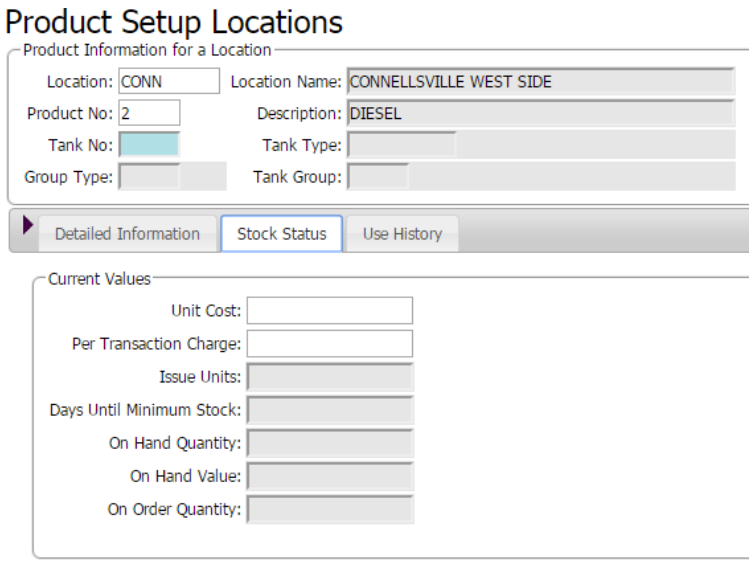
The Product Setup Locations frame is used as the product inventory control manager for purposes of indicating how the user will manage this product from an accounting perspective at this location including information on minimum and maximum levels as well as reordering details.



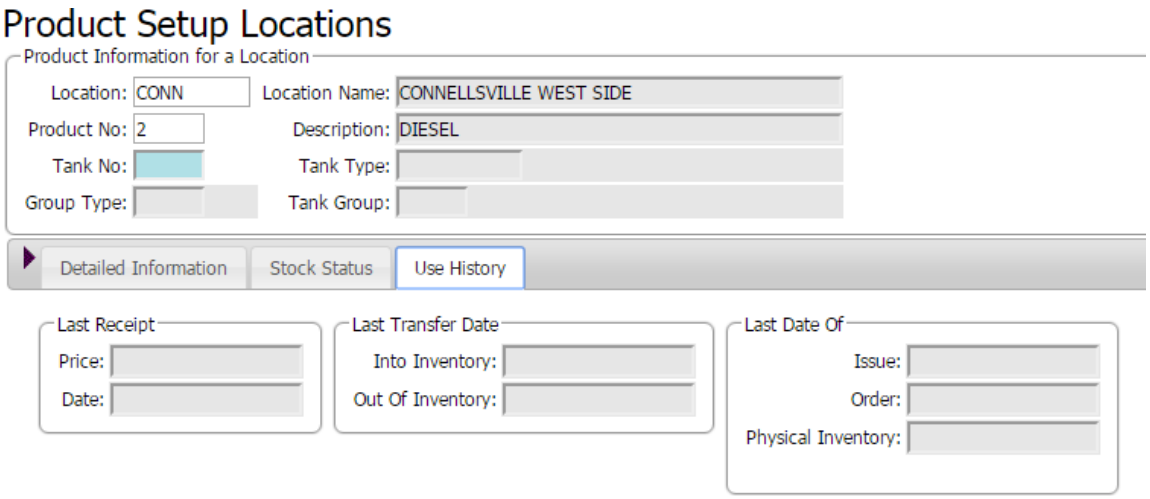
1. Open the Product Setup Locations frame.
2. Enter the fueling location that the products are to be assigned to in the Location field and press Tab. The fueling location's description displays to the right. If a search is needed to view all fueling locations, double-click in the field or use the Binoculars icon.
3. Enter the product to be associated to this location in the Product No field and press
4. Tab. A search can be performed to view all available products.
5. Enter the associated tank with the entered product in the Tank No field and press
6. Tab. To view any tanks with the entered product at this location, double-click in the field.



7. Double-click on the desired tank. The tank type displays to the right.
8. If you want to track the tank's inventory, select Inventory in the Method of Tracking Stock section, otherwise, select Expense. If you select Inventory then you will want to enter sticking values and maintain your stock levels. If you only want to track fuel passing through the tank and not actually tracking the inventory levels, then select Expense.
9. Issue Quantity Calculation section –The issue quantity entered button must be selected. Its purpose to validate that there is a quantity issue on the product issue frames. At this time CNG method 1 is currently being adjusted per Focus Item 7360 and 19510.
10. If you selected Inventory as your method of tracking, proceed to enter the tank's maximum and minimum Stock Limits. The maximum level is taken into account when transferring, adjusting, ordering or receiving of the product. If the tank is below the minimum limit as set here, you will not be able to transfer any fuel from that tank.
11. If this product at this location has a different cost than the product's cost on Product Main, then proceed to enter that cost in the Unit Cost field under the Stock Status tab. Press Tab.
12. If you wish to charge the customer a certain rate every time they go to the tank, enter that cost in the Per Transaction Charge field and press Tab.



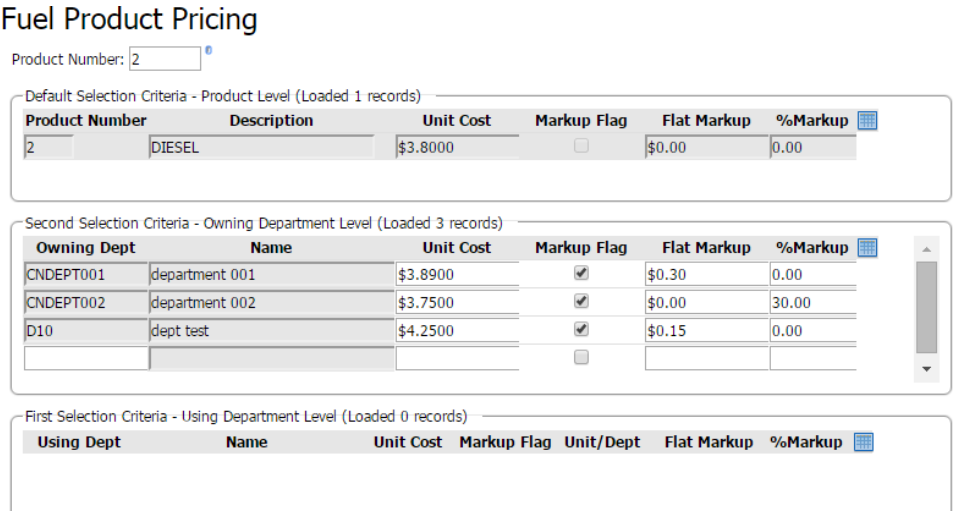
13. The Use History tab offers information on the previous usage of the product at the location such as the cost at time of last receipt and when was this product last issued.



Product Pricing

Consumable pricing can be determined by:

- The fueling unit's using department.
- The fueling location's owning department.
- System-wide product values entered on the Product Main frame.
- The product's inventoried consumable price per issue unit.



FleetFocus™M5 uses a six-step process in determining consumable pricing for a given product at time of issue to a unit, indirect account or vendor. The documented order is:

1. The system looks for consumable pricing information for the fueling unit's using department location and the fueling locations owning department on the Product Pricing Frame.

   - If a unit price is entered in the Unit price $ field (no information in the Flat markup $ field) on the Using Department table, then the fueling unit's using department consumable price per issue unit is charged to the unit.

   - If (1) a markup value is entered in the Flat markup $ field, (2) the Unit Price $ field is set to $0.00 and (3) the Pct markup field is set to 0, then the fueling unit's using department flat markup value is added to the product's inventoried consumable price per issue unit and the total is charged to the unit.

   - If (1) the Flat markup $ field is set to $0.00, (2) the Unit Price $ field is set to $0.00 and (3) a markup percentage is entered in the Pct markup field, then the fueling unit's using department markup percentage is added to the product's inventoried consumable price per issue unit and the total is charged to the unit.

2. If no information is found for step 1, the system looks for consumable pricing information for the fueling location's owning department on the Product Pricing frame.

   - If a unit price is entered in the Unit price $ field (no information in the Flat markup $ field), then the owning department consumable price per issue unit is charged to the unit.

   - If (1) a markup value is entered in the Flat markup $ field, (2) the Unit Price $ field is set to $0.00 and (3) the Pct markup field is set to 0, then the fueling unit's owning department flat markup value is added to the product's inventoried consumable price per issue unit and the total is charged to the unit

   - If (1) the Flat markup $ field is set to $0.00, (2) the Unit Price $ field is set to $0.00 and (3) a markup percentage is entered in the Pct markup field, then the fueling unit's owning department markup percentage is added to the product's inventoried consumable price per issue unit and the total is charged to the unit.

3. If no information is found for steps 1-2, the system looks for the system-wide unit price established for a product on the Product Main frame.

   - If the Unit price $ field is not set to $0.00 , the Product Main established consumable price per issue unit is charged to the unit (instead of the product's inventoried consumable price per issue unit).

4. If no information is found for steps 1-3, the system looks for the system-wide markup value established for the product on the Product Main frame.

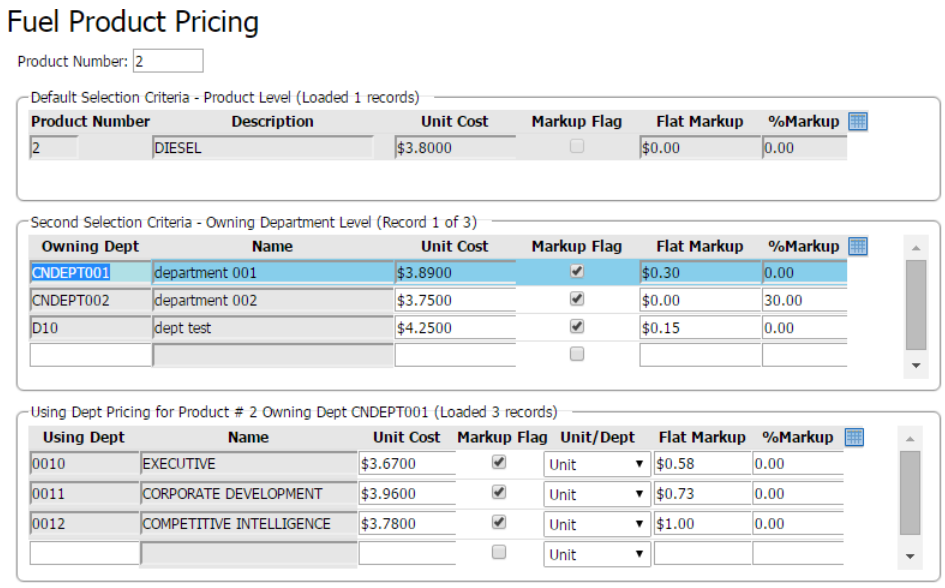
   - If (1) the Unit price $ field is set to $0.00 and (2) the Flat MU field is a positive dollar value, then the Product Main established flat markup value is added to the product's inventoried consumable price per issue unit and the total is charged to the unit.

5. If no information is found for steps 1-4, the system looks for the system-wide markup percentage established for the product on the Product Main frame.

   - If (1) the Unit price $ field is set to $0.00 and (2) the Flat MU field is set to $0.00, and (3) the % MU field is a positive value, the Product Main established markup percentage is added to the product's inventoried consumable price per issue unit and the total is charged to the unit.

6. If no information is found for steps 1-5, the system looks for the product's inventoried consumable price per issue unit.

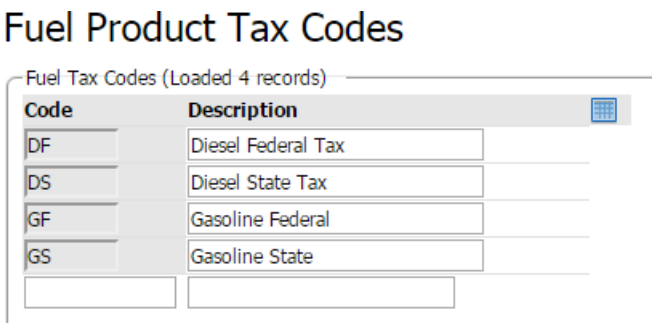
    - If an inventoried consumable price per issue unit is established for the product (displayed on the Product Location Set Up frame), then the inventoried consumable price per issue unit is charged to the unit.



1. Open the Product Pricing frame.
2. Enter the product whose pricing needs to be adjusted in the Product Number field and press Tab. If you do not know the product code, proceed to either double-click or use the Binoculars icon to perform a search. The current description, cost and any associated markups from Product Main will display in the Default Selection Criteria section.
3. To change the cost or markup for a specific owning department, select the Owning Dept field and proceed to enter the owning department to be affected. Otherwise, select the Using Dept field to change the cost for a particular using department. Press Tab.
4. After the owning or using department code is entered, the department description displays.
5. Enter the new total unit cost in the Unit Cost field and press Tab.
6. Enter any markup, if needed and press Tab.
7. Proceed to enter as many departments as required.
8. Select the SAVE icon when complete.

Product Tax Codes

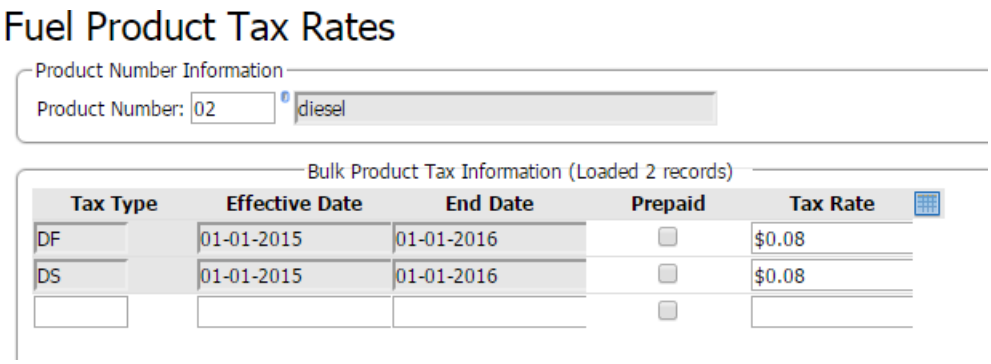
The Product Tax Codes frame is used to established tax codes that are used on the Product Tax Rates frame. Use this frame to add or delete fuel or product specific tax codes. System Flag 1111 must be set in order to assess taxes to fuel.



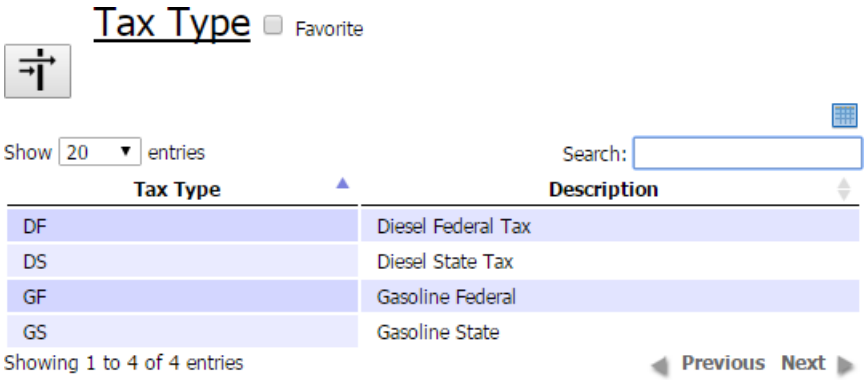
1. Open the Product Tax Code frame.
2. To add a new tax code, select the next available row and enter the tax code in the Code field and press Tab.
3. Enter the description of the tax code and press Tab.
4. Continue to enter as many tax codes as needed and select the SAVE icon when complete.

Product Setup Tax Rates

This frame is used to enter the value of the tax, whether it is prepaid (refunded) on the bulk fuel received into a tank or on fuel issued to off road units.



1. Open the Product Tax Rates frame.
2. Enter the product to which the tax is to be applied in the Product Number field and press Tab. The product's description displays to the right.
3. Select the Tax Type field and enter the tax code to be used that was created in Bulk Product Tax Information. You can double-click in the field to see valid tax codes.

