Product Cost Calculation

Last Modified on 02/05/2026 3:00 pm CST

Last Cost

Last Cost is the last price paid for a product on a Purchase Invoice or the most recent cost of a manufactured product.

Last Cost is updated when:

1. A Purchase Invoice increases inventory.
2. Manufacturing of product takes place resulting in an increase or decrease to inventory.

Note: *Last Cost* is not updated when a Purchase Invoice decreases inventory (return to vendor).

Average Cost

Average Cost in Agvance is a weighted average of costs. This means the change in *Average Cost* depends on the amount of Company Owned Inventory prior to the purchase and the amount of inventory being purchased. *Average Cost* is always listed in billing units.

Company Owned Inventory is the *Amount On Hand* minus the unprocessed Purchase Receipts (which have not yet been valued) plus the unprocessed Delivery Tickets and Blend Tickets. Company Owned Inventory can differ significantly from the Amount On Hand if there are several unprocessed purchases or deliveries.

If the Company Owned Inventory quantity is much greater than the quantity of product on the Purchase Invoice, the effect on the *Average Cost* will be small. However, if there is little Company Owned Inventory and a large purchase is entered, the effect on the *Average Cost* will be significant. Remember, *Average Cost* does not depend on the amount of inventory in the warehouse, but rather the amount of Company Owned Inventory.

The formula for determining the new *Average Cost* takes three values into consideration, *ValueBefore*, which is the value of Company Owned Inventory prior to the purchase; *ValuePurchased*, which is the value of the inventory on the Purchase Invoice; and *QuantityAfter*, which is the amount of Company Owned Inventory after the purchase. These values are defined below:

*ValueBefore = Company Owned Quantity * Current Average Cost / Billing Divisor*
*ValuePurchased = Quantity Purchased * Cost of Purchase / Billing Divisor + Freight - Discount*
QuantityAfter = (Company Owned + Quantity Purchased) / Billing Divisor

Average Cost is updated with:

1. An increase or decrease to inventory from a Purchase Invoice.
2. An increase or decrease to inventory from manufacturing product.

Formula

- *NewAverageCost = (ValueBefore + ValuePurchased) / QuantityAfter*

Estimated Average Cost

Estimated Average Cost is updated by Purchase Receipts and is useful for fast-moving inventory that is likely to be sold before the Purchase Invoice ever arrives. *Estimated Average Cost* is only updated for products whose department Invoice cost is set to *Estimated Average*.

Company Owned is calculated differently for a Purchase Receipt when updating a product's *Estimated Average Cost*. It is the pre-transaction Amount On Hand + unprocessed loaded Delivery Tickets + unprocessed loaded Blend Tickets. Otherwise, *Estimated Average Cost* uses the same formula and rules as *Average Cost*.

Note: *Estimated Average Cost* is updated with Purchase Receipts only.

Exceptions for Average and Estimated Average Cost

There are a few times when the *Average Cost* formula is not used:

1. If *ValueBefore* is less than or equal to zero, then the *Average Cost* will be set to the cost of the Purchase Invoice.
2. If *ValuePurchased* is less than or equal to zero and *ValueBefore* is less than or equal to zero, then the *Average Cost* will not change.
3. If the value of the inventory after the purchase is less than or equal to zero, the *Average Cost* will be set to the *Last Cost* on the Product file.
4. If *ValueBefore* is less than zero and the value of the inventory after the purchase is zero, then the *Average Cost* will be set to the cost of the Purchase Invoice.

There are a few times when the Average Cost formula is not used to calculate the Estimated Average:

1. If *ValueBefore* is less than or equal to zero, then the *Estimated Average Cost* will be set to the cost on the Purchase Receipt.
2. If *ValuePurchased* is less than or equal to zero and *ValueBefore* is less than or equal to zero, then the *Estimated Average Cost* will be set to the cost on the Purchase Receipt.
3. If the value of the inventory after the purchase is less than or equal to zero, the *Estimated Average Cost* will be set to the cost on the Purchase Receipt.
4. If *ValueBefore* is less than zero and the value of the inventory after the purchase is zero, then the *Estimated Average Cost* will be set to the cost on the Purchase Receipt.