

# *PERCEPTION<sup>®</sup> MAT-PAC*

## **Developing A Parts Catalog**

*A Training Tutorial*

**This training tutorial outlines the basic features of the *PERCEPTION* system for developing a parts catalog.**

**It is a supplement to the user manual entitled “*PERCEPTION Material Planning, Purchasing & Inventory Control*,” which provides more details for the user.**

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

## **Other related training documents are the following:**

- 1. Starting From Scratch:  
Material Planning,  
Purchasing & Inventory  
Control**
- 2. Starting A New Project**
- 3. Managing Drawings &  
Bills of Materials**
- 4. Material Requisitions**
- 5. Purchase Orders**
- 6. Work Order Pallets**
- 7. Tool Room Control**
- 8. Managing Stock  
Inventories**
- 9. Receiving &  
Warehousing**
- 10. Withdrawing Material  
to Production**
- 11. Managing Vendor  
Invoices**
- 12. Managing Customer  
Billings**

*PERCEPTION* supports a Parts Catalog that can be used in the following areas of the system's capabilities:

- **Cost estimating** that identifies detail material requirements using Part IDs from the catalog.
- **Stock inventory control**, where stock items are managed in the Parts Catalog.
- **Standard Direct Purchase Material** Items that provide the means for bulk purchasing benefits.
- **Production pallet planning** and management functions using standard parts (stock and/or direct purchase items) from the catalog.
- **Engineering drawing bills of material** using standard parts (stock and/or direct purchase items) from the catalog.

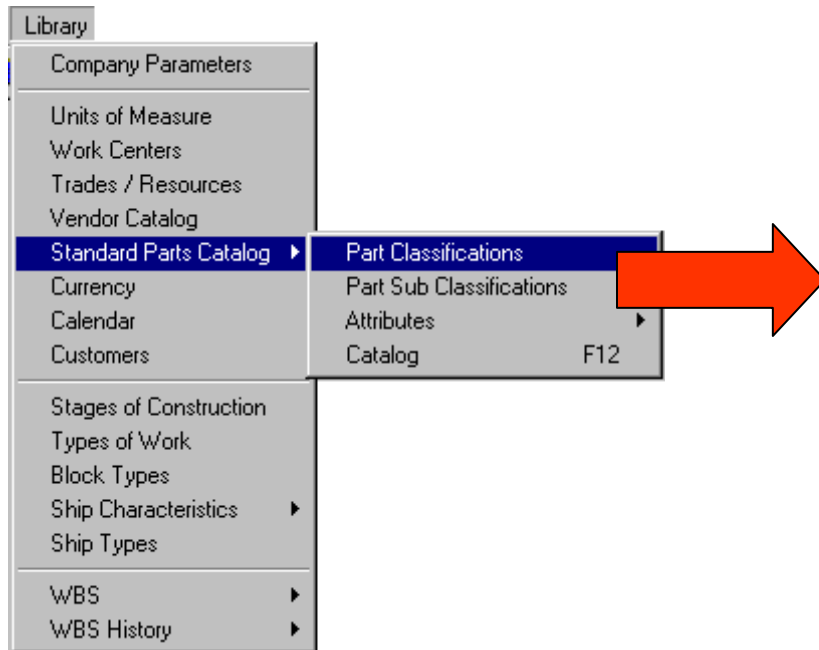
## **The Parts Catalog groups parts into the following part types:**

- **Stock**
- **Standard Direct Purchase Items**
- **Standard Manufactured Items**

## **Within the each part type, a part can be further categorized by:**

- **By part classification**
- **By part sub-classification**

**Begin setting up the Parts Catalog by defining the part classes. Select *Library/Standard Parts Catalog/Part Classifications* from the main menu.**