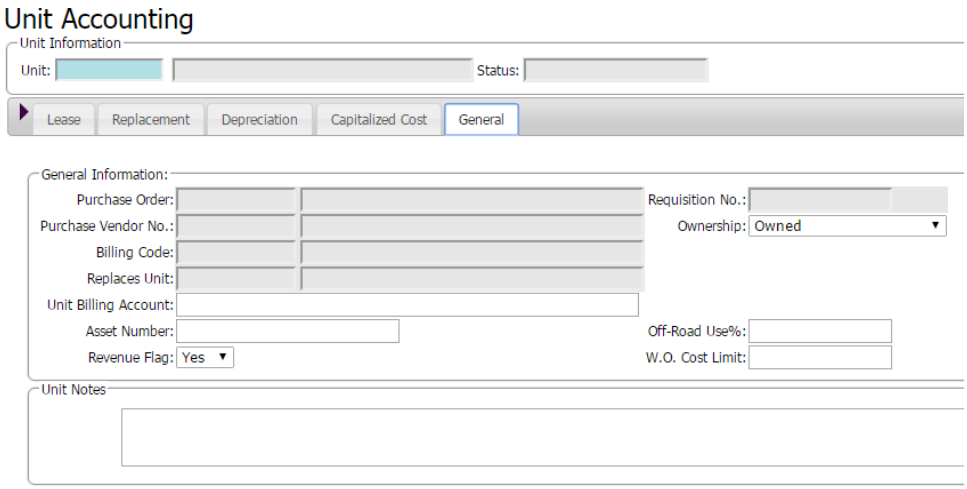


1. Double-click on the required tax code.
2. Enter the date in which the tax is to begin in the Effective Date field and press
3. Tab. If needed, use the Calendar icon.
4. Enter the date the tax will no longer be in effect in the End Date field and press Tab.
5. If the tax is prepaid, select the Prepaid checkbox.

Off Road Taxes

M5 is able to calculate Off Road Taxes per unit. In order to implement this feature, System Flag 1111 must be set on. The product tax codes and rates must be set up and the Percentage Off Road Usage must be established for each unit on the Unit Account frame.

Unit Accounting – General Tab



1. Open the Unit Accounting frame.
2. Enter a valid Unit No. in the unit field. Press Tab.
3. In the Off-Road Use % field, enter a percentage of time the unit is used offroad to account for fuel taxability.
4. Select the SAVE icon.

Section D - Product Replenishment

Purchasing Contract

Depending on the functionality that will be used as part of the purchase contract, there are various codes that may need to be setup in M5 such as price types, shipmentterms, and vendors.

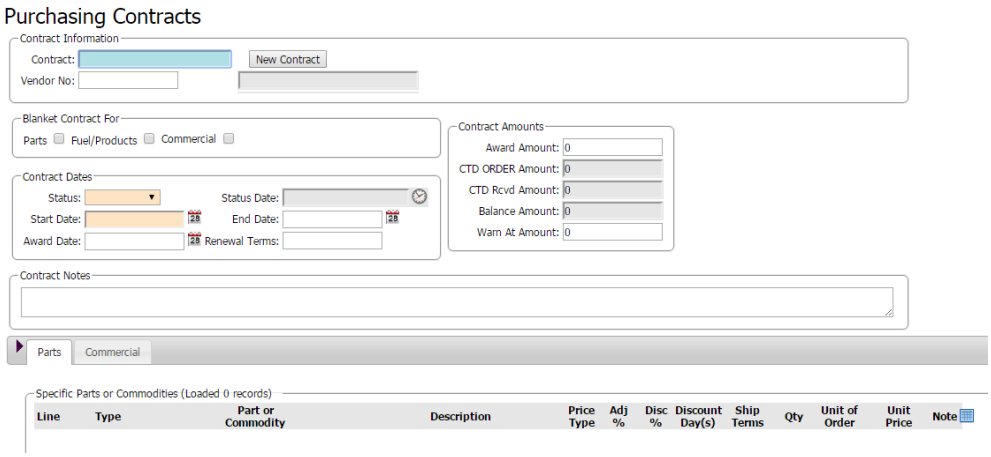
In order to receive the best price for an item or part, a user can establish a purchasing contract with a vendor. This is sometimes referred as a blanket purchase order. A purchasing contract enables the user to establish pre-approved conditions for the purchase of stock or non-stock parts, products and services, including purchases made with specific vendors for pre-determined items or parts, quantities and prices. The user can define a range of dates for which the purchasing contract is valid ad specify the balance amount at which a warning is issued for purchase orders approved against the contract. Later, when creating the purchase order, line items may be retrieved from awarded contracts originally established here.

Purchasing contracts can be established for:

- Parts (specific or not)
- Fuel/Products
- Commercial (sub-let) work

Contract lines may be for commodities, meaning that any part whose commodity code matches the contract line's commodity can be ordered off the contract. Individual part numbers can also be set up on contracts. However, this is not a popular method as it is labor intensive. The commodity method is helpful for those customers who purchase broad categories of parts from a particular vendor and need to ensure that spending does not exceed a preset limit for the vendor. Another option is to create a blanket contract, where specific parts or commodities are not defined.

The Purchasing Contract frame allows for more than one valid blanket contract with same vendor with the same start and end dates. If the contract is created for specific parts then only one Purchase Contract is allowed per vendor with the same effective dates.



1. Open the Purchasing Contracts frame.
2. Enter a valid contract number in the Contract field or use the List of Values icon to select an existing one or use the New Contract button to create one. Press Tab.
3. Enter a valid fuel vendor in the Vendor No. field or select from the List of Values. Press Tab.
4. If the Blanket control is for Fuel or Products, select the appropriate checkbox. Press Tab.
5. The Status displays as Build for a new contract. Press Tab.
6. The Date of the Status is displayed. Press Tab.
7. Enter the Start Date of the contract. Press Tab.
8. Enter the End Date of the contract. Press Tab.
9. Enter the Award date of the contract. The contract is not valid until there is an award date. Press Tab.
10. Enter the renewals terms if needed. Press Tab.
11. Enter the Contract Award Amount and the system will calculate CTD (Contract to Date) order, received and balance amounts. Warn amount can be established to warn user when contract reaches a specific amount. If System Flag 1158 is set to Y, M5 maintains the balance information. Press Tab.
12. Contract notes can be entered
13. Select the SAVE icon.

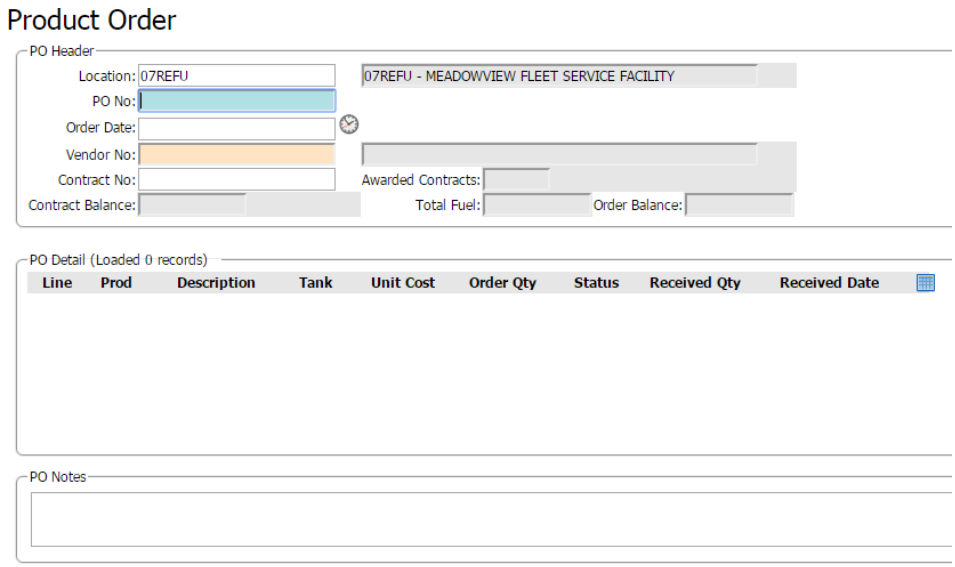
Note: The Purchasing Contract goes through a number of statuses:

- Build
- Awarded
- Closed.

The purchasing contract cannot be used until the status is changed to Awarded. The purchasing contract can be updated during the validate period. After a purchasing contract is finished, the status is changed to Closed.

Product Order Frame

Product Order frame is used to record bulk purchase orders for fuel or products from a single vendor. Both the vendor and any products must be previously established in M5.



1. Open the Product Order frame. Notice the location defaults to your login location.
2. Tab past the PO # field in order to create a new purchase order. The PO number defaults to NEW.
3. Enter a valid Vendor Number or select from the List of Values and then press Tab. The vendor name displays.
4. Enter the contract number if you are ordering against a fuel contract for the entered vendor and press Tab. If needed, use the Binoculars icon to perform a search.
   Note: A contract number is now accepted and validated to make sure that it is a blanket fuel contract for the entered vendor. The purchase order number's prefix is assigned depending on whether a contract is used. (See System Flags 1125 and 1126). The user is warned if the amount of the fuel contract will exceed the contract's balance.
5. Enter the products to be purchased in the PO detail section.
   a. Enter a valid product to be ordered or select from the List of Values and then press Tab.
   b. Enter a valid tank where the product will be stored or select from the List of Values and then press Tab.
   c. The current inventory price will display. If the price is different, enter the
   d. Unit Cost and press Tab.
   e. Enter the order quantity and press Tab. You can order more fuel than the tank’s capacity; however, you will not be allowed to receive more than the tank’s capacity.

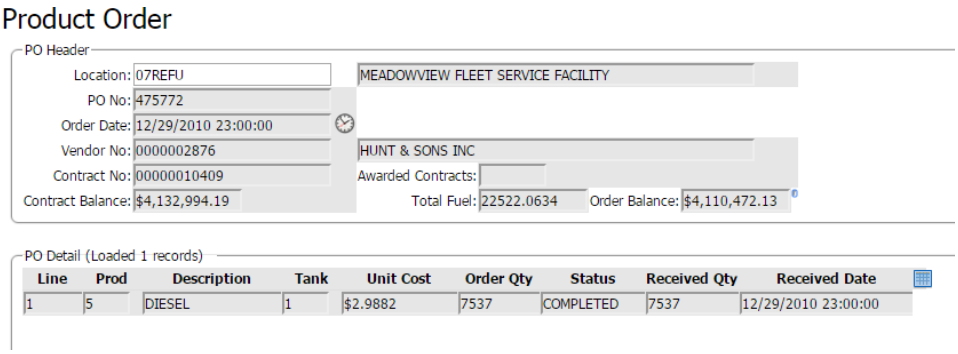
f. The Status field displays O (open) automatically.
g. Enter any PO notes if desired.

6. Continue to enter any additional products and select the SAVE icon when complete.

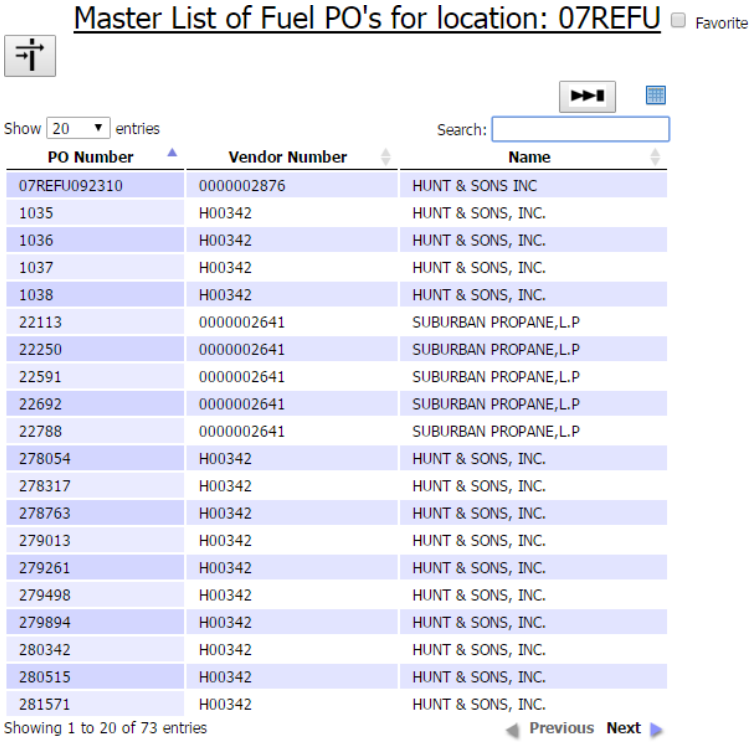
Modifying Fuel Purchase Orders

Changes can be made to any open purchase order.

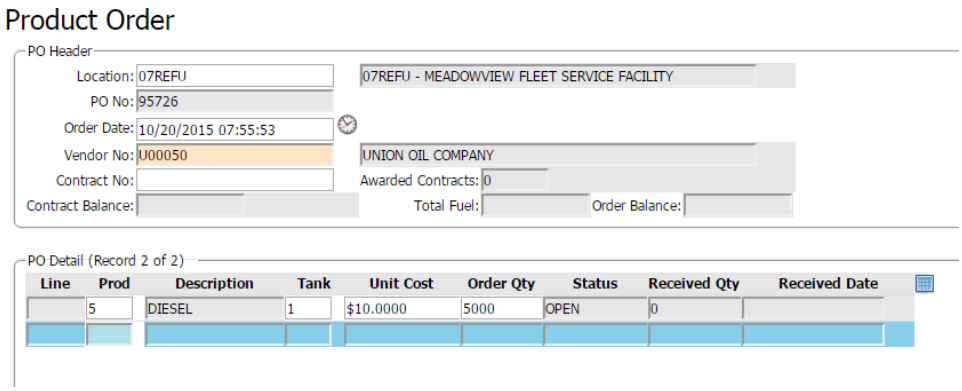
1. Select the Product Order frame. Your login location automatically displays.



2. Double-click or use the Binoculars to view all open purchase orders for displayed location.

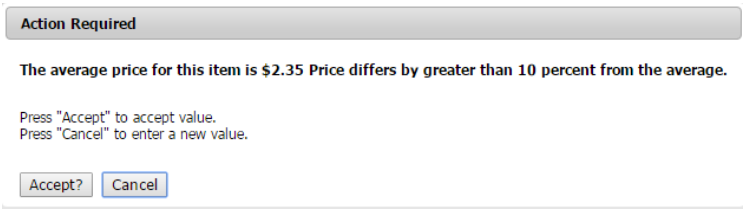


3. Double-click on the purchase order to be modified. The entire PO will display.



4. Any field in white can be modified. Select the field to be changed and enter the corrected value. Remember that the product and its associated tank must be a valid product for that location.

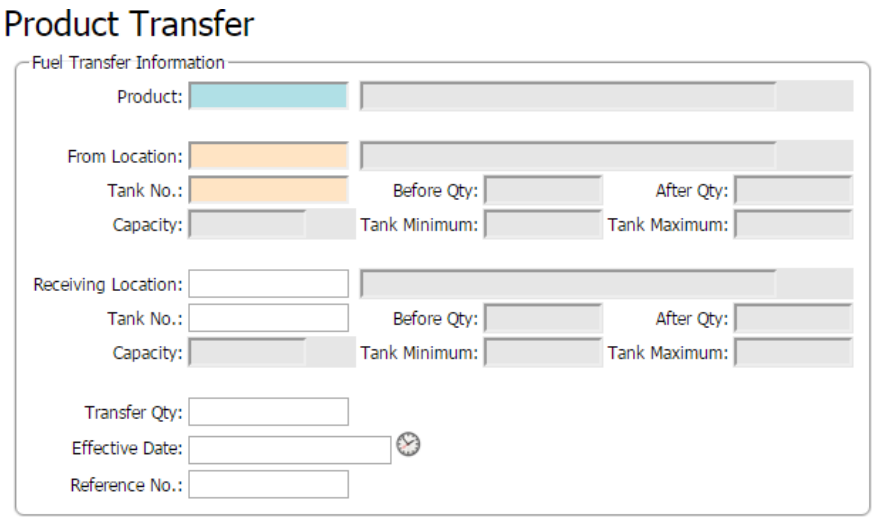
If you change the price, you may see a message similar to the one below.



