CHAPTER 5: PURCHASE ORDER MANAGEMENT

Objectives

The objectives are:

- Reviewing the business impact from efficient purchasing processes
- Setting up Purchases, Vendors, Alternative Vendors and Vendor Posting Groups
- Managing Purchase Transactions
- Creating Purchase Quotes
- Setting up Purchase Prices and Discounts
- Using the Pricing Mechanism
- Managing Purchase Line Discounts

Introduction

Timely purchases made at the best price not only improve the efficiency of the company's inventory management and reduce requisition costs, but also have a direct impact on the company's ability to keep their customers satisfied.

This lesson demonstrates the key features of the purchase order management functionality in Microsoft Dynamics™ NAV. The two main sections focus on the most common aspects of purchase transaction handling and cover the following topics:

- Quote and purchase order
- Order posting
- Managing purchase prices and discounts

Purchase Order Management starts with describing the setup functionality. A list of purchase batch jobs, reports, and purchase documents is included in Appendix A. Additionally, demonstrations and examples help explain how the program supports companies in managing the tasks involved in purchase handling processes.

NOTE: For an overview of procedures associated with handling specific purchase management tasks, refer to the relevant topic in the online Help. To learn more about payables functionality in Microsoft Dynamics NAV, refer to the Financials training materials.
Efficient Purchasing

Companies must make sure each purchase transaction is based on the most favorable terms, such as delivery time and price, and that the associated inventory and financial information is registered correctly. Because many aspects of a future purchase agreement with a vendor are negotiated and agreed upon in the pre-purchase stage, it helps for purchasing agents to record the relevant agreement details once and reuse this information when making a purchase.

There is a lot of functionality in Microsoft Dynamics™ NAV that supports purchase transaction handling:

- **Purchase Order Management**: This includes documents, such as quotes, blanket orders, and purchase orders that support purchasing agents in efficiently managing purchases. It also provides the facility for:
  - Partial order receipt
  - Separation between receiving and invoicing
  - Combined invoicing

- **Alternative Order Addresses**: This facilitates handling purchase orders toward vendors with several alternative shipping addresses.

- **Alternative Vendors**: This supports purchase situations where the same item is supplied by several different vendors.

- **Salespeople/Purchasers**: This enables collection of purchase statistics at an individual purchasing agent level.

- **Purchase Line Pricing**: This helps maintain and manage alternative purchase prices negotiated and agreed upon with individual vendors.

- **Purchase Line Discounting**: This helps maintain and manage purchase discounts that are percentage-based, negotiated, and agreed upon with individual vendors.
Setting Up Purchases

This chapter elaborates on setup options that define the functionality of purchase order management. This is done with the most common tasks found in purchase management in mind and with focus on the physical flow of purchase transactions instead of on the financial flow. The latter is addressed in more detail in the Financials training materials.

The purchase setup consists of Purchases & Payables setup and Vendor setup.

Purchases & Payables Setup

Based on their established practices, companies must specify how they want the program to support them in managing different aspects of their purchase transactions. These are the general setup options applied to all purchase transactions regardless of which item and vendor are involved.

Vendor Setup

Managing vendor information is an important part of managing the total purchases and finances of a company. Basic information (such as name, address, and so on) and details (such as credit limit, invoicing, discount and payment terms, currencies, and list of regularly supplied items) are recorded for each vendor on a vendor card.

The setup of vendor posting groups defines a connection between a vendor and the accounts in the general ledger. This is done by assigning a vendor to a posting group for which balance sheet and income statement accounts are then set up.

Demonstration – Setting Up Purchases

At Cronus, management has a registration of all the receipts that enter their inventory. In the same manner, they want the program to automatically create a shipment note when they have to return items to the vendor. They also want to make sure that no purchase document can be posted unless several corresponding external documents are entered.
Steps

The business requirements listed above have led to the following Purchases & Payables setup for Cronus.