**Each Part Classification (its ID) can be defined with a maximum of 25 characters.**

Standard Part Classifications Information for the Estimator		
	Part Classification	Description
1	Bolts	Bolts
2	Bolts, Carriage	Bolts, Carriage
3	Bulb Flats, Steel	Bulb Flats, Steel
4	Chain	Chain
5	Clean-Up	Clean-Up Materials
6	Coatings, Pine Tar	Pine Tar
7	Engines, Diesel	Diesel Engine Without Gear box
8	Fab	Fabricated Parts
9	FLANGE	Flange
10	FRM	Structural Frames
11	Gaskets	Gaskets
12	Gears	Gears
13	Injectors	Injectors
14	Nuts, Hex	Hex Head Nuts
15	Pipe	Pipe
16	PLT	Structural Plates
17	Rudders	Ship Rudder Assemblies
18	Shapes, Steel	Shapes, Steel
19	STEEL	Steel
20	STF	Structural Stiffeners
21	VALVE	Valve
22	Weld	Welding

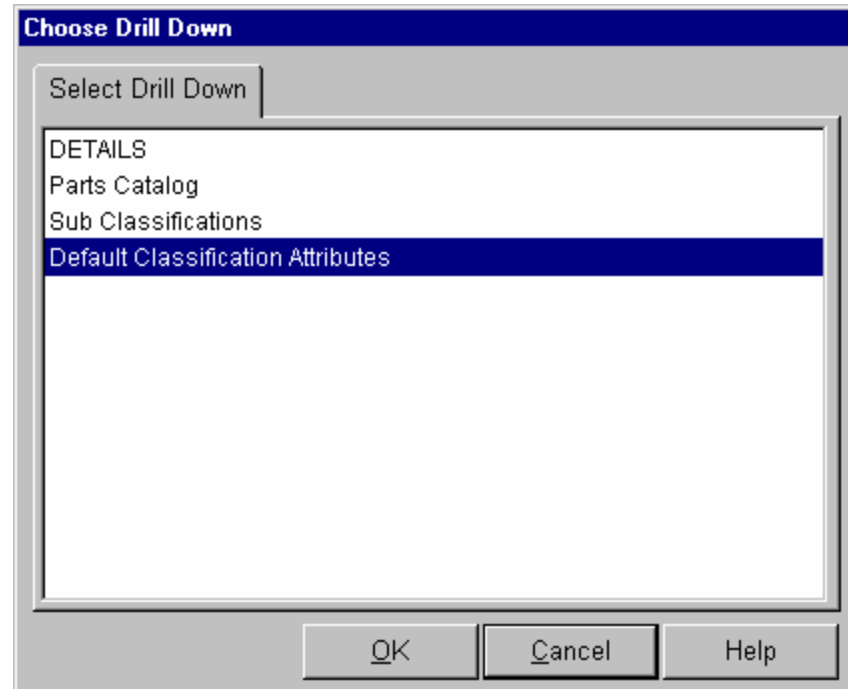
An option for each Part Classification is a list of default classification attributes.

Certain functions in the system allow the user to scan any set of parts in its part classification and select only those parts that meet a prescribed set of part attributes, such as color, size, & material.

For each Part Classification, highlight it, then click on the Drill-Down button



and select *Default Classification Attributes*.



**The default part attributes worksheet allows the user to define as many different part attributes as necessary for the given Part Classification or Sub Classification**