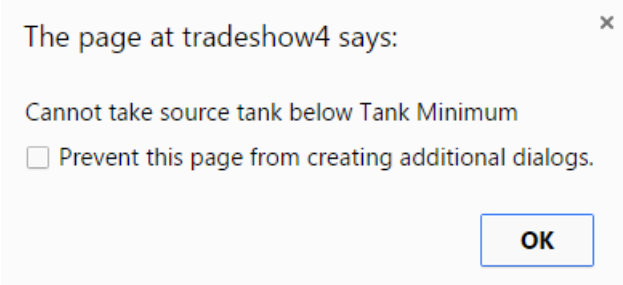
5. Select Accept? if this is truly the cost or select Cancel to change the cost.
6. To delete the item all together, highlight the row to be deleted and select the DELETE icon. The row displays in red. Select the SAVE icon to delete the PO line Item.

Product Location Transfer

The Product Location Transfer frame is used to report on the movement of fuel or products at fueling locations.



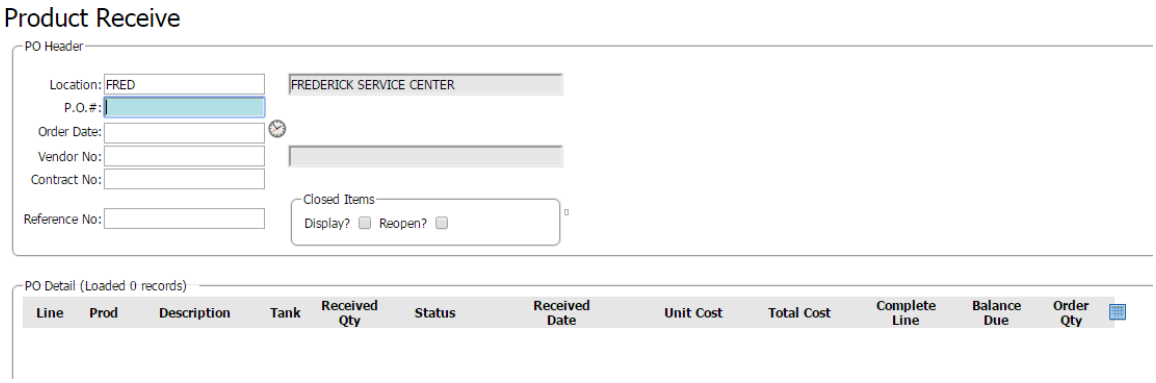
1. Open the Product Location Transfer frame.
2. Enter a valid product number in the Product field or select from the LOV and press Tab. The product description displays.
3. Enter a valid fuel From Location where the product will be transferred from or select from the List of Values and then press Tab. The fuel location description will display.
4. Enter a tank number in the Tank No field or select from the List of Values and then press Tab. The Before Qty, Tank Minimum and Tank Maximum fields display.
5. Enter a valid receiving fuel location in the Receiving Location field or select from the List of Values and then press Tab. The fuel location description will display.
6. Enter the receiving tank number in the Tank No field or select from the List of Values and then press Tab. Before Qty, Tank Minimum and Tank Maximum fields display.
7. Enter the quantity to be transferred in the Transfer Qty field and press Tab. If you try to transfer more fuel than the tank's minimum, you will receive a message similar to the one below.



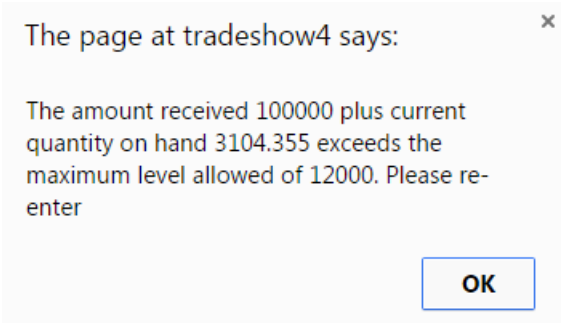
8. Select OK to return and change the quantity to be transferred.
9. Tab past the Effective Date in order to use the current date; otherwise, use the Calendar icon to select the date of the transfer.
10. Optionally, enter a reference number in the Reference No field.
11. The From Location and Receiving Location After Quantity (After Qty) is calculated and displays.
12. Select the SAVE icon when complete.

Product Location Receive

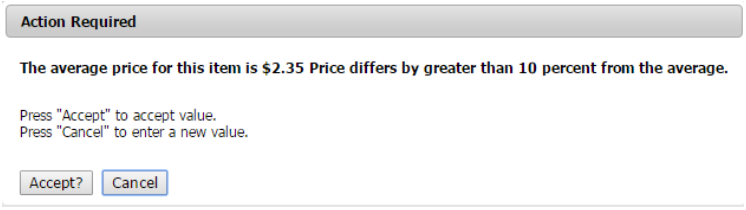
From A Purchase Order



1. Open the Product Receive frame. The fuel location of the login user is displayed.
2. Enter a valid purchase order number from which the orders are being received in the P.O. # field or use the Binoculars to select an open PO and press Tab. The entire PO displays.
   Note: A Contract No field allows for the association of a blank fuel contract with the receipt. Receipts against the contract reduce the contract balance. If the receipt stems from an order, the contract is taken from that.
3. Enter a user-defined reference number in the Reference No field and press Tab.
   Note: A user-defined reference number is a user issued or vendor issued tracking ID which is not validated by the system.
4. Select the Display Closed Items checkbox to set it to display closed items.
5. Enter the quantity received in the Received Qty field and press Tab.
6. If the quantity received plus the current inventory balance exceeds the tank's maximum quantity, the following message appears. Correct the receive quantity.

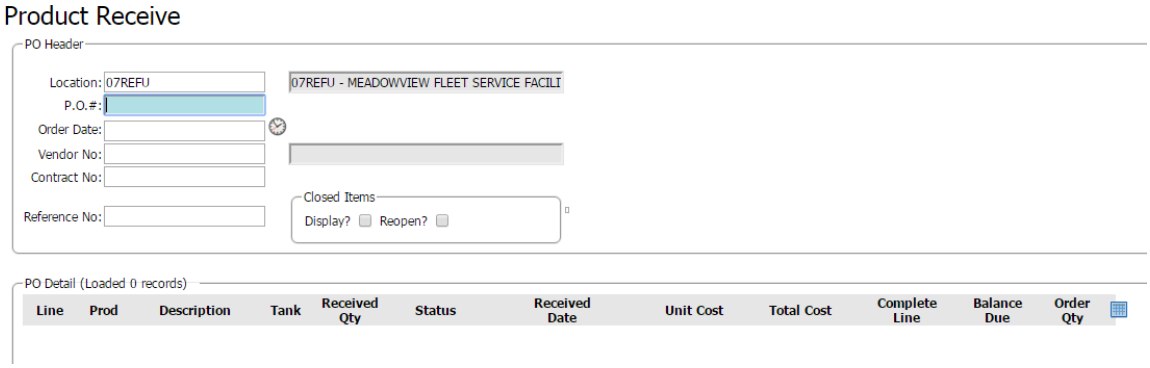


7. Enter the received date in the Received Date field, and then press Tab. The purchase order's present status displays in the Status field.
   Note: On partial receipts the Status field displays PARTIAL. On full receipts, the Status field displays CLOSED.
8. Enter the unit cost of the product at receipt time. Press Tab.
9. If the new unit price is different from the current inventory price by more than 10 percent the Action Required window opens. Select the Accept? button to accept the price. To change the price, select the Cancel button.



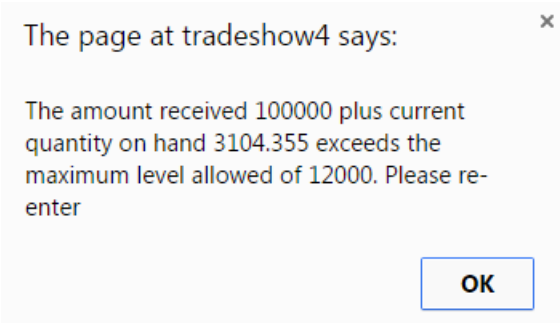
10. The Balance Due field displays any remaining quantity due on the purchase.
11. The order quantity displays in the Order Qty field.
12. Select the SAVE icon when completed.

Without A Purchase Order

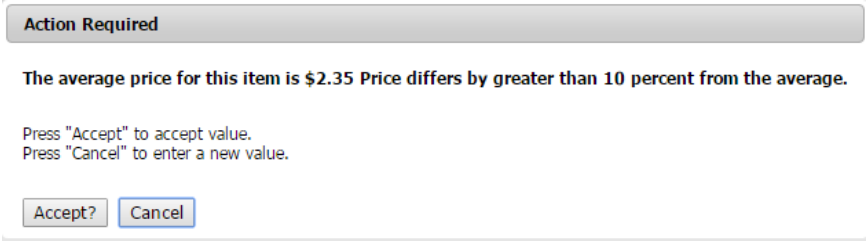


1. Open the Product Receive frame.
2. The fuel location of the login user is displayed.
3. Press Tab to skip the PO # field and go to the vendor field.

4. Enter a valid vendor number used to purchase the product in the Vendor No. field or use the Binoculars to perform a search. Press Tab and the vendor name displays.
5. Enter a user-defined reference number in the Reference No field and press Tab.
   Note: A user-defined reference number is a user issued or vendor issued tracking ID which is not validated by the system.
6. Enter a product number in the Prod field or use the <Binoculars> to view a list of valid products for the entered location and press Tab. The product's description displays.
7. Enter a tank number in the Tank field or use the Binoculars to view a list of valid tanks for the entered product at this location and press Tab.
8. Enter the quantity received in the Received Qty field and press Tab.
9. If the quantity received plus the current inventory balance exceeds the tanks maximum quantity, the following message appears. Correct the receive quantity.



10. Enter the date the product was received in the Received Date field and then press Tab.
11. Tab past this field to display the current date.
12. Enter the Unit Cost of the product at receipt time and press Tab.
13. If the new unit price is different from the current inventory price by more than 10 percent the following message appears. Select the Accept? button to accept the price. To change the price, select the Cancel button.

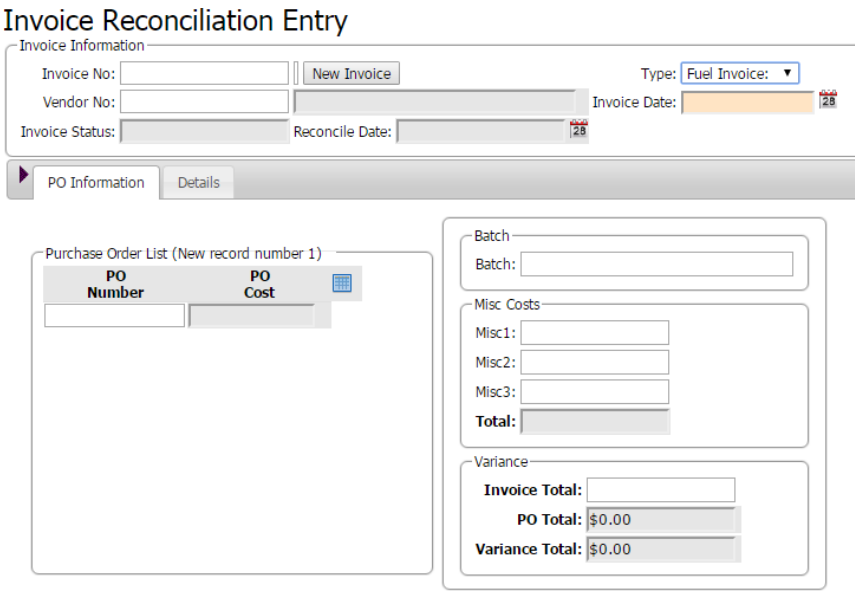


14. Select the SAVE icon when complete.

Fuel Invoice Reconciliation

The function of the reconciliation process is to verify that the actual invoice amount is reconciled with the price at receipt time. While it is very common for parts to be received with a bill of lading at the last price paid for the part and when the invoice is received, the price on the invoice is different so with fuel purchases. In order to use Fuel Invoice Reconciliation System Flag 5094 - **Is Invoice Reconciliation being used for fuel (Y/N)?**

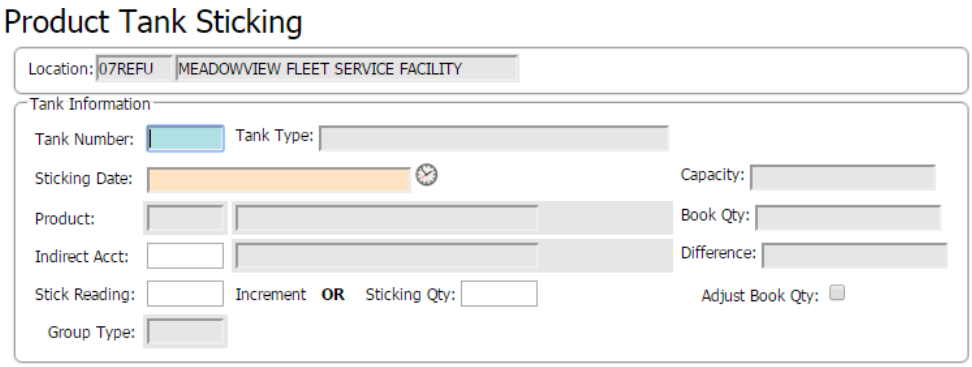
If set to Y, the user will have the option to reconcile either fuel or parts; otherwise, if set to N, only parts can be reconciled. Please refer the M5 Invoice Reconciliation document for a full explanation of this functionality.



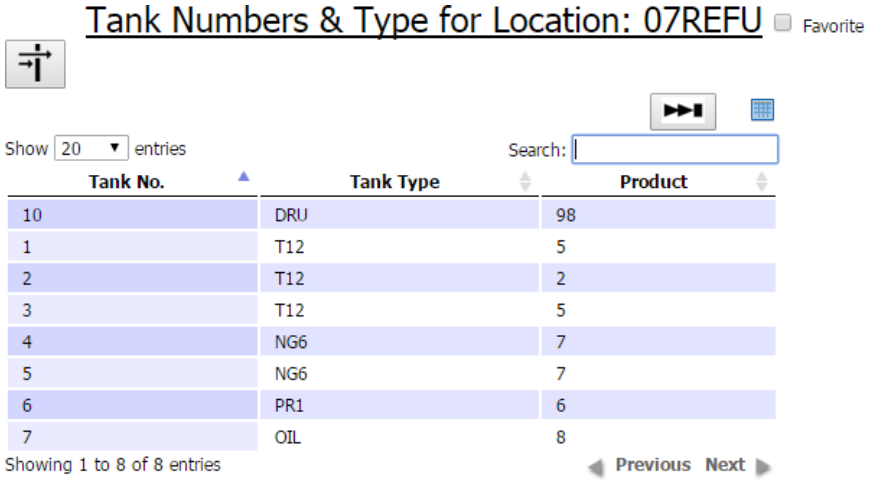
Section E - Product Control

Product Location Tank Sticking

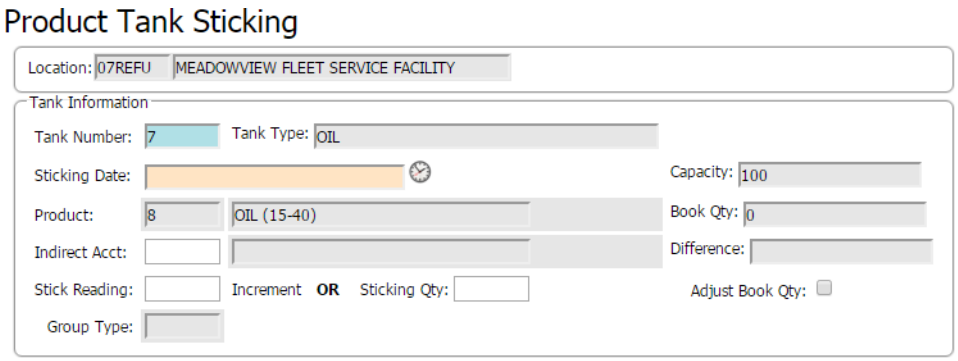
Use the Product Location Tank Sticking frame to enter the tank sticking information. Be sure to be in the fueling location that you are entering the stickings for.



1. Open the Product Tank Sticking frame.
2. Enter a valid tank number in the Tank Number field or use the Binoculars icon to select one for the user's login fuel location and press Tab.



The tank type, capacity, the fuel location of the login user, product number, product description, current book quantity, and Indirect Account displays if one has been assigned to the displayed fueling location.