On the Purchase menu, click SETUP→PURCHASES & PAYABLES SETUP. Setup of the fields on the General tab specifies the program's facilities for purchase order management. Check marks in the Receipt on Invoice and Return Shipment on Credit Memo fields indicate that the company wants to automatically create posted receipt and posted return shipment documents at the time of posting purchase invoices and purchase credit memos respectively.

If these fields are clear, only posted invoices/credit memos are created. (This setup option is only relevant if, in addition to the Purchase Invoicing functionality, a company also uses the Purchase Order Management and Return Order Management.) The check mark in the Receipt on Invoice field is necessary if item charges are used because they are applied to the receipt. There is more information about item charges later in this training manual.

Selecting the Ext. Doc. No. Mandatory field indicates that users cannot post any purchase document (order, invoice, and a credit memo) as invoiced without an external document number in the Vendor Invoice No. field on a purchase header. A check mark in the Exact Cost Reversing field indicates that the company wants the program to automatically align the cost of every item returned to the vendors with the original purchase entry.

The definition and setup options of all other fields on the General tab of the Purchases & Payables Setup window can be found in the online Help. In addition, fields determining costing reversing options are described in detail later in this training manual.
Setting Up Vendors

The vendor card and the type of information and vendor details that can be recorded are covered in other courses and are not repeated here.

Setting Up Receiving Options

A situation where a vendor may have alternative sites, in addition to their main business address, from which they deliver items to their customers is not uncommon. For example, companies may have various warehousing and production sites that have addresses different from their main office.

Alternative Order Address supports companies when dealing with such vendors. If the company receives orders from different vendor addresses, those addresses can be recorded as alternative order addresses in the program and then chosen by the purchasing agent when making an order/invoice for the vendor in question.

Alternative order addresses are entered in the Order Address table, which can contain an unlimited number of addresses for each vendor. A code representing information such as vendor number and name is linked to each address.

Demonstration – Setting Up Vendors

The following demonstration shows how to set up vendors.

Steps

Cronus’ vendor 10000 has two alternative order addresses set up in the program.

1. From the Purchase menu, click ORDER PROCESSING→VENDORS.

2. Open the vendor card for vendor 10000. Click VENDOR→ORDER ADDRESSES and press f5. The Order Address List is displayed.

3. Select the second address line, and then click OK to see the address details.

When the code is selected in the Order Address Code field on orders (invoices and credit memos), the order address information appears on document printouts.

All other receiving setup options are found on the Receiving tab of the vendor card.
4. Open the vendor card for vendor 10000, and then click the Receiving tab.

For several reasons, for example to make sure that certain types of items are stored in the same warehouse, companies may use a decentralized location strategy. Such a strategy suggests that shipments from vendors are received in local warehouses instead of in a central one.

To reflect these considerations, a company can link certain vendors to specific locations. This is done by specifying a default location in the Location Code field for the individual vendor. More information about the multiple locations setup is included in the Inventory Management training manual.

Depending on their profile, industrial practices, and location, vendors and customers may have different agreements as to who transports orders to customers (vendors themselves, shipping agents, or customers) and according to which terms. The program offers the possibility to record all the different terms of purchase and shipment methods (often based on Incoterms) that can then be associated with each specific vendor.

Cronus has set up several shipment methods in the program.

5. From the Purchase menu, click ORDER PROCESSING→SETUP→SHIPMENT METHODS.

When assigned to a vendor, the shipment method code is copied to purchase documents toward that vendor.

The two other setup options on the Receiving tab affect the way the program calculates different purchase order receipt dates.

The program uses the value in the Lead Time Calculation field to calculate the order planned and expected receipt dates, if there is no lead time calculation value set up on the card for the item being purchased or in the item vendor catalog.

The two calendar fields relate to the program's facility to calculate various receiving and delivery dates on the purchase documents. These setup options are described in detail later in this training manual.
Demonstration – Setting up Alternative Vendors

If the company has more than one vendor supplying the same item, purchasing agents may want these vendor-item combinations registered. To do this, they must create a Vendor Item Catalog listing items that are purchased regularly from a specific vendor.

