

PERCEPTION[®]

Accounting Functions

Vendor Invoices

A Training Tutorial

This training tutorial outlines the basic features for interfacing the *PERCEPTION* system with financial and accounting systems.

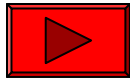
It is a supplement to the user manual entitled “*PERCEPTION Accounting Functions & Interface Manual*,” which provides more details for the user.

Before using this tutorial, the user should first view the preliminary training tutorial, “Getting Started With *PERCEPTION*.”

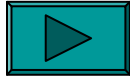
Other related training tutorials for accounting functions are the following:

- 1. *PERCEPTION* Accounting – Managing Customer Billings**
- 2. *PERCEPTION* Accounting – Managing Time Charges**
- 3. *PERCEPTION* Accounting Interface Setup**
- 4. *PERCEPTION* Accounting Project Interface Setup**

Training Directory



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Vendor Invoice Vouchers



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Vendor invoice cross-reference with purchase orders is an important feature of *PERCEPTION*.

This capability provides computer assistance in comparing vendor invoices to what has actually been received, rejected, and QA inspected to date.


It further aids in avoiding any errors or duplications in billing by providing a formal cross check of material deliveries and releasing invoices for payment.

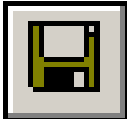
The Vendor Invoice module enables automatic cross checking of vendor invoices against actual purchase order status.


The system prevents premature accounts payable and vendor overcharges.

Vendor invoice data is processed and controlled through the functions of a specific system module where the user has the ability to add, change, delete, report, cross-reference, and release vendor invoices.

Special Note:

To add new records in any worksheet, click on the *Add* button  on the toolbar or the down-arrow on your keyboard.

To save data entered into any worksheet, click on the *Save* button  on the toolbar.

To delete records from any worksheet, highlight those records (rows) to be deleted, then click on the *Delete* button  on the toolbar.

Vendor Invoice Vouchers

The system controls vendor invoices by Vendor Invoice Vouchers.

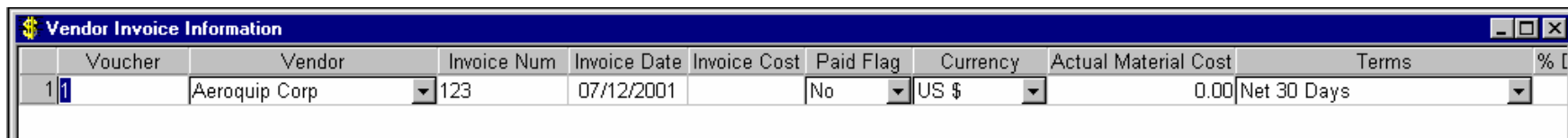
The voucher is intended to be a transmittal only of what is to be paid to the vendor.

If there are items in the invoice that are in dispute, they should not be included in the voucher.

If they later become payable, then another voucher must be created for those items.

Vendor invoices consist of the voucher header record and invoice detail records.

Click on *Environment/Accounting/Vendor Invoices* from the main menu to open the **Vendor Invoice Worksheet.**



Voucher	Vendor	Invoice Num	Invoice Date	Invoice Cost	Paid Flag	Currency	Actual Material Cost	Terms	% L
1	Aeroquip Corp	123	07/12/2001		No	US \$	0.00	Net 30 Days	

Vendor Invoice Worksheet

The procedures for adding, changing and deleting Vendor Invoice Vouchers are the same as those outlined in General System Operation, “*Getting Started With PERCEPTION.*”

Each Vendor Invoice Voucher is identified on the database by its unique voucher number (maximum 15 alphanumeric characters).


In addition, the system requires that the combination of Vendor ID and Vendor Invoice Number also must be unique.

Occasionally, vendors will use the same invoice number for multiple submissions. PERCEPTION will not permit this, and this helps minimize opportunities for duplicate entries of invoices.