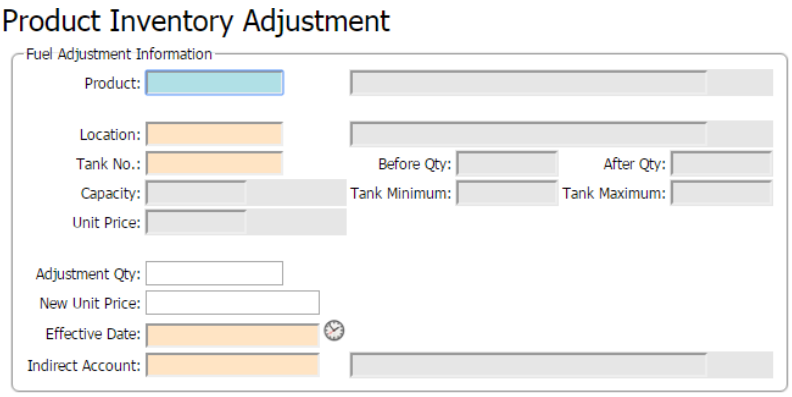
The current date automatically displays in the Sticking Date field. If this is not correct, proceed to use the Calendar icon to select the date of the sticking entry and press Tab.
Note: The system checks to make sure the sticking date is after the previous sticking date and equal to or prior to the current date. The field becomes read-only.

3. If you are recording a tank sticking for the first time, you must enter an indirect account number in the Indirect Acct field. Press Tab. The description for the indirect account will display.
4. Enter the stick reading increment in the Stick Reading field, if tank conversion data has been entered on the tank types or enter the quantity of product if not using tank conversion in the Issued Units field and press Tab.
   The book quantity displays in the Book Qty field. The difference between the book quantity and stick reading displays in the Difference field.
5. Select the Adjust Book Qty field to set it to Yes to adjust the book quantity.
6. Select the SAVE icon when complete.

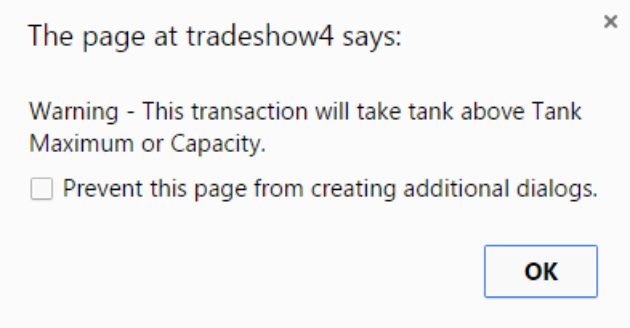
Product Location Inventory Adjustment

The Product Location Inventory Adjustment frame is used to reconcile your physical inventory with your book inventory (what's on the computer).

If you are authorized to change fueling locations, you can adjust product inventory at another location.



1. Open the Product Inventory Adjustment frame.
2. Enter a valid product number in the Product field or use the Binoculars icon to perform a search and press Tab. The product description displays.
3. Enter the fueling location that needs the adjustment in the Location field and press Tab. The description of the fueling location displays. A search can be performed by either double-clicking or using the Binoculars icon.
4. Enter a valid tank number for the entered fueling location and press Tab. The Before Qty, Capacity, Tank Minimum and Tank Maximum fields will display.
5. Enter the negative or positive adjusted quantity in the Adjustment Qty field and press Tab. The After Qty will calculate and display.
6. Enter the date of the adjustment in the Effective Date field and press Tab.
7. Enter a valid indirect adjustment account for any variance in the Indirect Account field and press Tab. The indirect account description will display.
8. If the adjusted inventory quantity exceeds the tank capacity, the following message displays:

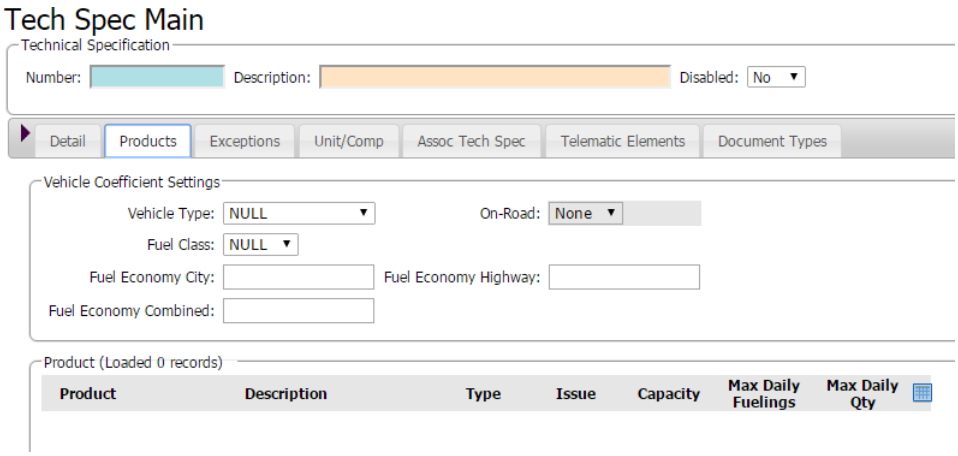


9. Correct any quantities as needed.
10. Select the SAVE icon when complete.

Section F - Product Validations

Tech Spec Products

A technical specification code is assigned to a group of units having the same physical characteristics. Along with requiring the same parts be used to repair and to perform maintenance, all units in a technical specification group may use the same consumable products in order to function. After consumable information is set up on a technical specification and after the technical specification is assigned to a unit in the Unit Main, the technical specification's consumable information can be transferred to the unit.



1. Open the Tech Spec Main frame.
2. Enter a valid technical specification number in the Number field or use the Binoculars icon to perform a search. Press Tab. The description displays.
3. Select the Products tab
4. Vehicle Type – See Carbon Footprint Reporting Section for more details. The Vehicle Types are a hardcoded dropdown list (only one can be assigned to a single Tech Spec) of the following choices:
    - Passenger car
    - Light duty
    - Heavy duty
    - Motorcycle
    - AG equipment
    - Other equipment
    - Locomotive
    - Ship/Boat
    - Aircraft

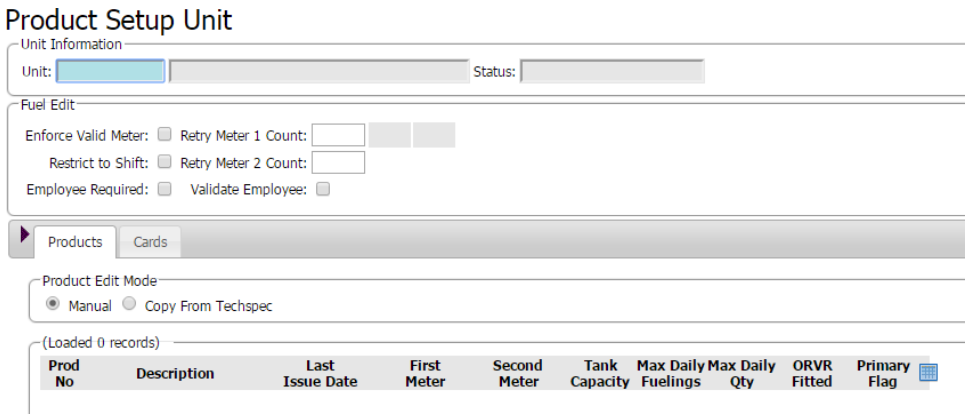
5. On Road Indicator – See Carbon Footprint Reporting Section for more details. To determine whether a tech spec contains on-road or off-road units, a flag is shown in read-only mode on the Technical Specification frame. This flag is set automatically based on the vehicle type chosen. The on-road flag is Y if the vehicle type is one of the following, passenger car, light duty, heavy duty or motorcycle. The on-road flag will be N for any of the following: AG equipment, other equipment, locomotive, ship, boat or aircraft.

Fuel Economy class and mileage fields have also been added to the Technical Specification frame to allow comparison of actual vs. expected mileage and for estimating fuel usage where no fuel issues are available.

6. Fuel Economy City – Enter City fuel economy and press Tab.
7. Fuel Economy Highway – Enter Highway fuel economy and press Tab.
8. Fuel Economy Combined – Enter Combined Fuel Economy and press Tab.
9. Select the Product field and enter a valid product or use the Binoculars icon to view all products and then press Tab. The description, type of fuel, and unit of issue will display.
10. Enter the unit's tank capacity in the Tank Capacity field so that the ICU can monitor the amount of fuel being dispensed and not allow this amount to be exceeded. Enter as many products as the entered unit can have.
11. Enter the maximum daily fuelings the unit will be allowed.
12. Enter the maximum daily quantity the unit will be allowed.
    This feature can be configured one of three ways as determined by System Flag 5199 -Limit the number of fueling(s)/issue quantity allowed per calendar day? (0, 1, 2).
    - If this flag is set to '0', units and departments are not limited by the number of daily fueling(s) or daily issue quantity limits. This setting would preserve the current functionality as it stands pre-release 2.3.0.
    - If system flag 5199 is set to '1', units and departments will be limited by the number of daily fueling(s) allowed in one calendar day at a system wide level based on the following module flag values. System flag 5197 sets the system wide unit limit and system flag 5198 sets the department limit. No daily fuel issue quantity limits will be enforced.
    - If system flag 5199 is set to '2' units and departments will be limited by the number of daily fueling(s) or daily issue quantity limits established on the product setup unit and product setup department frames.
    - Enter as many products as the entered unit can have.
12. Select the SAVE icon when complete.

Product Setup Unit

The Product Setup Unit frame is used to associate a product with a specific unit. The product must be associated to the unit before the product can be issued to the unit.



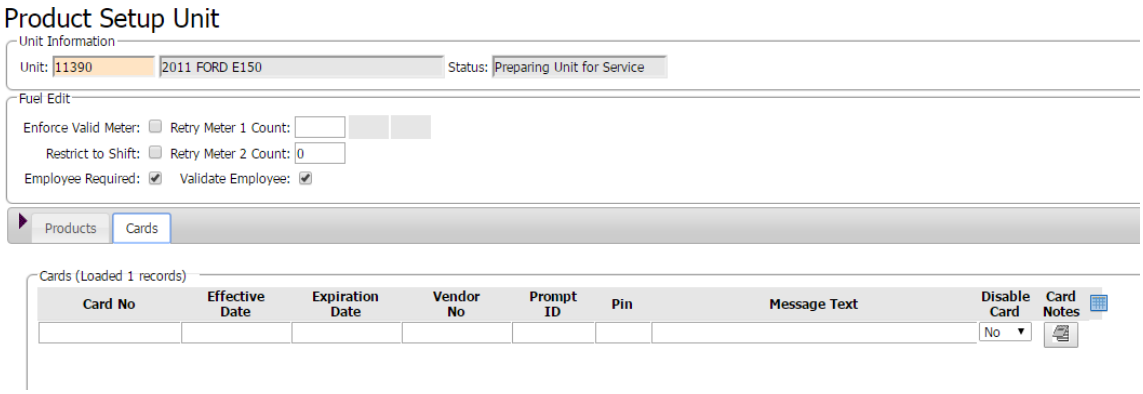
1. Open the Product Setup Unit frame.
   Enter the unit number in the Unit field and press Tab. The unit's description and status will display to the right of the unit number. If needed, a search can be performed by using the Binoculars icon.
2. In the Fuel Edit section, the user may optionally add information to require an Employee ID at the time of product issue by selecting the Employee Required checkbox.
3. The user may also restrict fueling to the unit's designated shift by selecting the Restrict to Shift checkbox.
4. To enforce that a meter entry follows the basic M5 meter checks, select the Enforce Valid Meter checkbox.
5. If you want to restrict the number of times that a meter can be entered before the tank will disallow the transaction, enter that value in the Retry Meter Count field and press Tab.
   - If enforce meter is checked then they will get X amount of retries to enter a valid meter based on the number in the Meter 1 Retry field. If they do not enter a valid meter then fuel will be denied.
   - If the enforce meter is NOT checked then they will get X amount of retries to enter a valid meter based on the number in the Meter Retry field. If they do not enter a valid meter after the number of retries they will be granted authorization to fuel but the meter will not be updated.

6. The Product Edit Mode section indicates if this product was associated at the unit level or was copied down from the tech spec level. If this is the first time in this page for this unit and the products were entered at the tech spec level, select the Copy from Techspec button. By doing so, all products for the tech spec of the entered unit will copy to this area, rather than the user manually entering each and every product. If you select Manual, then you must enter each and every product the entered unit can have.
7. If manually entering each product, enter the first product code in the Prod No field and press Tab. If you do not know the products, either double-click or use the Binoculars icon to view all products. Double-click on the desired product.

8. Enter the unit's tank capacity in the Tank Capacity field so that the ICU can monitor the amount of fuel being dispensed and not allow this amount to be exceeded. Enter as many products as the entered unit can have.
9. Enter the maximum daily fuelings the unit will be allowed.
10. Enter the maximum daily quantity the unit will be allowed.
    This feature can be configured one of three ways as determined by System Flag – Limit the number of fueling(s)/issue quantity allowed per calendar day? (0, 1, 2).
    - If this flag is set to '0', units and departments are not limited by the number of daily fueling(s) or daily issue quantity limits. This setting would preserve the current functionality as it stands pre-release 2.3.0.

- If system flag 5199 is set to '1', units and departments will be limited by the number of daily fueling(s) allowed in one calendar day at a system wide level based on the following module flag values. System flag 5197 sets the system wide unit limit and system flag 5198 sets the department limit. No daily fuel issue quantity limits will be enforced.
- If system flag 5199 is set to '2' units and departments will be limited by the number of daily fueling(s) or daily issue quantity limits established on the product setup unit and product setup department frames.

11. ORVR Fitted – Indicates if the unit has an Onboard Refueling Vapor Recovery (ORVR) vehicle emission control system to capture fuel vapors from the vehicle gas tank during refueling.
12. Select the SAVE icon when complete.
13. If fuel cards are issued to the unit and you wish to track transactions against those fuel cards, proceed to select the Cards tab. If any of these fuel cards have already been entered in Product Fuel Card frame, then you do not need to enter it here.



14. Enter the card number in the Card Number field and press Tab.
15. Enter the date in which the card goes into effect in the Effective Date and press Tab.
16. Enter the Expiration Date of the card and press Tab.
17. Enter the vendor of the card in the Vendor No field and press Tab. If you do not know the vendor number, proceed to double-click in the field or use the Binoculars icon to perform a search. If vendor is not applicable leave blank.
18. Enter the unique Prompt ID and PIN number for this card.
19. If desired, enter a Text Message that will display on the ICU when this card is used.
20. Select the Notepad icon if you wish to enter any pertinent notes regarding this fuel card.

21. User Data 1 – User Data3 fields may be entered – each field will hold 15 positions of data.
22. Select the SAVE icon to save the information.

Department Cross Validation

A new enhancement was added to v.3.0.0 for those clients using FuelFocus that allows an additional validation of employees issuing fuel. The modification provides a cross validation of employee department assignment with unit department assignment.
The validation may include multiple levels of validation. For example:
1. Unit number 1234 is assigned to department 13142.
2. Employee 039775 is assigned to department 13141.
3. Both department 13142 AND 13141 are under the service org code of 13103 (organization hierarchy)
4. Therefore, fueling is authorized.

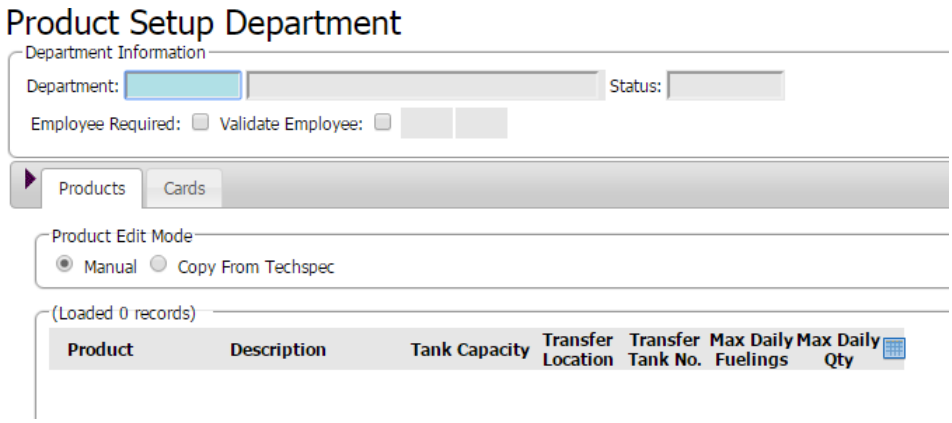
If no levels of hierarchy match for the employee, then fueling is denied. So that the employee`s assigned department and the unit`s using department must have the same value in any one of the four levels organizational hierarchy in M5.
This functionality is controlled by System Flag 5279 – “Deny fuel unless employee and unit hierarchies overlap?” If the flag is "Y", then the FuelFocus dispensers deny fuel if flag 5077- “Employee Required Flag” is "Y" or the unit requires an employee number entry, the employee is not an ICU supervisor, and no non-blank levels of the employee's department hierarchy match any non-blank levels of the unit's using department's hierarchy.