Steps
At Cronus, vendor 30000 is among those vendors that have a vendor item catalog created for them:

Open the card for vendor 30000. Click PURCHASES→ITEMS.

In addition to specifying items typically purchased from the vendor in question, the vendor item catalog also contains information about the delivery lead time and whether there are any special price and discount agreements with that vendor. The setup and functionality of the latter is described in the section "Purchase Prices and Discounts" in this chapter.

Vendor Posting Groups

The financial value of any purchase transaction must be posted to dedicated accounts in the general ledger. Where companies do not find it possible to establish accounts for each vendor, they can put several vendors into one posting group and then specify accounts for such a group.

After the company has decided on criteria for how its vendors can be grouped, the respective groups must be set up in the program in the Vendor Posting Group table. In this table, the user can assign a code to each identified posting group and specify general ledger accounts for different amount categories, such as:

- Payables
- Service charges
- Payment discount amounts
- Interest
- Additional fees
Demonstration - Setting Up Vendor Posting Groups

Cronus' accountants have set up two vendor posting groups: domestic and foreign.

Steps
Perform the following steps to set up the vendor posting groups:

1. From the Financial Management menu, click SETUP → POSTING GROUPS → CUSTOMER.

   ![Customer Posting Groups Window]

   FIGURE 5-1: CUSTOMER POSTING GROUPS WINDOW

   Entering an appropriate code in the Vendor Posting Group field on the Invoicing tab of a vendor card implies that the vendor is assigned to a specific posting group.

2. Open the vendor card for vendor 10000, and then click the Invoicing tab.

   Remember that each vendor can only be assigned to one vendor posting group.

   When a purchase transaction (order, invoice, or credit memo) involving this vendor is posted, the program uses the accounts specified for the posting group to which the vendor belongs.

   **NOTE:** Accountants must also assign general business posting groups to vendors. The business group code is used in combination with a general product posting group code in the general posting setup to specify the accounts to which certain transactions are posted. You can learn more about general setup rules in the Financials training materials.

   Each vendor posting group can have different general ledger accounts or the same accounts set up for it. An advantage of having different groups that have the same accounts is that it gives accountants flexibility in how they group vendors together for reporting and analysis purposes. For example, a total payables amount can be presented and analyzed per two groups representing domestic and foreign vendors.
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Setting Up Purchasers

If several purchasing agents work in the same company, they can each be set up and assigned a code. The codes can be used to prepare statistics and to filter information in printed reports.

To set up purchasing agents in the program, follow the procedure for setting up Sales Representatives explained in the "Setting up Sales Management" section of this training manual.

Managing Purchase Transactions

Previous courses explain how to create and process a simple purchase order. This section elaborates on the facilities that support the most common tasks in purchase transaction management. The section takes you through a workflow, from making a quote to posting the order.

Purchase Quotes

The first step in a workflow involves making a purchase quote, which can be described as a "draft order" in which purchasing agents can register the vendor's offer specifying:

- Price
- Terms of sale
- Description of items

If the offer matches the purchasing agent's requirements and they want to buy the items on the quote, they can convert it into an order. Similarly, where there is a need to replenish items on stock, inventory managers can send a request to the purchasing department, who create a quote (which is later submitted to a vendor as a purchase order).

Purchase Orders

The purchase order is a cornerstone of purchase management functionality in Microsoft Dynamics NAV. In parallel with sales orders, the program supports the purchasing agents in their task of:

- Processing a purchase transaction by automatically copying the default setup information to the order header and lines
- Performing necessary calculations
- Ensuring a correct update of the company's financial records.

Most of the properties of the purchase order header and lines (such as delivery details, location, quantity, unit of measure, and so on) are identical to those on the sales order.
Therefore, only the features distinctive to the purchase order processing tasks are addressed in the demonstration "Creating Purchase Orders."

Planning Flexibility

By selecting a certain value in the **Planning Flexibility** field on the purchase order line (use the Show Column function to make the field visible), the purchasing agent defines if the order in question is included in the program's planning calculations. The value must be set to None, if the purchasing agent does not want the program to alter either the receipt date or the quantity of the ordered items.