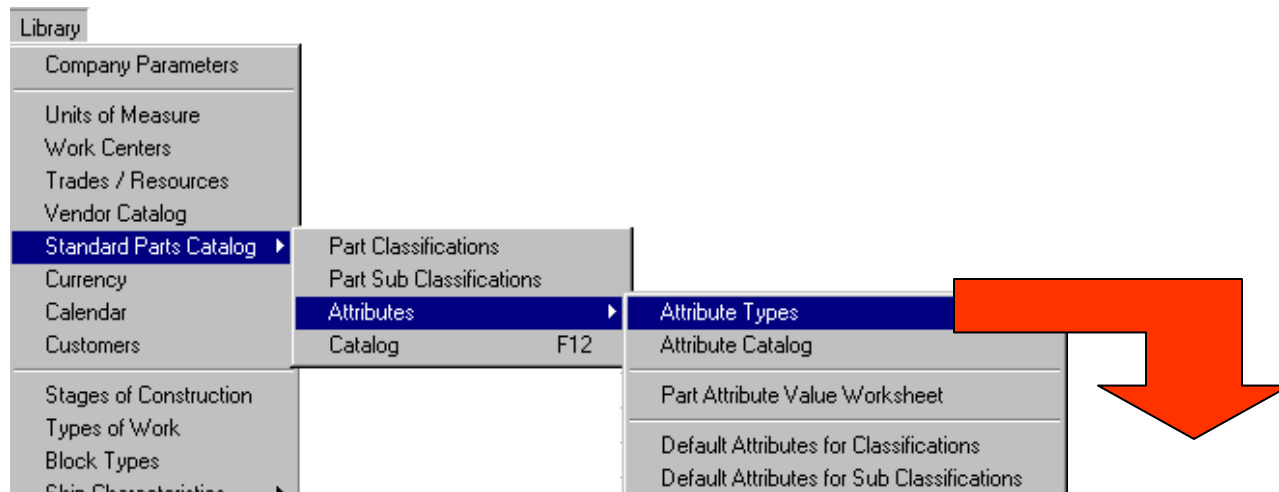
Default Part Classification Attributes for the Estimating Environment					
	Part Classification	Part Attribute Type	Part Attribute	Description	UoM
1	VALVE	Material	ASTM Grade	ASTM Material Grade	EA
2	VALVE	Physical	P Dia	Pipe Diameter	EA
3	VALVE	Performance	PSI	Max operating pressure	EA
4	VALVE	Physical	Type	Valve Type	EA

**Each Part Attribute requires the following information:**

- **Part Attribute Type (from a drop-down selection)**
- **The Part Attribute Name & Description**
- **The Part Attribute Unit of Measure**

Each attribute must be identified with a particular Part Type Attribute.

This table of Part Type Attributes can be modified by selecting *Attribute Types* from the main Library menu.



The screenshot shows the 'Library' menu with the following items: Company Parameters, Units of Measure, Work Centers, Trades / Resources, Vendor Catalog, Standard Parts Catalog (selected), Currency, Calendar, Customers, Stages of Construction, Types of Work, Block Types, Ship Characteristics, Ship Types, WBS, and WBS History. The 'Standard Parts Catalog' sub-menu is open, showing: Part Classifications, Part Sub Classifications, Attributes (selected), and Catalog. The 'Attributes' sub-menu is open, showing: Attribute Types (selected), Attribute Catalog, Part Attribute Value Worksheet, Default Attributes for Classifications, and Default Attributes for Sub Classifications. A red arrow points from the 'Attribute Types' menu item to the table below.

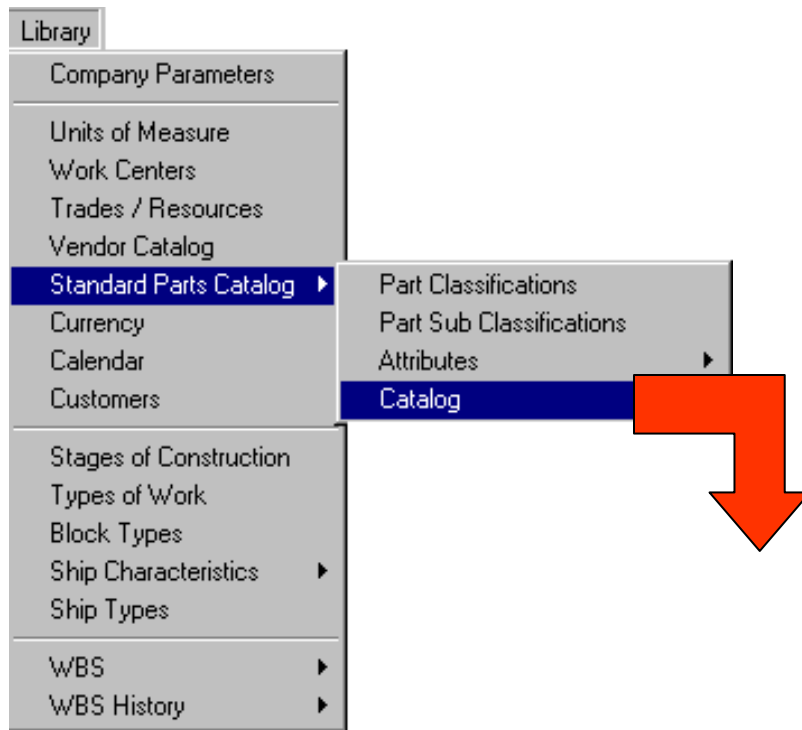
Attribute Types for the Estimating Environment		
	Part Attribute Type	Description
1	Documentation	Manuals & Engineering Documentation
2	Maintenance	Maintenance Characteristics
3	Material	Material Characteristics
4	Performance	Operating & Performance Characteristics
5	Physical	Physical & Dimensional Characteristic