The only exception to this functionality is fueling motor pool units. M5 will effectively ignore this logic for any unit where the billing code is a motor pool type.

Products to Departments

In order to issue fuel to a department, the department needs to have consumable information assigned to it. You can assign department consumables when the department is originally added or when department information is changed. This page is similar to the one for unit setup but does not offer meter or tech spec information. A tank capacity must be entered but all the other fields, such as Allocation remained unused.

Transfer Location and Transfer Tank No - When FuelFocus has an issue to this department for a product that has these two columns valued, a product transfer will be done from the issuing tank to the location and tank on the Department Product Setup frame. The only time this special transfer will be done is from FuelFocus ICU generated transactions.



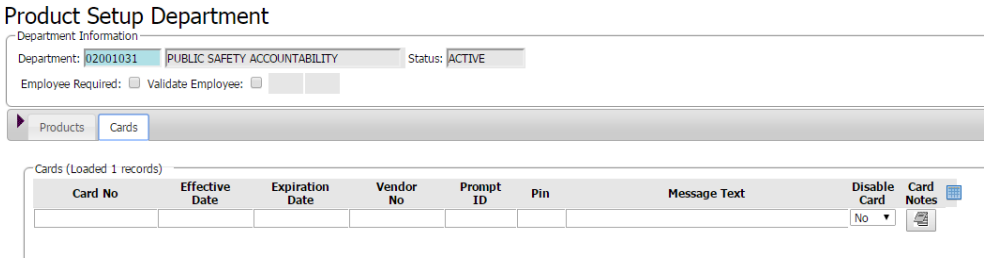
1. Open the Product Setup Department frame.
2. Enter a valid department number in the Department field and press Tab. The description and status of the department will display.
3. The Employee Required? field is asking whether an employee card number is also required to obtain products.
4. Enter the product code this department could receive in the Product field and press Tab The product's description will display.
5. Enter the tank capacity for the entered product in the Tank Capacity field and press Tab. This will help M5 determine how much fuel this department can receive.
6. If this department is a transfer location then enter in the location the product is to be transferred to and the tank number that corresponds to the product.
7. Enter the maximum daily fuelings the unit will be allowed.
8. Enter the maximum daily quantity the unit will be allowed.

   This feature can be configured one of three ways as determined by System Flag 5199 – "Limit the number of fueling(s)/issue quantity allowed per calendar day? (0, 1, 2)".

   - If this flag is set to '0', units and departments are not limited by the number of daily fueling(s) or daily issue quantity limits. This setting would preserve the current functionality as it stands pre-release 2.3.0.
   - If system flag 5199 is set to '1', units and departments will be limited by the number of daily fueling(s) allowed in one calendar day at a system wide level based on the following module flag values. System flag 5197 sets the system wide unit limit and system flag 5198 sets the department limit. No daily fuel issue quantity limits will be enforced.

- If system flag 5199 is set to '2' units and departments will be limited by the number of daily fueling(s) or daily issue quantity limits established on the product setup unit and product setup department frames.

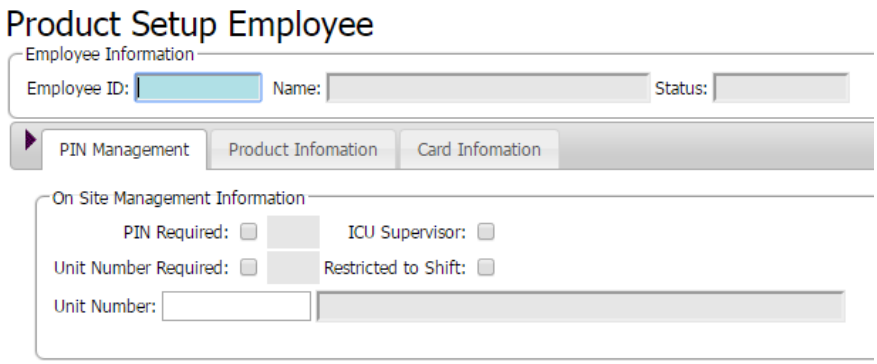
9. Proceed to enter as many products as this department is allowed to obtain.
10. If fuel cards are issued to the department and you wish to track transactions against those fuel cards, proceed to select the Cards tab. If any of these fuel cards have already been entered in Product Fuel Card frame, then you do not need to enter it here.



1. Enter the card number in the Card Number field and press Tab.
2. Enter the date in which the card goes into effect in the Effective Date and press Tab.
3. Enter the Expiration Date of the card and press Tab.
4. Enter the vendor of the card in the Vendor No field and press Tab. If you do not know the vendor number, proceed to double-click in the field or use the Binoculars icon to perform a search. If vendor is not applicable leave blank.
5. FuelFocus will look at the fuel card in M5 and if the Prompt ID contains a 1, then the first meter is prompted for. If the Prompt ID contains a 2, then the 2nd meter is prompted for. There is no validation on the actual entry at the ICU.
6. Enter a PIN # if you are using this feature.
7. If desired, enter a Text Message that will display on the ICU when this card is used.
8. Select the Notepad icon if you wish to enter any pertinent notes regarding this fuel card.
9. User Data 1 – User Data3 fields may be entered – each field will hold 15 positions of data.
10. Select the SAVE icon to save the information.
11. FuelFocus will look at the fuel card in M5 and if the Prompt ID contains a 1,then the first meter is prompted for. If the Prompt ID contains a 2, then the 2nd meter is prompted for. There is no validation on the actual entry at the ICU.

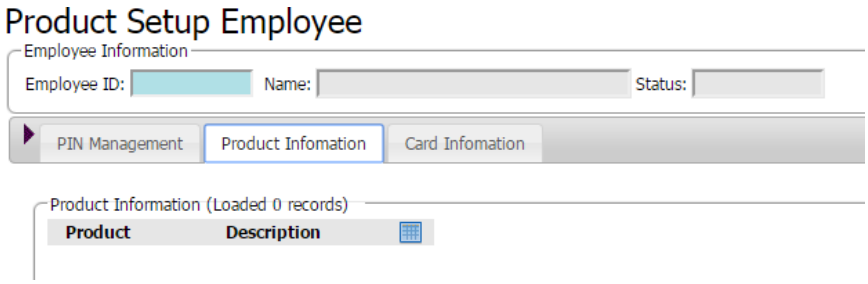
Products to Employees

After the consumable products are set up, you can go back into the Employee Product Set Up and add employee product information to each employee. In order for an employee to issue consumable products to a unit, department or indirect account, the employee needs to have consumable product information set up as well as any assigned fuel card.



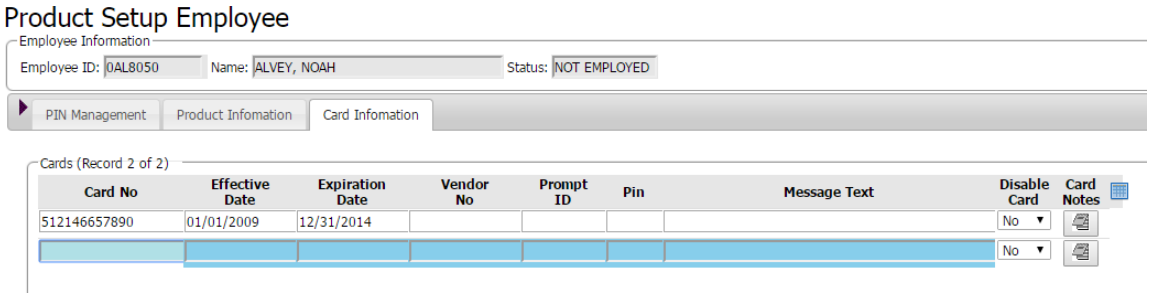
1. Open the Product Setup Employee frame.
2. Enter an employee ID in the Employee ID field or select from the List of Values. Press Tab. The employee's name and status will display.
3. Pin Management tab. There are two sections on this tab, one for in-house fueling (On Site Management Information) and off-site or commercial fueling (Commercial PIN Management Information). If a pin is required for in-house fuel, select the PIN Required checkbox and press Tab.
   Note: A PIN must be assigned on the Card Information tab before this flag can be set.
4. If the employee is an ICU supervisor, select the ICU Supervisor checkbox and press Tab.
5. If the employee must enter a unit number to obtain fuel from an ICU, select the Unit Number Required checkbox.
   Note: If this is selected, then the unit number field must be entered. If this is not set, then the employee can receive fuel but the system does not post the transaction. The system tracks fuel by unit, not employee.
6. If the employee is restricted to fuel only on his shift, select the Restricted to Shift checkbox and press Tab.

Production Information TAB



7. Enter a valid product in the product field or select from the List of Values and press Tab. The description displays.
8. Proceed to enter as many products as the entered employee is able to receive.
9. Select the SAVE button when complete.

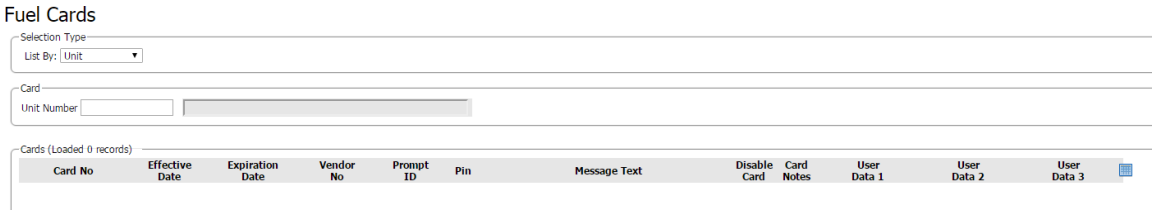
Card Information tab



1. Enter the card number in the Card Number field and press Tab.
2. Enter the date in which the card goes into effect in the Effective Date and press Tab.
3. Enter the Expiration Date of the card and press Tab.
4. Enter the vendor of the card in the Vendor No field and press Tab. If you do not know the vendor number, proceed to double-click in the field or use the Binoculars icon to perform a search. If vendor is not applicable leave blank.
5. Enter the unique Prompt ID and PIN number for this card.
6. If desired, enter a Text Message that will display on the ICU when this card is used.
7. Select the Notepad icon if you wish to enter any pertinent notes regarding this fuel card.
8. User Data 1 – User Data3 fields may be entered – each field will hold 15 positions of data.
9. Select the SAVE icon to save the information.

Product Fuel Cards

Fuel cards can be issued to units, departments or employees and work with the company's ICUs (Island Control Units) when fueling takes place. If fuel cards are used in any fuel interfaces and need to be valid fuel cards, then this frame is also required. Use Product Fuel Cards frame to maintain information about these cards including the ability to inactivate previously issued cards. Remember fuel cards can also be created in either Product Setup Employee, Department Products, or Product Setup Unit.

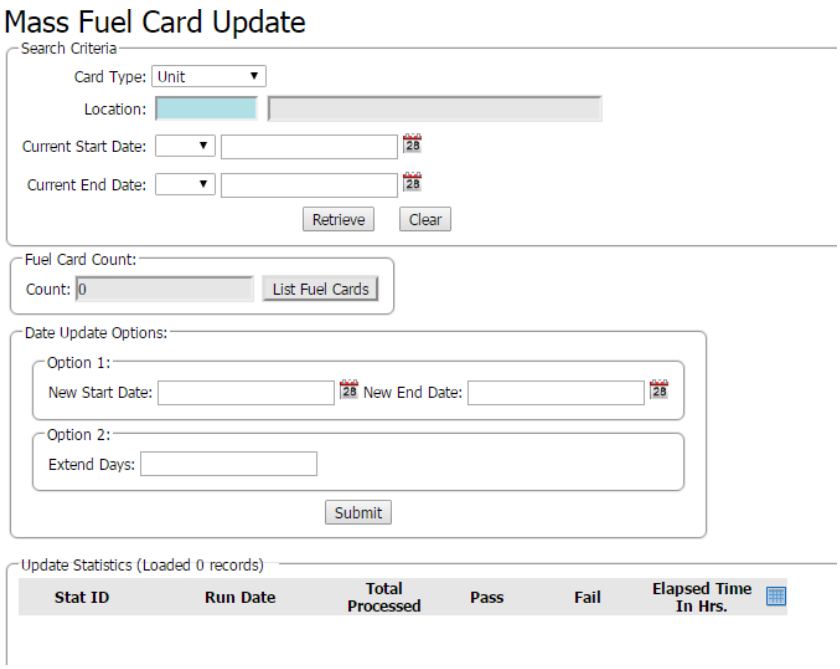


From this page, the user may assign a vendor to the card of a unit, department or employee as well as maintain the status of the card. The valid ICU parameters are also added or changed on this page as well as any additional notes pertaining to that card. Depending on the setting for System Flag 5147 determines how many fields display.

1. The selection is defaulted to find cards tied to a unit. Select the dropdown in the List By field if you wish to view cards by employee, department or card number. The field in the Card section will change accordingly. Press Tab.
2. Enter the unit number, employee id, department or card number you wish to view cards for in the Unit Number field or whichever field is displayed and press Tab. Any cards associated to the entered unit, employee or department will display.

3. To disassociate or remove any card, select the card to be removed and select the DELETE icon. The row displays in red. After the SAVE icon is selected, the card will be deleted.
4. To change the fuel vendor (if the card is only valid for one vendor), the prompt at the pump or the pin, select the appropriate field and select the SAVE icon.

Mass Fuel Card Update



You can quickly update the expiration dates for fuel cards that will or that have expired on the Mass Fuel Card Update frame. The user can enter search criteria such as card type, and location. The user can select the Retrieve button, and it shows how many fuel cards have been selected. The user can select the list fuel cards button to view the fuel cards that match the filter criteria entered.

There are two options for updating the fuel cards.

1. The user can enter an exact date.
2. The existing expiration date can be extended by X days in advance.

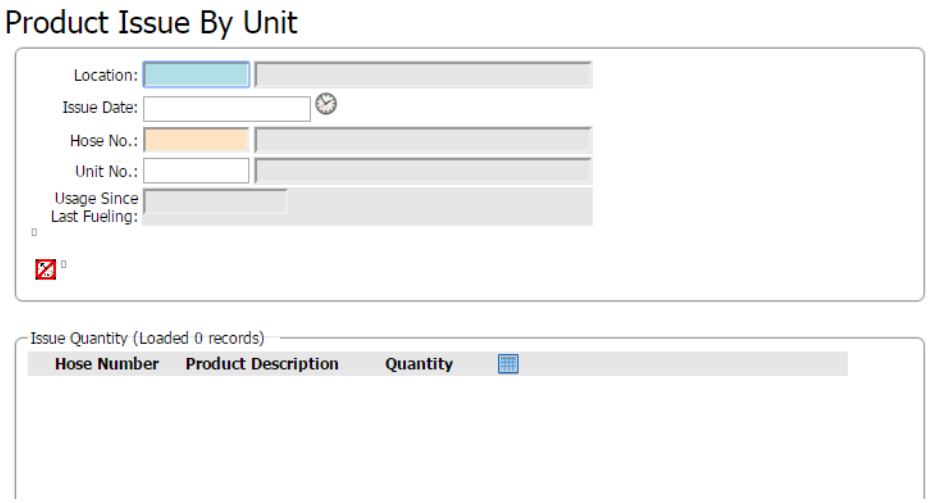
After one option is chosen and data entered then the user can select the Submit button which will run a batch process to update the expiration dates. When the process is running the entire frame will be read-only and cannot be modified until the batch process is complete.

The batch run will create a statistic row which will show in the i-frame at the bottom of the page. If records failed for any reason, the number will be tallied and a hyperlink will display. The hyperlink, when selected, will launch the Mass Fuel Card Update Reject list frame where the record can be corrected and resubmitted.