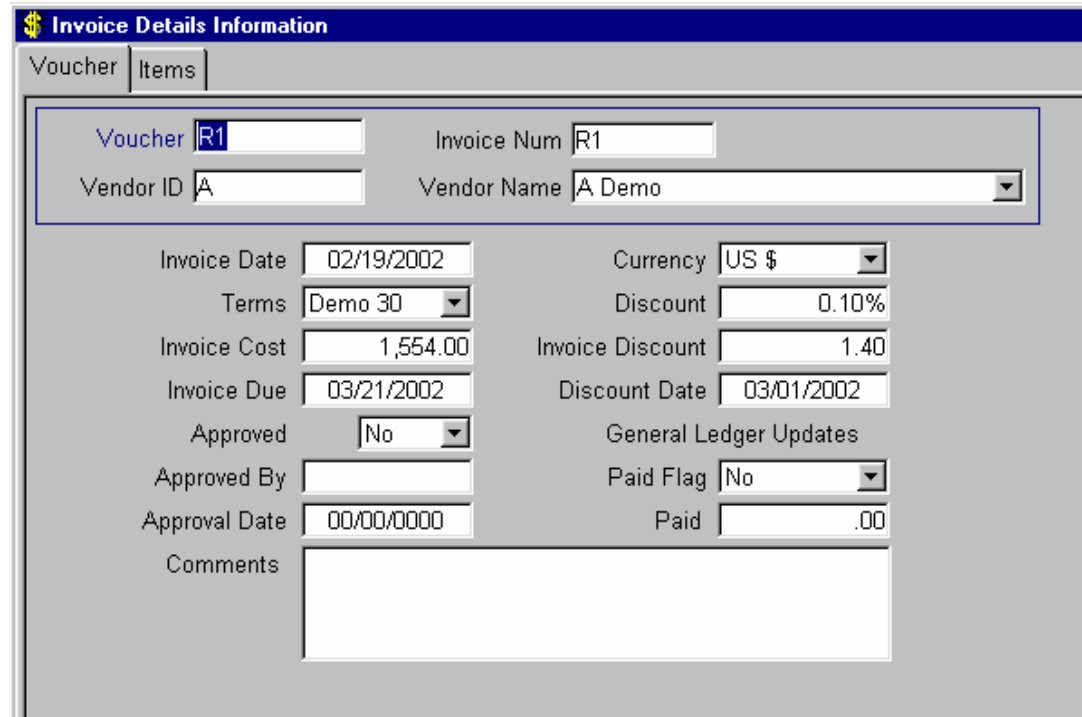
When an invoice is caught by the system as not being unique, the user can either recognize a duplicate entry and delete it from the system or must somehow alter the invoice number so that it is unique for that vendor.

The user can do this by adding an alpha character to the end of the invoice number.

To display the *Vendor Invoice Detail* tab window,

1. Double click on a selected vendor invoice in the *Vendor Invoice Worksheet*, or
2. Click on the *Drill Down* button  on the toolbar.

Vendor Invoice Detail Window



Invoice Details Information

Voucher | Items

Voucher Invoice Num
Vendor ID Vendor Name

Invoice Date Currency
Terms Discount
Invoice Cost Invoice Discount
Invoice Due Discount Date
Approved General Ledger Updates
Approved By Paid Flag
Approval Date Paid
Comments

The detail invoice tab window provides the same information as is available in the worksheet:

Vendor Number: The vendor must be selected from the list of vendors defined on the *PERCEPTION* database.

Vendor Invoice Number: The vendor invoice number is character based and will allow up to eighteen (18) characters. **A vendor cannot provide two invoices with the same number. In such a situation, the user may append some character to ensure that the invoice number is unique.**

Invoice Date & Terms: After the invoice date is entered, select the applicable terms from those defined in the terms catalog (*Environment/Purchasing/Terms* or *Environment/Accounting/Terms*). The invoice due date, the discount percent and discount date will be displayed based on the parameters defined by these terms.

Invoice Discounts & Payments: When the invoice cost is entered, the invoice discount dollars and the cost with discount are calculated and displayed. The paid flag and the amount paid are not entered by the user but rather are updated by a general ledger interface.

When the header is completed, click on the *Save* button on the tool bar.

Invoice Voucher Items

Click on the *Invoice Items* tab and the Invoice Item worksheet will display.

To create items, click on the *Add* button on the tool bar.