If the purchase order was created because of the requisition planning (and must remain available for possible changes), the **Planning Flexibility** field is set to Unlimited. This makes it possible to change or move the order date and adjust the quantity as long as the order has not been posted. The default selection is Unlimited. Learn more about purchases planning and managing later in this manual.

Posting Orders

The purchase order posting principles and mechanism are identical to those applied to sales orders (described in detail and illustrated earlier in this manual) and are not described here. However, the key points in purchasing are summarized in the following list:

- The posting function consists of two parts: receipt (quantity change) and invoice (value change) posting.
- The **Qty. to Receive** and the **Qty. to Invoice** fields on a purchase order represent the quantities referring to the posting function.
- Orders can be partially received/invoiced.
- When posting an invoice, the two parts occur at the same time, without an option to separate them in time.
- Posting of an order can be done by registering the order receipt first, while the order invoicing can occur later.
- Related to the previous point are the facilities: To combine several receipts in one invoice or to undo a quantity record for a posted but not invoiced receipt.
Demonstration – Creating Purchase Quotes

Cronus is interested in purchasing 100 units of items 70010 and 70011, respectively. To do this, the purchasing agent wants quotes from three different vendors to find the best offer. The purchasing agent calls up vendors 10000, 30000, and 40000 to hear what they have to offer. Considering the quantity to be purchased, the prices are as follows:

Vendor 10000  Item 70010: quantity 100-500 at 24.00 LCY per unit
Item 70011: quantity 100-500 at 35.00 LCY per unit

Vendor 30000  Item 70010: quantity 100-1000 at 26.00 LCY per unit
Item 70011: quantity 100-1000 at 34.00 LCY per unit

Vendor 40000: Item 70010: quantity 50-200 at 24.50 LCY per unit
Item 70011: quantity 50-200 at 35.00 LCY per unit

Steps

Create a purchase quote for each of the vendors so the offers are registered and the total purchase prices can be compared. In addition to a quoted unit price, total purchase prices may also include invoice discounts, currency calculation, and so on.

1. From the Purchase menu, click ORDER PROCESSING→QUOTES. Press F3 to make a new quote, and enter the vendor information for vendor 10000 on the quote header. Leave the Order Date field blank.

2. Create a line for 100 units of item 70010 and a line for 100 units of item 70011, filling in the Direct Unit Cost Excl. VAT field that has the prices quoted here.

Create quotes for vendors 30000 and 40000 respectively.

From the total amount, it is clear the vendor 10000 gives the best offer. The purchasing agent converts the quote for vendor 10000 into a purchase order.

3. Click Make Order. Click Yes in the information message to confirm the action.

4. Note the purchase order number.
Demonstration – Creating Purchase Orders

Cronus' purchasing agent has discovered that not only does vendor 10000 have the best offer, they also have a warehouse close to Cronus. Because this is not the location from where they usually ship their orders, the purchasing agent has agreed with the vendor to ship the items from the alternative location.

Steps

The purchasing agent is working on the purchase order created in the demonstration, "Creating Purchase Quotes":

1. Locate the purchase order created in the demonstration, "Creating Purchase Quotes".
2. Click the Order Address Code field, and select HOPE.

The program updates the buy-from address details on the header respectively.

If the company has more than one vendor supplying the same item, the purchasing agent may want to check if this is the case when creating and processing an order for specific items. Records of item-vendor combinations are stored in the Item Vendor Catalog, available from the item card:

3. In the purchase order, in the No. field on the first purchase line, click the AssistButton to open the list of items. Click PURCHASES—VENDORS.

![Figure 5-2: Item Vendor Catalog Window]

In addition to specifying a typical vendor(s) for the item in question, the item vendor catalog also contains information about whether there are any special price and discount agreements with the vendor. This information can be accessed by clicking the Item Vendor buttons on the delivery lead time.
Purchase Prices and Discounts

Companies have the possibility to specify cost information for each item on the item card, and are given a functionality that facilitates the task of purchase price management. The program automatically retrieves information about the last direct cost stored on an item card to copy it to the purchase order line for the item in question.