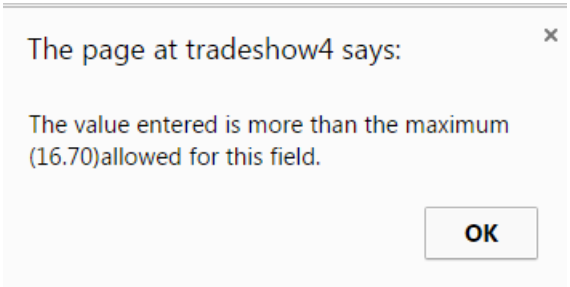
Section G - Product Issues

Product Issue by Unit

This frame is used to issue in-house fuel to a particular unit.



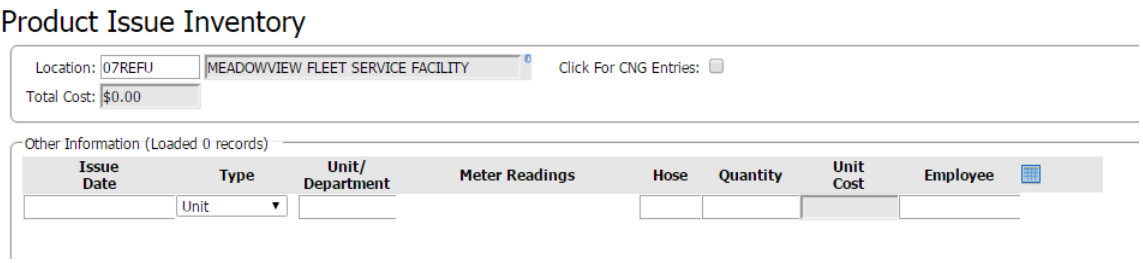
1. Open the Product Issue By Unit frame.
2. Enter the location in which the unit received fuel in the Location field and press Tab.
3. Enter the date the unit received the fuel in the Issue Date and press Tab. The current date and time will default.
4. Enter the Hose No. that the unit received fuel from and press Tab.
5. Enter the unit number of the unit that received the fuel in the Unit No field and press Tab.
6. The current odometer reading will display allowing the user to update the odometer. Using the bubble help, the user can view when the last reading was taken. Press Tab. The usual M5 meter checks will apply and if you have the privilege to override meters, the box to override will display.
7. Any products that the unit can receive will display in the table field area.
8. Enter the quantity received in the Quantity field and then select the SAVE icon. If you try to issue more than you have on-hand, the following message displays:



Product Issue Inventory

Charging an In-House Product to multiple Units/Departments

This frame is used to enter product issues to one or more units or departments.

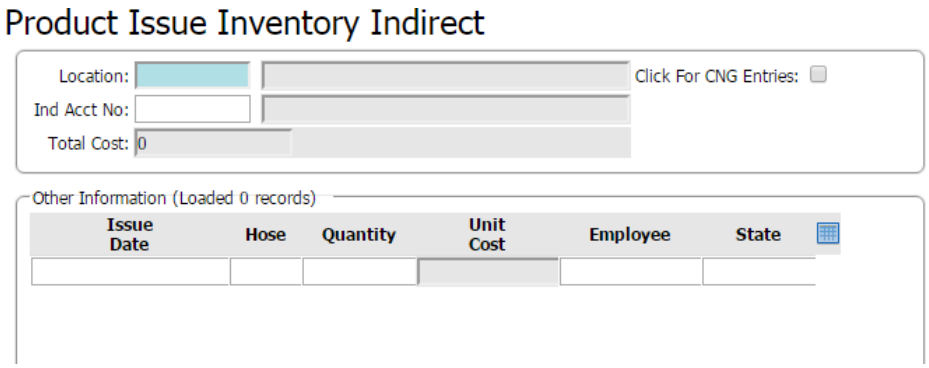


1. Open the Product Issue Inventory frame.
2. Enter a valid fuel location or use the Binoculars icon to perform a search and press Tab. The description displays.
3. If the entries are for CNG (Compress Natural Gas), select the checkbox for CNG entries and press Tab.
4. Enter the date the product was issued in the Issue Date field and press Tab.
5. M5 defaults to assuming that the fuel is dispensed to a unit, but if not, select the dropdown in the Type field and select Department. Press Tab.
6. Enter a valid unit or department based on the Type and press Tab. If needed, either double-click or use the Binoculars to perform the appropriate search.
7. If issuing fuel to a unit, enter the meter reading, in the Meter Reading field, at the time of issue and press Tab.
8. Enter the hose in which the fuel was dispensed at the entered location in the Hose field and press Tab. The current unit cost will display.
9. Enter the quantity of fuel issued in the Quantity field and press Tab.
10. Enter the employee receiving the fuel in the Employee field and press Tab.
11. Depending on how System Flag 2016 is set, the following information may also be entered: license, driver, card number.
12. Continue to enter as many issues as needed.
13. Select the SAVE icon when complete. If no fuel cost displays on Product Location Main frame for the entered product, then the following will display. This means that the inventory location has not yet received any fuel.

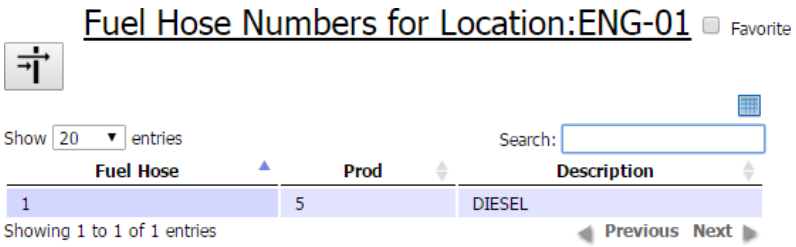
Product Issue Inventory Indirect

Charging an In-House Product to an Indirect Account

This frame is used to record all issues to an Indirect Account from inventoried fuel or products. Many organizations make blanket issues to an Indirect Account without detailing the units which actually received the fuel. The Indirect Account must be previously established in M5 before record of the transactions can be made.



1. Open the Product Issue Inventory Indirect frame. The current login location will display. If this is a fuel location, continue to press Tab. The location's description will appear.
   Note: If these are CNG transactions, select the Click for CNG Entries checkbox. The table field will adjust to display columns for pressure and temperature readings.
2. Enter a valid indirect account number to charge the product to in the Ind Acct No field and press Tab. If needed, either double-click or use the Binoculars to perform a search. The description displays.
3. Enter the date the product was dispensed in the Issue Date field and press Tab. The current date will display automatically.
4. Enter the hose of the product that was dispensed in the Hose field and press Tab. A search can be performed to view the applicable hoses for any products at the entered location.

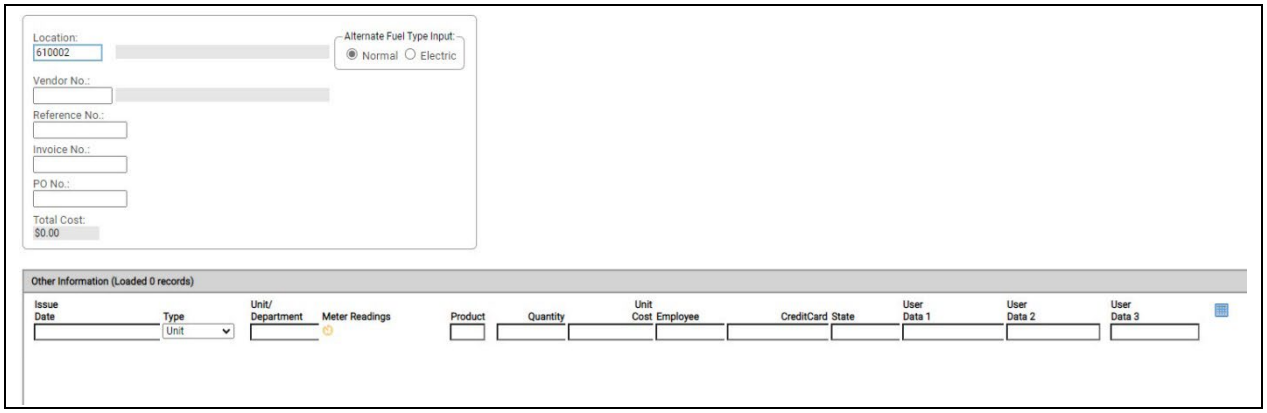


5. The unit of issue cost will automatically display.
6. Enter the quantity of fuel issued in the Quantity field and press Tab. Notice the Total Cost will update accordingly.
7. Enter the employee who received the product, if required and press Tab.
8. Select the SAVE icon when complete.

Product Issue Vendor

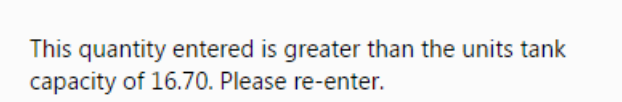
Charging a Commercial Product to a Unit/Department

This page would be used to track commercial fuel issues that are not otherwise entered by using a fuel interface.



1. Open the Product Issue Vendor frame.
2. The current login location automatically displays. Press Tab and the fueling location's description displays.
3. Enter the vendor that dispensed the fuel in the Vendor No field and press Tab. If needed, either double-click or use the Binoculars to perform a search. The vendor's name displays.
4. At least one of the following fields must be entered, PO No, Reference No or Invoice No. Proceed to enter one of these values and press Tab.
5. For non-fuel issues, like windshield wipers, you may enter the percentage of tax paid in the Tax Percent field and then press Tab.
6. Enter the date the product was dispensed in the Issue Date field and press Tab. The current date will display automatically.
7. Select the type of entry, unit or department and press Tab.
8. Based on the Type selected, enter a valid unit or department or perform a search and press Tab.
9. If a unit received fuel, then enter its meter reading at the time of issuance and press Tab. The normal meter checks are performed.
10. Enter the product that was dispensed in the Product field and press Tab. A search can be performed to view the applicable products at the entered location for the entered unit.

11. Enter the quantity of fuel issued in the Quantity field and press Tab. If the quantity entered is more than the unit's tank capacity, a message similar to the one below will display.

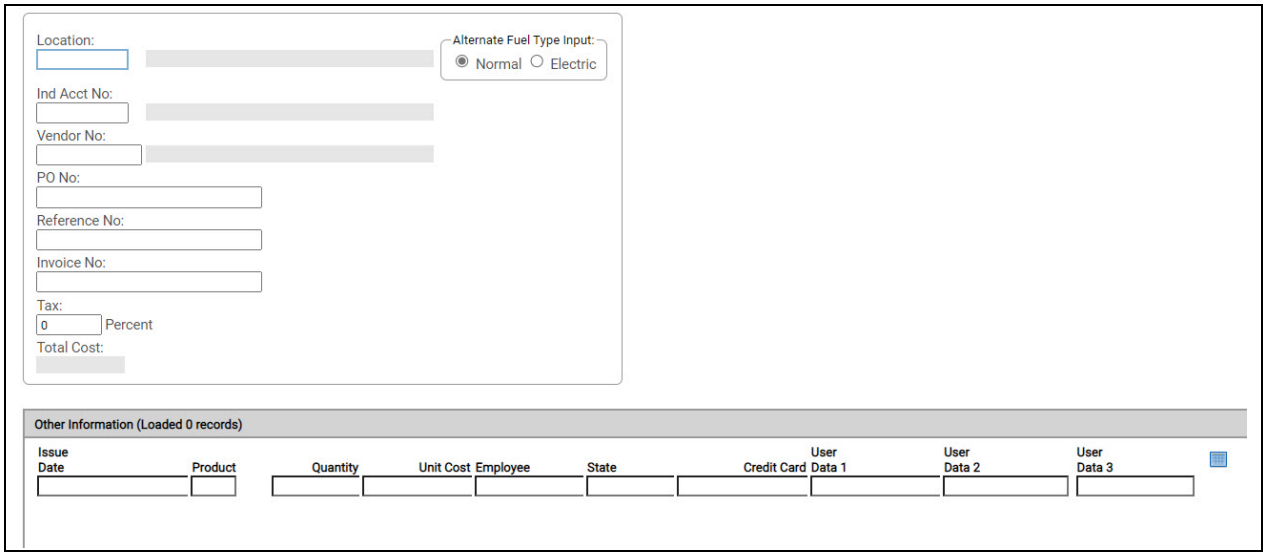


12. Select OK to continue and reenter the quantity and press Tab.
13. Enter the fuel cost per unit of issue in the Unit Cost field and press Tab. Notice the total cost updates automatically, including any applicable tax.
14. Enter a valid employee if required. Press Tab.
15. Depending on how System Flag 2016 is set, the following information can be entered: license, driver, card number.
16. User Data 1-3 – these fields may be entered as well.
17. Select the SAVE icon when complete.

Product Issue Vendor Indirect

Charging a Commercial Product to an Indirect Account

This frame is used to record all fuel issues from an outside vendor to an indirect account. Often a company will receive a single invoice for all fuel transactions from a vendor to be applied to a single indirect account. The indirect account must be previously established in M5 before transactions can be reported against it.



1. Open the Product Issue Vendor Indirect frame.
2. The current login location automatically displays. Press Tab and the fueling location's description displays.
3. Enter a valid indirect account number to charge the product to in the Ind Acct No field and press Tab. If needed, either double-click or use the Binoculars to perform a search. The description displays.
4. Enter the Vendor No of the vendor dispensing the product and press Tab. A search can be performed. The vendor's name will display.
5. At least one of the following fields must be entered, PO No, Reference No or Invoice No. Proceed to enter one of these values and press Tab.
6. If there is tax, enter the percentage of tax in the Tax Percent field and press Tab.
7. Enter the date the product was dispensed in the Issue Date field and press Tab. The current date will display automatically.
8. Enter the product that was dispensed in the Product field and press Tab. A search can be performed to view the applicable products at the entered location.
9. Enter the quantity of fuel issued in the Quantity field and press Tab.
10. Enter the fuel cost per unit of issue in the Unit Cost field and press Tab. Notice the total cost updates automatically, including any applicable tax.
11. Enter the employee who received the product, if required and press Tab.

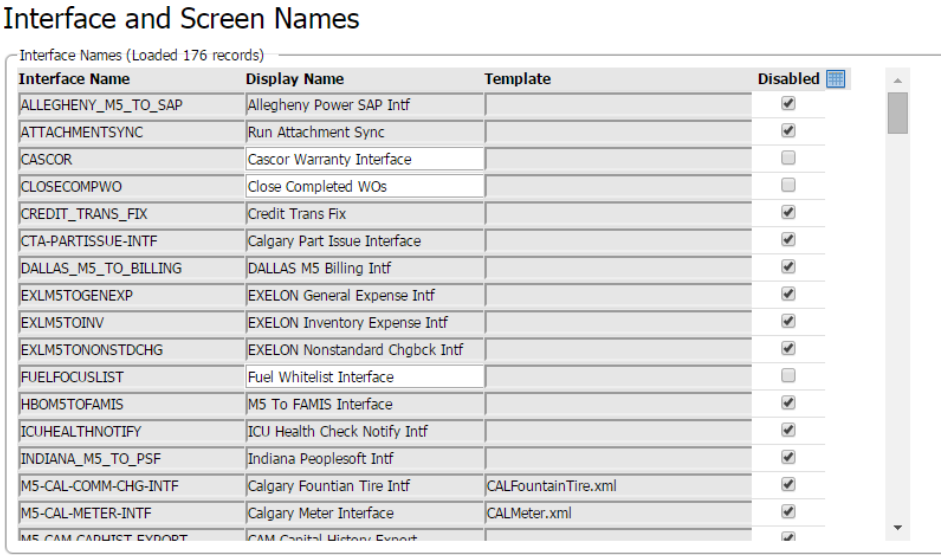
12. Depending on how System Flag 2016 is set, the following information can be entered: license, driver, card number.
13. User Data 1-3 may be entered.
14. Select the SAVE icon when complete.