Invoice Details Information										
Voucher		Items								
Voucher	Invoice Num	Invoice Item	PO	PO Item	Part Type	Part ID	Description	Invoice Cost	Unit Price	
1	123	1	02	1	Direct Purchase	PCRED/XS-24X20	EX STG Butt Weld SMLS, CS, Concentric		275.000	
2	123	10	02	10	Direct Purchase	PVBFLY/150-20	150# RF Flg, CS, SS Trim Butterfly Val		2,850.000	
3	123	11	02	11	Direct Purchase	PVBFLY/150-24	150# RF Flg, CS, SS Trim Butterfly Val		3,000.000	
4	123	12	02	12	Direct Purchase	PVCHK/150-20	150# RF Flg, CS, SS Trim Wafer Check V		4,500.000	
5	123	13	02	13	Direct Purchase	PVGATA/150-20	150# RF Flg, CS, Gate Valve w/Actuator		10,000.000	
6	123	14	02	14	Direct Purchase	PVGATA/150-24	150# RF Flg, CS, Gate Valve w/Actuator		10,000.000	
7	123	15	02	15	Direct Purchase	PVRELF-8X10	Cargo Pump Relief Valve		5,000.000	
8	123	2	02	2	Direct Purchase	PE90SR/XS-24	EX STG Butt Weld SMLS, CS, 90-deg SR E		255.000	
9	123	3	02	3	Direct Purchase	PI/XS-10	EX STG ERW/SMLS, CS, Pipe		93.500	
10	123	4	02	4	Direct Purchase	PI/XS-14	EX STG ERW/SMLS, CS, Pipe		154.200	
11	123	5	02	5	Direct Purchase	PI/XS-20	EX STG ERW/SMLS, CS, Pipe		262.470	
12	123	6	02	6	Direct Purchase	PI/XS-24	EX STG ERW/SMLS, CS, Pipe		344.490	
13	123	7	02	7	Direct Purchase	PI/XS-8	EX STG ERW/SMLS, CS, Pipe		100.070	
14	123	8	02	8	Direct Purchase	PTEE/XS-24	EX STG Butt Weld SMLS, CS, Tee		1,600.000	
15	123	9	02	9	Direct Purchase	PTRED/XS-24X20	EX STG Butt Weld SMLS, CS, Reducing Te		1,150.000	

Vendor Invoice Item Worksheet

Each voucher item on the database is uniquely identified by the following combination of information:

- 1. Vendor (must be previously defined)**
- 2. Invoice number (maximum 18 alphanumeric characters)**
- 3. Invoice item number (maximum 8 alphanumeric characters)**


Each vendor invoice voucher line item should reference an associated purchase order line item.

If invoiced items have not been defined on an earlier purchase order, they may still be processed according to the rules described in the section *“Invoiced Items Not Covered By A Purchase Order.”*

Stubbing Out Invoice Items With Purchase Order Items

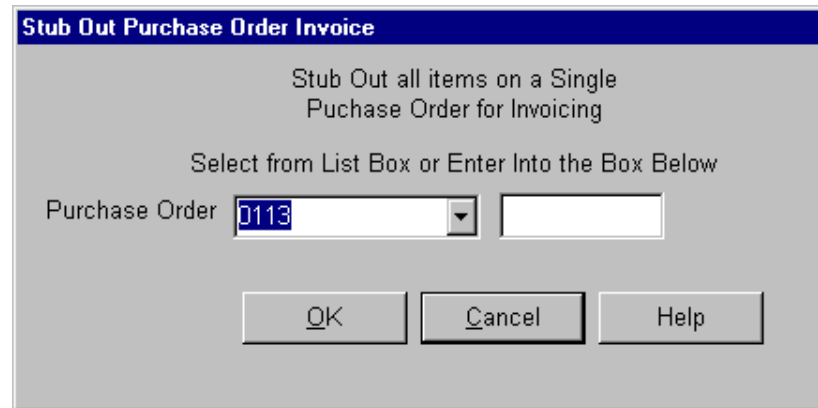
Instead of manually entering each invoice item, the system provides a “stub out” feature that automatically loads the items from a purchase order into the invoice voucher item worksheet.

There are three different ways to accomplish this. Either:

1. Select *Edit/Stub Out PO to Invoice* from the main menu, or
2. Click on the *Stub Out* button  on the toolbar, or
3. Press the F4 function key on the keyboard.