This direct cost information is the same in all purchase situations regardless of whether individual price and discount agreements exist between the company and its vendor. These agreements and policies can be based on several conditions, such as:

- The item variant and quantity bought
- Currency paid
- Order date

Maintaining alternative purchase prices and discounts is challenging for the company's purchasing department.

The Purchase Line Pricing and Purchase Line Discounting offer a pricing functionality beyond the standard item card. The functionality is described in this section, which is divided into two parts:

- Purchase Prices
- Line Discounts

Demonstration – Setting up Alternative Purchase Prices

To record alternative purchase prices that the purchasing agents have agreed upon with their vendor/group of vendors, they must use the Purchase Price table.

Steps

The Purchase Prices window is accessed from both the vendor card and the item card.

1. From the Purchases menu, click ORDER PROCESSING→VENDORS, and locate the vendor card for vendor 10000.
2. Click PURCHASES→PRICES to open the Purchase Prices window.
FIGURE 5-3: PURCHASE PRICES WINDOW

In this window, a purchasing agent can specify the conditions that must be met before a vendor offers a unit price for an item. For example, the conditions can require that a purchase is made within a certain period. A special purchase price can also depend on the following:

- A unit of measure
- Item variant
- Minimum quantity
- Currency

The following demonstration illustrates a situation where a company must set up individual prices based on a price agreement reached with one of its vendors about some selected items.
Demonstration – Setting Up Individual Prices based on Price Agreement

Cronus' purchases from vendor 40000 have been increasing lately. Until now, Cronus has made purchases that have been based on vendor 40000's ordinary price rates. Now they want to purchase items at more favorable prices. Based on an agreement, Cronus obtains a deal that says that they can save 50 LCY for any purchase of item 1976-W if the quantity is at least ten units.

A purchasing agent at Cronus must set up these decisions in the program.

Steps
As mentioned earlier, the alternative purchase prices are entered in the Purchase Prices window.

1. Open the vendor card for vendor 40000. Click PURCHASES→PRICES.

   In the Purchase Prices window, enter the conditions under which Cronus can obtain a favorable price rate.

2. In the Item No. field, select 1976-W, in the Minimum Quantity field enter 10, and in the Direct Unit Cost field, enter 206.10 (or alternatively, 256.10-50), which is the reduced unit price.

   Assume that Cronus' price agreement with this vendor will take effect from the current date: 01/24/08.

3. In the Starting Date field, enter 01/24/08.

   In this case, the purchasing agent may not have to enter an ending date as a condition in the price agreement with the vendor. If an agreement is renegotiated at a later date, a new purchase price line is entered with a new starting date. This then takes over the previous agreement.
Using the Pricing Mechanism

The purpose of setting up alternative prices in the program is to support the purchasing agents in their task of always buying at the best prices. The best price is defined as the lowest possible price with the highest possible line discount on the order date.

When a purchasing agent creates an order from a specific vendor, the program checks whether:

- There are alternative purchase prices set up for the vendor in question.
- The purchase header and line details meet the conditions for applying an alternative price.

If all the conditions are met, the applicable price from the Purchase Prices window is copied to the Direct Unit Cost (Excl./Incl. VAT) field on the purchase line.

If there are no alternative purchase prices recorded in the program or the conditions for applying an alternative price are not satisfied, the program uses the regular unit cost specified on the item card as a suggestion on the purchase document.
Lab 5.1 – Managing Alternative Purchase Prices

Scenario: You have a deal from vendor 1000 on items no. 1900-S and 1920-S according to the following conditions:

- Item 1900-S: If Cronus buys this item in pallets (that contains ten pieces) instead of pieces, you receive ten LCY off the regular price.

  HINT: Add a new unit of measure PALLET, which contains ten pieces, to the item's units of measure list.

