Description of the data

Carriers are companies that organize the transportation of products at a terminal.

A compartment is an area within a container where product is held. Some containers, such as tanks, have a single compartment, while other containers may have multiple compartments, such as trailers, ships, and railcars.

Containers are used to identify the physical locations where product is held or moved

Container types:

- Tanks
- Trailers
- Vapor recovery units
- Ships
- Barges
- Railcars

Terminal products are the base products stored at the terminal and make up the components of supplier, customer, and destination products.

A supplier is a company that owns or sells products at a terminal. A supplier may also be called a shipper, exchanger, or through putter, depending on the role the supplier plays in a transaction.

A customer is a person who purchases products from a supplier. Each supplier must have one or more customers in order to place orders for product withdrawal.

A Driver: A person employed by a carrier who is authorized to drive a transport vehicle and haul product into and out of a terminal. Drivers are allowed to drive any of a carrier's trailers, except those that are currently in use by another driver. Each carrier must have one or more drivers in order to withdraw product from the terminal.

Product groups are used to define sets of related products

Product Group Code	Name
ADD	ADDITIVE
DSL	DIESEL

GAS	GASOLINE
HFO	HEAVY FUEL

Destinations can be very specific, such as a store's name or address, or a general area, such as a city or region.

A folio represents one business day and is used to group that business day's orders and bulk movements.

EOD: End of day. The process of closing one business day's folio and opening a new folio for the next business day. The EOD process can be performed either automatically or manually.

EOM: End of month. The process of closing the carryover folio and, if configured, distributing inventory gains and losses

Inventory Management

FUEL-FACS maintains inventory using three methods:

Supplier book inventory Calculated using movement transactions for each product

Tank book inventories Calculated using movement transactions for each tank

Tank physical inventories Calculated by tracking actual tank volumes through automatic tank gauging or manually entering tank readings

Order & Trip Statuses and Revisions

As orders and trips are created, billed, and canceled, new revisions of the order or trip are created with the appropriate status.

- **Statuses**

1: **ENTERING**: The order or trip has been created, but not yet dispatched, or is being corrected. Only orders and trips with an Entering status can be modified or deleted.

2: **DISPATCHED**: Order shipped and ready for loading

3: **LOADING**: When the order is validated and FAN LOADING

4: **LOADING AT BAY**: Compartments are loading

5: **VALIDATING** The system is performing AIC checks on the order or trip

6: **LOADED**: The quantity shipped is fully loaded, the BOL is ready for printing

7: **CANCELE**: Only loaded orders can be canceled

- **Revisions**

An order identified by its movement number, can have several revisions if it has been corrected after it was loaded. Each revision is displayed separately and provides a snapshot of the order or trip at each point of the revision cycle.

Bulk Movement

Bulk movements are used to record product movements in bulk quantities.

Types of bulk movements include:

•**Bulk receipt**: A large movement of product into an internal container from an external, container **(**for example, to a tank from a ship)

•**Bulk disposal**: A large movement of product from an internal container to an external, mobile container (for example, from a tank to a railcar)

•**Internal transfer**—A large movement of product between two internal containers (such as two tanks); the transfer can be either the physical movement of product from one tank to another, a book entry transfer of terminal product ownership between suppliers, or a book entry transfer due to the regrading of a terminal product

•**External transfer**: A large movement of product between two external, mobile containers (for example, from a barge to a ship)

All product movements have a source (the originating container) and a destination (the container product is being moved to).

Method Of Measure

FUEL-FACS uses the method-of-measure (MOM) process to determine a terminal product's quantity. When the MOM is by volume, the product is measured in volumetric units, such as gallons or liters. When the MOM is by mass, the product is measured in weighed units, such as pounds or kilograms.

The MOM is used in combination with the terminal product's type, as follows:

- Metered products are measured by volume or mass.
- Weighed products are measured by mass.
- Injected products are measured by the same MOM as the products into which they are injected.

FUEL-FACS determines product quantity for two different uses: accounting and loading.

- **Accounting MOM**—Determines the quantity of product as it applies to allocation, inventory, credit, and billing
- **Loading MOM**—Determines the quantity of product as it is recorded during loading

Terminal products can have a different type/MOM combination for loading and accounting purposes, with the following restrictions:

- **Metered products** the accounting MOM and the loading MOM must be the same (either volume or mass).
- **Weighed products** When the accounting type is weighed, the loading type can be metered and the MOM can be mass or volume. However, products loaded by weight must be accounted for by weight.
- **Injected products** the accounting and loading types must both be injected. Because injected products use the MOM defined for the product into which they are injected.

Weight in Vacuum

Weight of product measured in a vacuum without the effects of buoyancy.

Weight in Air

Weight of product measured in air and corrected for buoyancy.

Perset

The smallest physical entity considered within the scope of the terminal automation system is called a preset. This definition encompasses all of the equipment necessary to deliver one or more products with zero or more additives into a single compartment on a single vehicle.

RVP

Reid Vapor Pressure. Absolute vapor pressure exerted by a liquid product at a standard temperature. The RVP is a measure of volatility;

Totalizer

A continually-incremented number held by a meter or injector. The difference between the totalizer values at the beginning and end of a load reflect the quantity loaded.

FRA: Floating Roof Adjustment.

A correction factor used to compensate for the displacement of product in a tank caused by the pressure exerted by a floating roof.

Weight Conversion Factor (WCF)

A weight conversion factor is used when converting measurements of volume to weight

COE: coefficient of expansion

The coefficient of expansion is used to express the degree of a solid or liquid material's response (expansion or contraction) to temperature change