The *Stub Out Purchase Order Invoice* window will open and enable the user to identify a purchase order that is the basis for the vendor invoice.

Stub Out Purchase Order Invoice



Stub Out Purchase Order Invoice

Stub Out all items on a Single
Purchase Order for Invoicing

Select from List Box or Enter Into the Box Below

Purchase Order 0113

OK Cancel Help

The purchase orders listed in the drop down list for selection are only those for the same vendor as the invoice and with items where the quantity invoiced is less than the quantity received or where the quantity invoiced is zero.

The user may enter into the free-key box on the right a purchase order that does not meet the criteria for the drop down list and the system will add its items.

When the purchase order is selected or entered manually, an invoice voucher item will be added for each of the items on that purchase order.

All relevant data from the purchase order items are presented as the default from the purchase order item but may be changed by the user.

The default item quantities that the system provides from the stub-out is formulated as follows:

Voucher item quantity = [Quantity Received] less [Quantity Returned] less [Quantity Invoiced on earlier vouchers].

The user may over-ride this value with a different figure from the invoice.

Purchase order items that should not be included as entries for the vendor invoice voucher should be deleted from this worksheet.

Manually Entered Invoice Items

If the stub-out feature is not used to add items, then vendor invoice line items may be added manually by the user from the hard copy invoice itself.

When the invoice items are entered with both the purchase order and purchase order item numbers identified, the system will update the purchase order with the quantity invoiced when the record is saved.

The system will not, however, automatically receive these items.

To receive them, select *Edit/Receive Items(s)* from the main menu or click on the *Receive* button  on the toolbar.

The standard receiving functions (*Environment/Stores Management/Receive Purchased Material*) can also be used.

Invoiced Freight

Freight charges may be catalogued on the system either as a separate purchase order line item or as an added cost for one or more items. The freight cost should be put in the “freight” column of the item.

If freight charges have not been specifically identified on the purchase order, they can be manually entered on invoice voucher items in the *Invoice Voucher Items Worksheet*.

It is not necessary to split out freight charges by invoice item, for the system will only consolidate all freight charges when the system summarizes costs to the Contract/Project WBS.

Invoiced Items Not Covered By A Purchase Order

While a vendor invoice normally should be covered by an approved purchase order, item-by-item, there are circumstances where such is not the case:

Case A: Sometimes items are delivered to the shipyard as additional items to an existing purchase order.

Case B: Other times, items are delivered without any purchase order on file. The latter can occur when orders are placed via telephone when there is not sufficient time to execute a formal purchase order document to the vendor.

Case A: If a voucher item is entered against a purchase order, but without referencing a purchase order item number, the system will append the item to that purchase order automatically. These appended items will be incremented by the system, starting with the highest purchase order item number already on the purchase order plus 1.

Similarly, the system either will create a new requisition or will append the item to any existing requisition in a similar manner.

If a new requisition is created, *the requisition number will be the same as the purchase order number.*

If appended to an existing requisition, the new requisition item numbers will be incremented, starting with the highest item number already on the requisition plus 1.

Case B: If the invoice items are entered without a purchase order number, the system will create a new purchase order automatically when the item is saved.

The purchase order numbers for these specially created POs are all 6 characters long:

1. The first character is “V” and the remaining spaces are padded with zeros.
2. The PO numbers are automatically incremented starting with 00001 (V00001, V00002, etc.).

In addition to an automated purchase order, the system also will create the related requisition items.

The user has the option either to create a new requisition or to append new requisition items to an existing requisition.

Automated Requisition Generation

When the user elects to automatically create a requisition from a vendor invoice, the system will create the related requisition as follows;

The requisition number will be the same as the purchase order number.

All requisitions require a contract and project for creation.

Therefore, the invoice item must have the contract and project identified before the invoice item record can be saved.

It is recommended that the record also be assigned to a SWBS group and account so that the invoiced cost can be rolled up to the appropriate levels.

The created requisition items for these invoice items also can be modified directly for a specific WBS assignment (*Environment/Material Control/Requisition Items*).

Automated Item Receiving

The system will receive all purchase order items that are automatically created from voucher items if the *Storage Flag* on the record is set to “Yes.”