- Item 1920-S: When Cronus buys this item and pays in local currency (EUR), you receive 15 LCY off the item's regular price.

Challenge Yourself!
Enter these purchase prices in the Purchase Prices window and check their use by creating a purchase order for two pallets of item 1900-S and five units of item 1920-S.

  HINT: Items can be accessed without leaving the Purchase menu. Click INVENTORY COSTING→ITEMS.

Need a Little Help?
The solution is provided in Appendix C.
Line Discounts

Line discounts allows the company to get a discount when ordering specific items at specific vendors. As opposite to invoice discounts that relates to the total invoice amount, line discount relates to the specific line item. Setting up and working with line discounts is described in the following section. First, the setup defining the general rules of how discounts are posted is explained.

General Discount Setup

Before using the line discount mechanism in the program, a company must decide how to post discount amounts. These decisions are implemented in the Purchases & Payables Setup window.

The Discount Posting field on the General tab offers four options for defining the way the line discounts are to be posted to the general ledger:

- No Discounts
- Invoice Discounts
- Line Discounts
- All Discounts

In principle, when the user makes a selection in this field, he or she can specify the type of purchase discounts to be posted to the general ledger (if any) and whether they are posted together or separately. For a detailed definition of each option, refer to the online Help for the field.

If the option determining that a specific line discount is posted separately is selected, the user must ensure that:

- A dedicated account(s) is created in the chart of accounts (for example, a Purchase Line Discount account).
- That the separate line discount option is set up in the General Posting Setup window.

When posting purchase documents, the program uses the general business posting group of the vendor and the general product posting group of the item to retrieve the account set up in the General Posting Setup window.

If discounts are not set up to be posted separately, they become part of a purchase amount posted to the Purchase account.

Setting Up Line Discounts

Purchasing agents must use the Purchase Line Discount table to record price discounts that they have agreed upon with different vendors. The table can be accessed from both the vendor card and the item card.
The **Purchase Line Discount** window enables a purchasing agent to specify the conditions that must be met before a vendor offers a discount price. For example, the conditions can require that the purchasing agent buy a certain quantity or a purchase is invoiced in a specified currency before a discount can be granted. Similar to alternative purchase prices, line discounts are applied to a vendor.

**Using the Line Discount Mechanism**

The purpose of setting up a line discount in the program is to support the purchasing agents in their task of purchasing items at the best prices.

After the line discounts and the associated terms have been set up, when a Purchasing Agent creates an order/invoice for a specific vendor, the program checks whether:

- There are line discounts set up for the vendor in question.
- The purchase header and line details meet the conditions for applying a discount price.

If these conditions are met, the program copies the discount percentage from the **Purchase Line Discounts** window to the **Line Discount %** field on the purchase line and enters the calculated discount price in the **Direct Unit Cost Excl./Incl. VAT** field.

If there are no discounts recorded in the program or the conditions for applying a discount are not satisfied, the program uses the last direct cost specified on the item card as a suggestion on the purchase document (unless there is a special purchase price set up for the customer).

Setup and use of the purchase line discount is similar to the setup and use of purchase prices.
Conclusion

Purchase Order Management is an important discipline in order to get purchased items in time, to maintain a good relationship with vendors and achieve the best possible prices. This again has a direct effect on the customer service a company provides to its own customers. Purchase Order Management also affects the company's inventory management and can help reduce requisition costs.
Lab 5.2 – Managing Purchase Line Discounts

Scenario: You as the purchasing agent at Cronus have made an agreement with vendor 30000 that for items in the item range 70100-70104 purchased after 01/30/08, Cronus receives the following discount:

- 1-99 items: 10%
- 100-499 items: 15%
- 500 or more items: 25%

Challenge Yourself!
Enter the line discounts in the Purchase Line Discounts window and check that the program uses them by creating a purchase order for 250 units of item 70102 and 600 units of item 70104.

Need a Little Help?
The solution is provided in Appendix C.
Quick Interaction: Lessons Learned

Take a moment and write down three key points you have learned from this chapter:

1. 

2. 

3. 