Section H - Fuel Interfaces

Setup For Fuel Interfaces

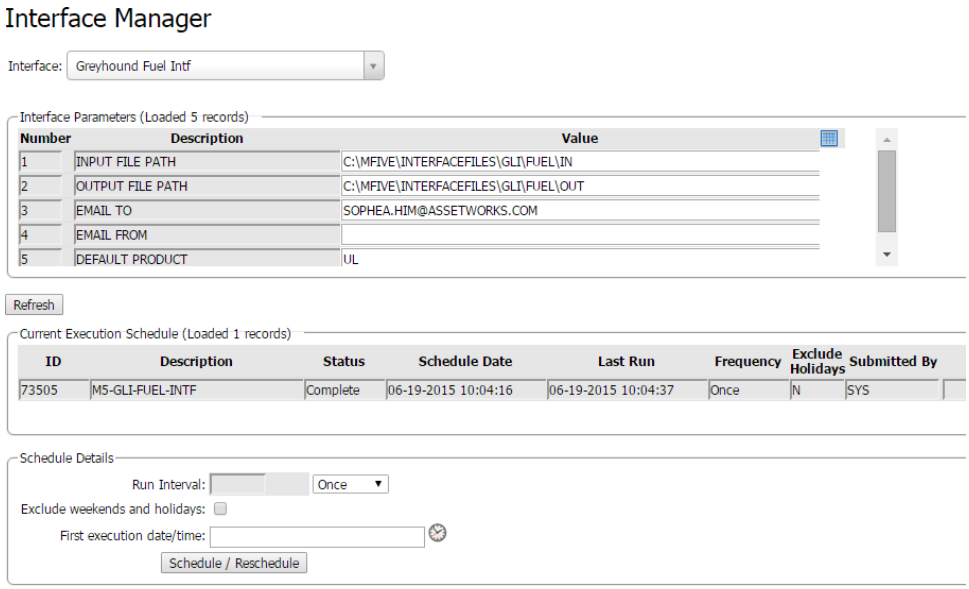
If a fuel interface has been developed for a customer, the interface name and description needs to be entered on the Interface and Screens Names frame.

Most likely a script has been run as part of the interface package and the interface will already be seen in this page. However, if you ever wish to disable the interface, you will need to do that here.



Executing the Fuel Interface

The Interface Manager is used to schedule the product interface to be run as well as specify the interface parameters to be used by the program. These parameters will come with the interface package.



From the Interface dropdown, select the fuel interface to be scheduled to be run. The interfaces displayed will be those as seen above in the INTERFACE AND SCREEN NAMES page.

Generally there are three primary interface parameters that setup:

1. Input File Path – Specifies where the program will find the product datafile to be processed.
2. Output File Path – Specifies where the program will write the process product data file to be processed.
3. Email - Indicates the person to receive the emails generated from the interface process. There are two:

    i. For each data file that is processed an email is generated.

    Sample:

    From: M5-GAS-BOY-INTFmanager@AssetWorks..com
    Sent: Wednesday, November x, 20xx 1:51 PM
    To: JCOFFIN@METROSTLOUIS.ORG

Subject: M5-GAS-BOY-INTF Interface Status

M5-GAS-BOY-INTF Interface Finished Successfully.
Data Processing Complete for file rawtrans_M51021.dat. There were 585 Records, and 98 errors detected.

ii. The second email indicates how many files were processed, total number of records, and number of errors detected.

Sample:

From: M5-GAS-BOY-INTFmanager@AssetWorks..com
Sent: Wednesday, November x, 20xx 1:51 PM
To: JCOFFIN@METROSTLOUIS.ORG
Subject: M5-GAS-BOY-INTF Interface Status

M5-GAS-BOY-INTF Interface Finished Successfully.

Data Processing Complete. Processed 1 file(s), with 585 Total Records, and 98 errors detected. Navigate to the M5 Fuel Issue Reject screen to view invalid transactions.

After the values are entered for the required parameters, scroll down to select when to start the interface.

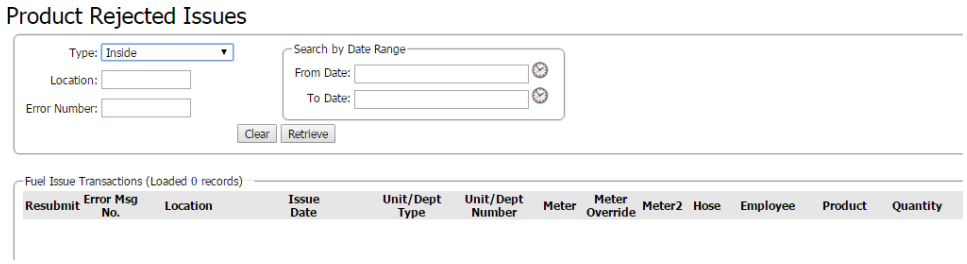
To run this once, select the First execution date/time field and use the Calendar icon to select when you would like the interface to begin. Then select the Schedule button. You will then see the interface and status of the batch process in the Current Execution Schedule section. Select Refresh, as applicable.

Product Rejected Issues

Product transactions that fail the validation process for both in-house and fuel interfaces can be deleted, corrected and resubmitted.

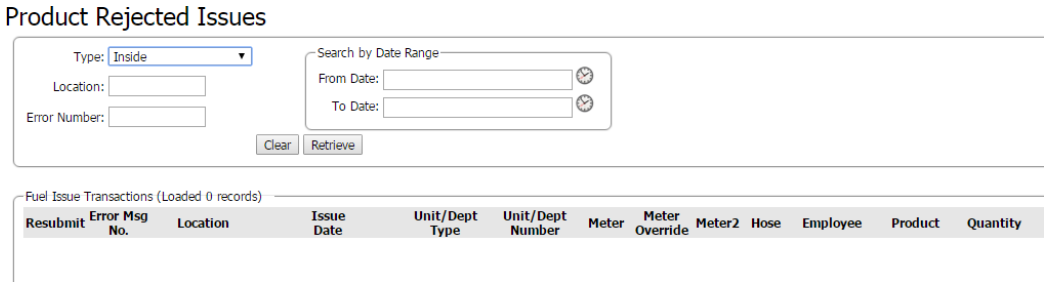
In-house fuel rejected transactions use the Product Rejected Issues frame. Entries will remain here until they are either deleted or resubmitted successfully.

Custom fuel interfaces written after July 2007 generally use the Interface Reject Manager to process rejected transactions.



To make corrections:

1. Use the Type dropdown and select the type of fuel transaction – in-house or commercial (can be a fuel interface).
2. Enter the fueling location in question or use the Binoculars to perform a search and press Tab.
3. To select rejected transactions by error number, enter a valid error number or use the Binoculars to view the list of values (LOV) and press Tab.
4. Enter the starting and ending dates for the rejected transactions by using the From Date and To Date fields.
5. Select the Retrieve button to display the rejected fuel issue transactions.



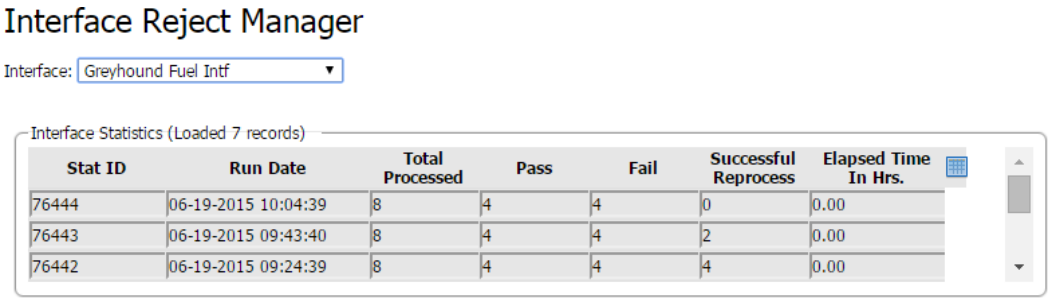
The mouse can hover over the fields to display additional information. Especially hover over the Error Msg No to view the error.

i. To correct a single record and resubmit, highlight the row to be corrected and make the necessary changes. Any field that is white can be changed. Select the Resubmit checkbox when you are ready to try passing the record to M5.
ii. To delete a single record, select the row, then select the DELETE icon. The row highlights in red and then select the SAVE icon to continue to delete it. Select the UNDO icon if you do not wish to delete it.

Data can be corrected on this frame and saved. It can then be resubmitted at a later time.

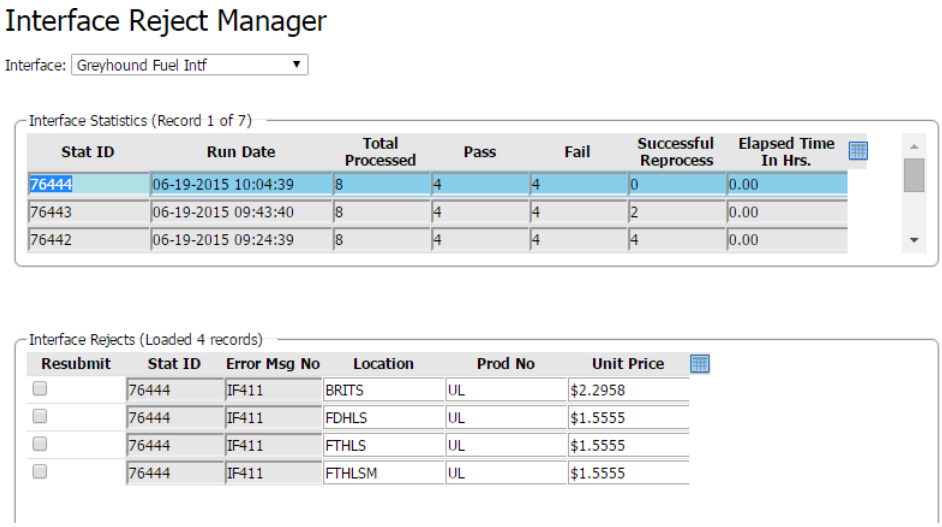
Interface Reject Manager

Custom fuel interfaces written after July 2007 generally use the Interface Reject Manager to process rejected transactions. Custom fuel interfaces written using the Product Rejected Issues frame can be rewritten to use the Interface Reject Manager. Please contact your Project Manager for additional details.

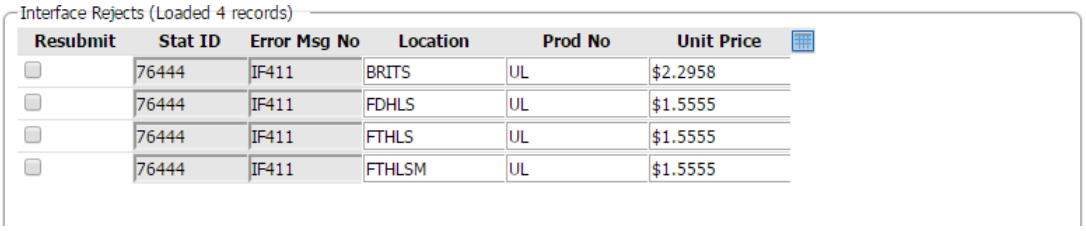


To make corrections

1. Open the Interface Manager Frame. Use the Interface dropdown menu to select the fuel interface.
2. In the Interface Statistics section select the Interface transactions that are to be corrected by selecting the Stat ID. The Filter Assistance section appears.



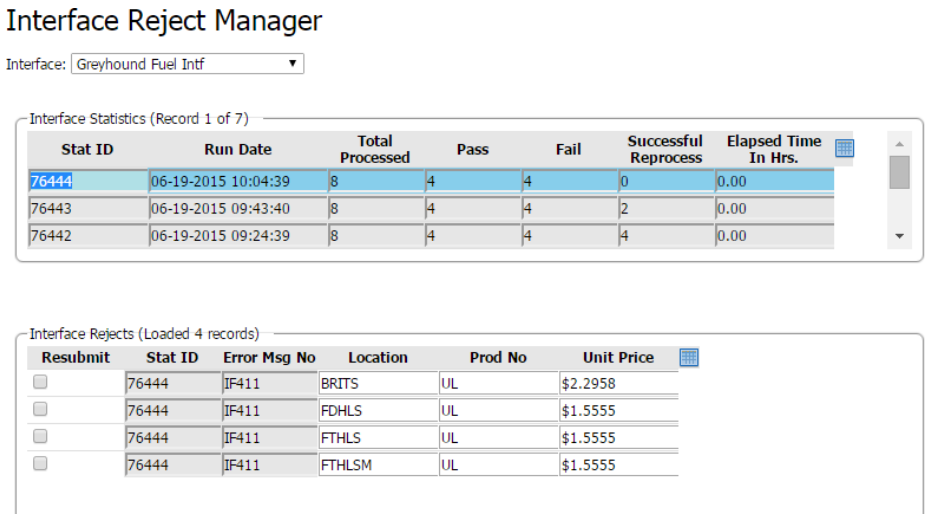
3. Use the Filter Assistance section to select the transactions to be corrected if desired. The filters include Location, Error Number, Invoice Number, Ref Number, Product Number, and Vendor Number.
4. Select the Search Button.



The mouse can hover over the fields to display additional information. Especially hover over the Error Msg No to view the error.

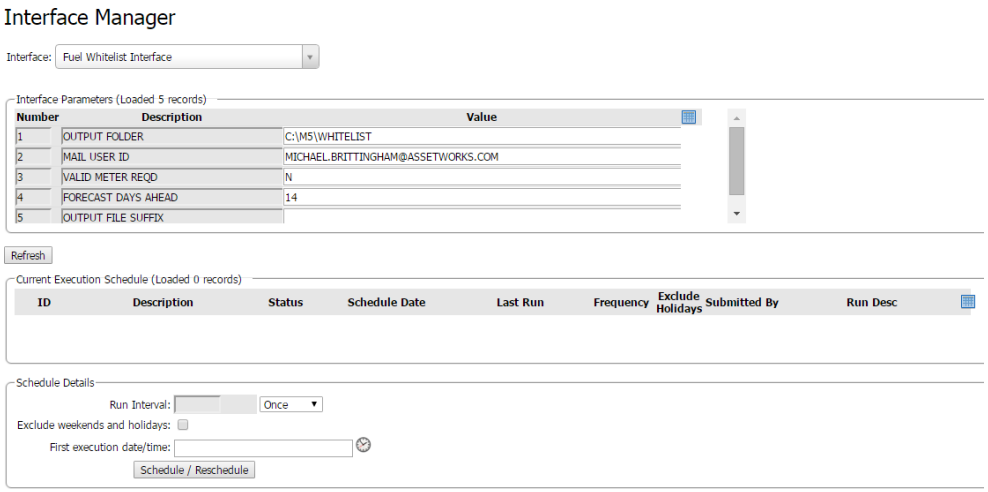
i. To correct a single record and resubmit, highlight the row to be corrected and make the necessary changes. Any field that is white can be changed. Select the Resubmit checkbox when you are ready to try passing the record to M5.
ii. To delete a single record, select the row, then select the DELETE icon. The row highlights in red and then select the SAVE icon to continue to delete it. Select the UNDO icon if you do not wish to delete it.

Data can be corrected on this frame and saved. It can then be resubmitted at a later time.
Sometimes the fuel interface is run the second time before the original transactions can be corrected. The error message for duplicate transactions is 214. To delete all the duplicate transactions, select the 214 icon at the top of the frame.



White List Batch Process

For the real time ICU processing, this batch process creates a text file used by the ICU if communication between the ICU and the server is down. The ICU will use this list to validate unit number, employee, mileage, types of products and capacities if it cannot communicate with the server.



1. On the Interface Manager frame select the FuelFocus White List in the Interface field.
2. Output folder - If this has a value that is used by the whitelistcreation program. If it is not, the Environment Variable value is used.
3. Enter in a valid email address in the Mail user ID. This is the person who will receive the email about the completion of the Fuel Whitelist batch process.
4. Valid Meter Reqd – If you enforce valid meters when online you can opt to not enforce them when the whitelist functionality is being used. This would prevent the issue with stale or out of date meters being denied fueling. Leave it blank if you

want to continue to enforce valid meters even when fueling from the whitelist.

5. Forecast Days Ahead – Normally, the Whitelist process calculates the meter ranges for the Whitelist based on the date and time the process is run. The new parameter will say calculate the range based on the current date and time (of the Whitelist creation) plus the number of days in the parameter. This is handy when you know there will be a longer outage between whitelist updates to the ICU.
6. A new parameter has been added to the interface manager frame to allow the client to put a suffix on the name of the output file. Allow a suffix (such as SP) so the new name would be whitelistSP.txt.
7. Select the run interval by opening the dropdown box. It is recommended to run this daily.
8. If you do not want this to run on weekends and holidays, select the exclude checkbox.
9. Enter the date and time you want to schedule this batch process to run.
10. Select the Schedule/Reschedule button.

A future enhancement to FuelFocus will support a one-time fueling feature for employees that lost cards. Currently, the employee card number is either required (Y) or not (null). To prepare for this enhancement the whitelist program now has a 3rd value of P that says to prompt for it but do not validate it.