Storage Flag
Yes

If a storage location other than the default is used, change the *Location* on each record appropriately.

Location
SPARHOLDER
Outside Pipe
Pipe Shop
Platten I
Platten II
Platten III
Sheet Metal
SPARHOLDER
Steel Yard
Tool Room
Wet Berth

Withdrawing Invoice Items

If these invoice items are withdrawn to production in the future (*Environment/Stores Management/Withdraw Material*) to a valid project work order, the item costs will be re-cataloged by the system to have the same WBS as the work order.

Identifying Invoice Items With Parts Catalog

The following short-cut is available to create invoice items automatically for items that have no corresponding purchase order items, and are for parts that have been previously defined in the Parts Catalog:

1. Click on the *Add Parts* button  on the toolbar,
2. Select the Part IDs for the invoiced items.

This function enables the user to scan the Parts Catalog and enter the invoiced quantities.

Invoice Cost Adjustments

Often times, invoiced costs do not match exactly what is provided in the system purchase order.

For large differences, the purchase order should be amended.

If the differences are small, it probably is not worth the effort to amend the purchase order. Nevertheless, if *PERCEPTION* is integrated with an accounts payable (A/P) system, the vendor will want to be paid in full as indicated on its invoice.

The following are three methods for entering adjustments that the system will incorporate into the purchase order database file without making a formal amendment to the purchase order.

1. Creating New Purchase Order Line Item For Adjustment

The first method is to summarize the differences as a new invoice line item.

- Manually add a new voucher item and assign it to the same purchase order number as is assigned to the other invoice voucher items.
- Leave the purchase order item number on the voucher item blank. When the voucher item is saved to the database, the system will generate a corresponding requisition and purchase order item automatically.

The following outlines how the differential cost for this new item will affect the project's cost accounting:

- 1. The added/subtracted cost will change the project's "committed" cost according to the amount of the adjustment.**
- 2. The same change will be reflected in the project's "received" cost (automated transaction performed by the system).**
- 3. However, the user will have to withdraw the item so that it will be included in the total "used" cost.**
- 4. When the invoice item is posted, the change also will be reflected in the "paid" cost.**

Since these cost adjustments alter the original purchase order, such adjustments should be done only with proper management authorization.

2. Direct Adjustment To Invoice Item Extended Cost

A second method is to simply over-write the extended item cost.

However, this leaves the item with an inconsistent unit price.

The following outlines how the cost adjustment will affect the project's cost accounting:

1. The adjusted cost will not change the project's "committed" cost.
2. The cost adjustment will not be reflected in the project's "received" cost.
3. When the invoice item is posted, the cost adjustment will be reflected in the "paid" cost.

Since these cost adjustments are not reflected in the project's committed costs (sum of purchase orders and stock used), such adjustments should be done only with proper management authorization.

3. Direct Adjustment To Invoice Item Unit Price

A third method is available when the unit price on the invoice does not result exactly in a total extended price as originally entered for the purchase order item.

Discrepancies can occur when the vendor's unit price uses decimal precision greater than what the purchase order item has defined.

To ensure that the invoice unit price entered into *PERCEPTION* results in a total extended cost matching the invoice, the user can enter an equation calculation in the item's unit price data field.

For example, if the invoiced quantity is equal to 3 and the total invoice cost for the item is \$150.15, enter the following into the item's unit price data field:

$$150.15/3$$

The system will do the arithmetic and compute a correct unit price, \$50.05.

The following outlines how this cost adjustment will affect the project's cost accounting:

1. The adjusted cost will not change the project's "committed" cost.
2. The cost adjustment will not be reflected in the project's "received" cost.
3. When the invoice item is posted, the cost adjustment will be reflected in the "paid" cost.

Since these cost adjustments are not reflected in the project's committed costs (sum of purchase orders and stock used), such adjustments should be done only with proper management authorization.

Correcting Received Quantities From Automated Purchase Order Items

Once purchase order items have been automatically created on the database from the vendor invoice voucher, the system will receive them at the same time automatically.

The database then will have all of the transactions ready for transmitting to the account system interface:

- Vendor invoice,
- Purchase order, and
- Receiving costs broken down by the necessary general ledger accounts.

After the invoice items have been saved, and the automated purchase order items have been created, changes may be required to quantities, prices, taxes, etc.

In order to preserve the transaction records for the accounting interface, the following steps must be taken:

- 1. Create a duplicate vendor invoice voucher (but different invoice number), complete with the same invoice items, but with negative quantities and save it to the database. This will, in effect, reverse out the erroneous costs of the initial invoice items.**
- 2. Then, create another vendor invoice voucher (again with a different invoice number) with the corrected invoice items.**

These correction steps may be performed on the entire list of items in a vendor invoice, or only on those items that require changes.

Saving And Storing Vendor Invoice Voucher

When the invoice voucher is fully defined, it must be saved by clicking *Save* on the toolbar or the Windows X.

When the invoice is saved, the system performs the following update:

1. The quantity invoice on the purchase order item is increased.
2. The invoice cost on the purchase order item is increased.
3. And when a material rollup has been performed, the WBS level total freight and tax dollars are increased.

Variations Between Purchase Order And Invoice

The vendor invoice report, *INV1 - Purchase Order/Vendor Invoice Status Report*, displays any variations between the purchase order and the invoice.

Among the information provided, item-by-item, are the following:

- 1. Quantity invoiced versus quantity ordered and quantity received.**
- 2. Unit price ordered versus unit price invoiced**

Note: The system will not permit a posted invoice item to be deleted from the database under the following conditions:

- 1. If it has costs associated with it or***
- 2. If it has been paid.***

Withdrawing Received Purchase Order Items

Whether or not the invoice items automatically generate purchase order items, they eventually need to be formally withdrawn to production.

Otherwise, they will remain in inventory as un-used.

To withdraw items (i.e., received quantities), click on *Environment/Stores Management/Withdraw Material* and proceed with the instructions outlined in the tutorial, *“Withdrawing Material To Production.”*

Project WBS Cost Allocations

The vendor invoice costs will be allocated to the project WBS via the related purchase order and requisition.

Purchase order items automatically created from vendor invoice voucher items must be assigned to a specific contract and project.

These voucher items are not required to have project WBS assignments, but it is recommended that they do. Otherwise, these purchase order commitments roll up only to the project and contract summary levels.

As the system creates the purchase orders and their items, it also creates parallel requisitions.

The WBS assignments on these requisition items can be modified. A subsequent “material rollup” (*Environment/Production Engineering/Rollup*) will allocate the purchase order committed and received costs to the WBS assignments.

The material withdrawal process requires a work order as the vehicle for the withdraw. The work order provides the project WBS for the production usage costs by project WBS.

System Rollups

After vendor invoices have been entered and saved, the user should perform a material rollup to process these costs into the contract/project WBS.

The material rollup summarizes all invoiced voucher costs under “Total Paid Costs.”

System Material Rollup

Invoiced Freight Costs

The material rollup summarizes vendor invoiced freight costs up through all levels of the contract/project WBS and includes them in the summarized “Total Paid Invoices” cost at these levels.

Invoiced Sales Taxes

The material rollup summarizes vendor invoiced sales tax costs up through all levels of the contract/project WBS and includes them in the summarized “Total Paid Invoices” cost at these levels.

Foreign Funds Invoices

The system manages both domestic and foreign currency values with vendor invoices.

Each invoice voucher therefore can be assigned a different exchange rate.

The resulting domestic values are then processed by the system and rolled up through the purchase orders (values paid), the requisitions, and the project WBS.

Approving Vendor Invoice Vouchers

A Voucher must be approved in order for it to be sent to the accounting system.

Vouchers which are not approved will not be transferred.

Accounting Interface Transactions

All vendor invoiced cost transactions can be exported to an accounting system Accounts Payable and General Ledger system.

Refer to the tutorial “Accounting Interface Setup” for details.

Vendor invoice cost transactions are specifically tagged for export into four categories of transactions:

- 1. Invoice item cost**
- 2. Total sales tax costs**
- 3. Total freight costs**
- 4. Credit memos**

A system rollup is not required to export vendor invoice cost transactions.

The “Paid” flag on the invoice is set by the accounting interface export. **This flag can be reset by un-posting the export batch using the *Un-post Accounting Transfer* option.**