Section I - Product Billing

M5 Product Billing is very comprehensive. Billing is configured based on the organization's goals. A billing workshop will be conducted to help the customer identify what and who will be billed.

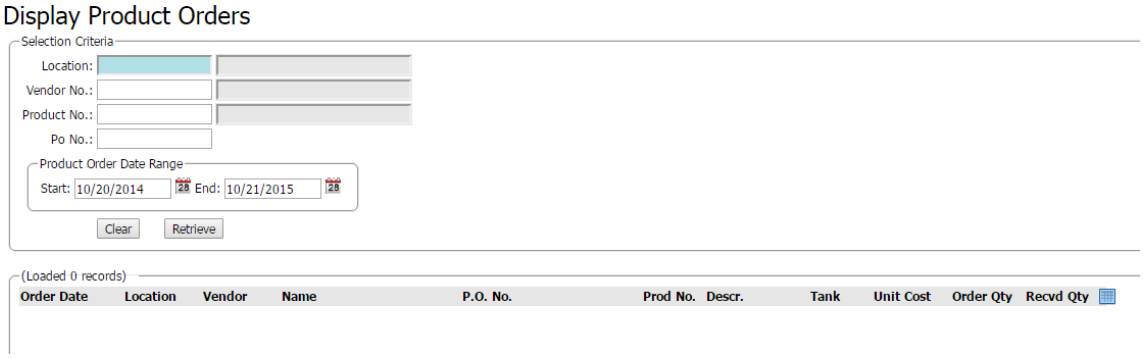
Section J - Product Display/Reports

Displays

Display Product Inventory

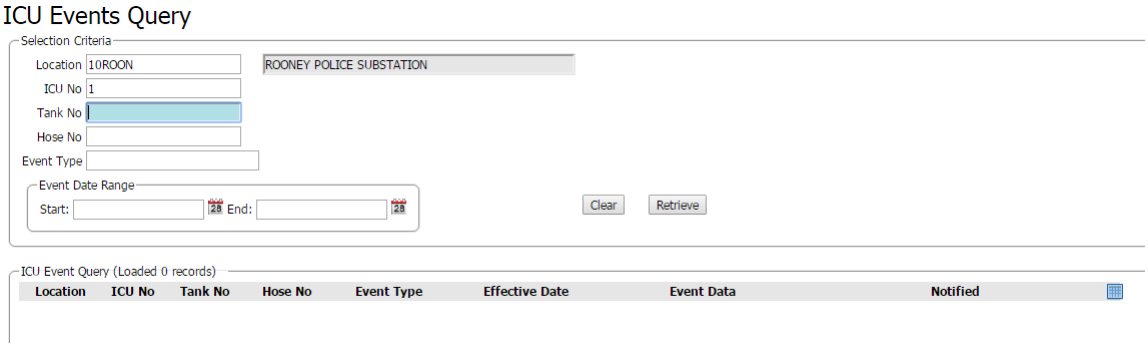
The Display Product Inventory frame allows you to see all products at each location according to the selection criteria you enter. This information includes Tank number, Product, Type, Physical Inventory Date, On Hand Qty, On Order Qty and Last Order date.

Display Product Orders



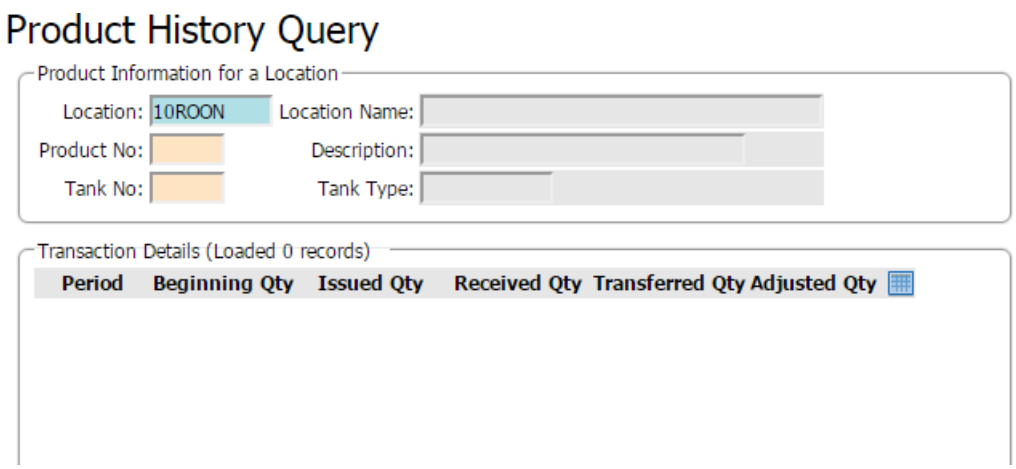
The Display Product Orders frame allows you to see what products have been ordered and at what location. Along with that information it also includes Vendor number, PO number, Tank, Unit cost, Order Qty and Received Qty.

ICU Event Query



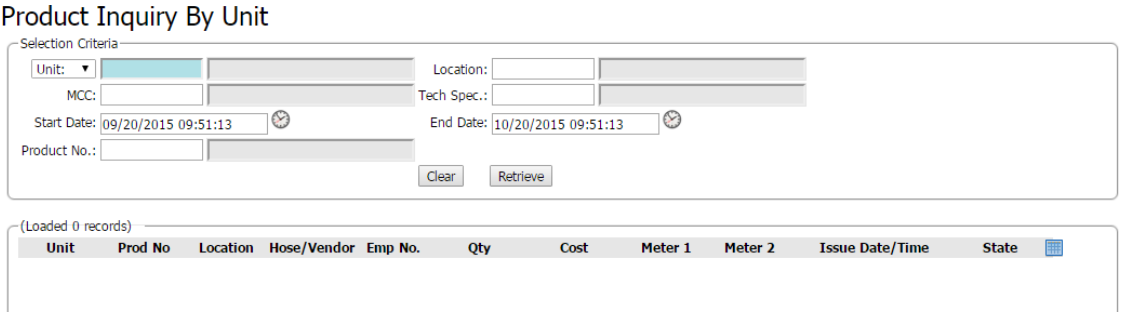
The ICU Event Query frame offers a detailed list of events that have occurred at the ICU. The selection criteria allows you to search by location or all locations, specific type of event and by date.

Product History Query



The Product History Query frame offers a detailed list by period of all receipts, total issues and adjustment made against a specific product and tank. User can refer to this list periodically to check for inconsistent amounts due to keypunch error. This frame is also valuable in offering a cursory glance at location consumption during a given period.

Product Inquiry By Unit



The Product Inquiry by Unit is a frame that displays the units, products, hoses, employee and issue date and time for a given unit, location and product for a specified date range.

The selection criteria includes: Unit number, location, Start and End date/time and product.

Reports

Here is the current list of Fuel Reports. Please refer to the M5 Reports Guide for a sample of each report and a fuel description.

- Product Issue Journal
- Product Receipt Journal
- Product Transfer Journal
- Product Commercial Issue Journal
- Product Orders
- Product Issue Summary
- Product Sticking
- Product Transaction Journal
- Product Issue Transactions 2
- Product Unit Summary
  Product
- Stick Reconciliation Product
- Book Reconciliation Product
- Receipt History Product Unit
- UPQ
- Product UPQ History
- Unit Product Configuration
- Unit Product History

Carbon Foot Printing Reports

- Greenhouse Emission Trend
- Greenhouse Emission by Type

Section K – Carbon Footprint Reporting

Climate change and the potential impacts of global warming have focused attention on the production of carbon dioxide (CO2) and other greenhouse gases (GHG). As policy-makers focus on ways to reduce the emission of GHG, governments and industry are being pushed to begin reporting on their own production of GHG related to their consumption of fossil fuels.

Greenhouse gases Carbon Dioxide (CO2), Methane (CH4) and Nitrous Oxide (N2O) are emitted directly by the burning of fossil fuels. Additionally, the fluorocarbon greenhouse gases: Hydrofluorocarbon (HFC) and perfluorocarbon (PFC) are emitted from leaks in air condition and refrigeration systems. The predominate GHG is CO2, which accounts for nearly 95% - 98% of all GHG emissions from fossil fuels. Gasoline powered automobiles alone produce twenty percent (20%) of the US CO2 emissions.

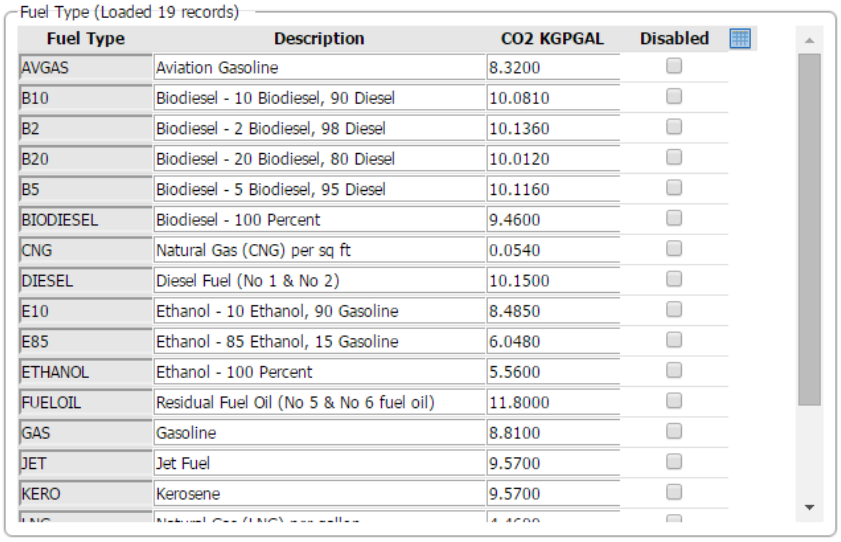
For non-manufacturing fleets, the primary source of GHG emissions will come from the fuel consumed by the fleet. Agriculture, mining, manufacturing and utility fleets that generate GHG through other sources also have an interest in tracking the fleet generated emissions to facilitate trading in carbon credits based on overall corporate GHG outputs. Therefore, FleetFocus M5 now has the ability to analyze the fuel consumption information captured in the database and has the ability to report on the amount of GHG produced by fleet operations.

In order to support our client's efforts to provide emissions reporting based on federal regulations, several enhancements were implemented in M5.

Fuel Type

The Fuel Type frame is used to enter each valid fuel type code, description and CO2 KGPGAL (carbon output). The Fuel Type field has been added to Product Main so it can be associated to a product. This field is made active if the user sets the Product Type equal to FUEL. The new fuel type field is not required.

Fuel Type


Fuel Type (Loaded 19 records)

Fuel Type	Description	CO2 KGPGAL	Disabled
AVGAS	Aviation Gasoline	8.3200	
B10	Biodiesel - 10 Biodiesel, 90 Diesel	10.0810	
B2	Biodiesel - 2 Biodiesel, 98 Diesel	10.1360	
B20	Biodiesel - 20 Biodiesel, 80 Diesel	10.0120	
B5	Biodiesel - 5 Biodiesel, 95 Diesel	10.1160	
BIODIESEL	Biodiesel - 100 Percent	9.4600	
CNG	Natural Gas (CNG) per sq ft	0.0540	
DIESEL	Diesel Fuel (No 1 & No 2)	10.1500	
E10	Ethanol - 10 Ethanol, 90 Gasoline	8.4850	
E85	Ethanol - 85 Ethanol, 15 Gasoline	6.0480	
ETHANOL	Ethanol - 100 Percent	5.5600	
FUELOIL	Residual Fuel Oil (No 5 & No 6 fuel oil)	11.8000	
GAS	Gasoline	8.8100	
JET	Jet Fuel	9.5700	
KERO	Kerosene	9.5700	

1. Fuel Type – Enter a fuel type code and press Tab.
2. Description – Enter a description for the fuel type and press Tab.
3. CO2 KGPGAL – Enter the CO2 KGPGAL (carbon output).
4. Select the SAVE icon when complete.
5. A fuel type may be disabled by selecting the Disabled checkbox and then selecting the SAVE button.

Calculating CO2 emissions only requires knowing the amount of fuel consumed. Calculating N2O and CH4 requires also knowing the vehicle type, if its on-road or off- road, emission control technology and the fuel type.

To assign the coefficient, new fields have been added to the Technical Specification screen to determine the vehicle type and emission technology. Fuel Economy class and mileage fields have also been added to the Technical Specification screen to allow comparison of actual vs. expected mileage and for estimating fuel usage where no fuel issues are available.

GHG Off Road

Because of the variability in coefficient values due to the vehicle type and fuel type, separate columns in the table will be created to capture N2O and CH4 coefficients. Additionally, because of differences between On-Road and Off-road calculations, separate tables will be are needed to handle both.
The Off-Road calculation is based on the number of gallons times the kilograms per gallon coefficient for the vehicle and fuel type combination.

GHG Off Road Setting

GHG OffRoad (Loaded 13 records)

Vehicle Type	Fuel Type	N2O KGPGAL	CH4 KGPGAL
AIRCRAFT	AVGAS	0.1100	7.0400
SHIP_BOAT	DIESEL	0.2600	0.7400
OTHER_EQUIP	DIESEL	0.2600	0.5800
CONSTRUCTION	DIESEL	0.2600	0.5800
AG_EQUIP	DIESEL	0.2600	1.4400
LOCOMOTIVE	DIESEL	0.2600	0.8000
SHIP_BOAT	FUELOIL	0.3000	0.8600
OTHER_EQUIP	GAS	0.2200	0.5000
SHIP_BOAT	GAS	0.2200	0.6400
AG_EQUIP	GAS	0.2200	1.2600
CONSTRUCTION	GAS	0.2200	0.5000
AIRCRAFT	JET	0.3100	0.2700
BUS			

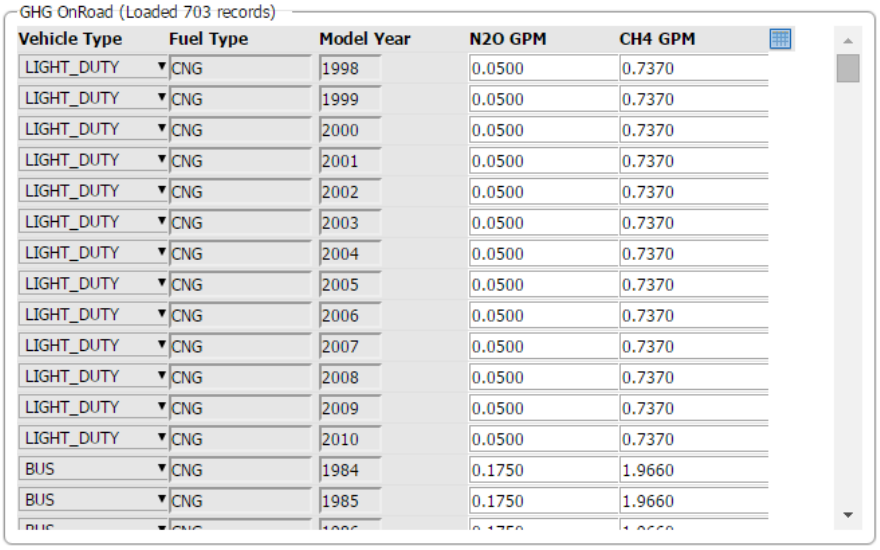
1. Select the Vehicle Type from the dropdown and press Tab.
2. Enter the Fuel Type and press Tab.
3. Enter the Nitrous Oxide - N20 KGPGAL and press Tab.
4. Enter the Carbon Dioxide - CH4 KGPGAL and press Tab.
5. Select the SAVE icon when complete.

GHG On-Road

Because of the variability in coefficient values due to the vehicle type and fuel type, separate columns in the table will be created to capture N2O and CH4 coefficients.

The On-Road calculation is based on the number of miles travelled times the grams per mile coefficient for the vehicle/model year/fuel type combination.

GHG On Road Setting



1. Enter the Fuel Type and press Tab.
2. Enter the Nitrous Oxide - N20 GPM and press Tab.
3. Enter the Carbon Dioxide - CH4 GPM and press Tab.
4. Select the <SAVE> icon when complete.

Updates

Release	Section	Description
23.1	ICU “Health” Checks	Added new ICU Tank Leak Test Query frame.
23.2	All sections	Applied miscellaneous writing style updates throughout the document.