**Once the default part type attributes have been defined for the Part Classification, the system will automatically copy this set of attribute names to each part entered under this classification.**

**The user then will need to enter the attribute values appropriate for each part in that classification.**

**The Part Sub Classification default attributes work exactly the same way.**

To begin entering parts into the Parts Catalog, select *Catalog* from the main Library menu.



Enter the new part with

- Part Classification (optional)
- Part Sub Classification (optional)
- Part Type
- Part ID & Description
- Unit of Measure

Parts Catalog Detail Information for the Estimating Environment							
Parts Catalog		Attributes					
	Part Classification	Part Type	Part ID	Description	Qty On Shelf	UoM	Unit Price
1	VALVE	Direct Purchase	1PV	Bronze Gate Valve - 2 inch - thre	0.00	EA	45.0000

## **Additional information also can be entered for the part:**

- **Size**
- **Weight**
- **Grade**
- **Manufacturer's Part ID**
- **Preferred Vendor**
- **etc.**

If part attributes are to be used, open the next tab window and enter attribute values.

Pictures, drawings & spec files also can be identified here.

**Parts Catalog Detail Information**

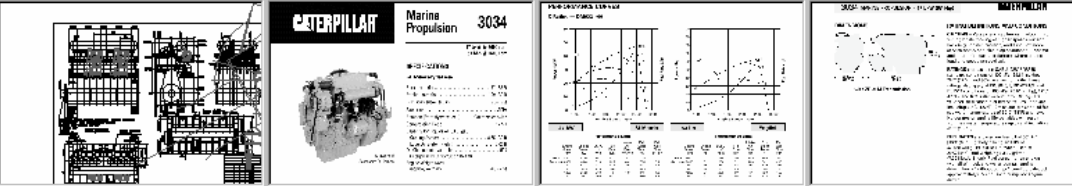
Parts Catalog | **Attributes** | Inventory | Transactions | Last Receipts | Pending Deliveries

Classification: Engines, Diesel    Part Type: Direct Purchase    Description: Caterpillar 3034 NA

Part ID: CAT-3034 NA    MFG P/N: 3034 NA

NATO ID: - - -

Drawing File Name: L:\SPAR\SPARDATA\Drawings Pi    Thumbnail Picture File Name:    3-D Model File Name: L:\SPAR\SPARDATA\Drawings Pi    Spec Document File Name: L:\SPAR\SPARDATA\Drawings P



**Attributes**


	Part Attribute Type	Part Attribute	Description	Value	UoM
1	Material	Weight	Engine Weight	579	LBS
2	Material	Width	Engine Width	20.5	IN
3	Physical	Bore x Stroke	Bore x Stroke	3.82 x 3.94	IN
4	Physical	Continuous Duty HP	Continuous Duty HP	63	HP
5	Physical	Continuous Duty kW	Continuous Duty kW	47	kW
6	Physical	Continuous Duty RPM	Continuous Duty RPM	2600	RPM
7	Physical	Cylinders	Number of Cylinders	4	NO
8	Physical	Displacement	Engine Displacement	183	CUIN
9	Physical	Height	Engine Height	20.5	IN

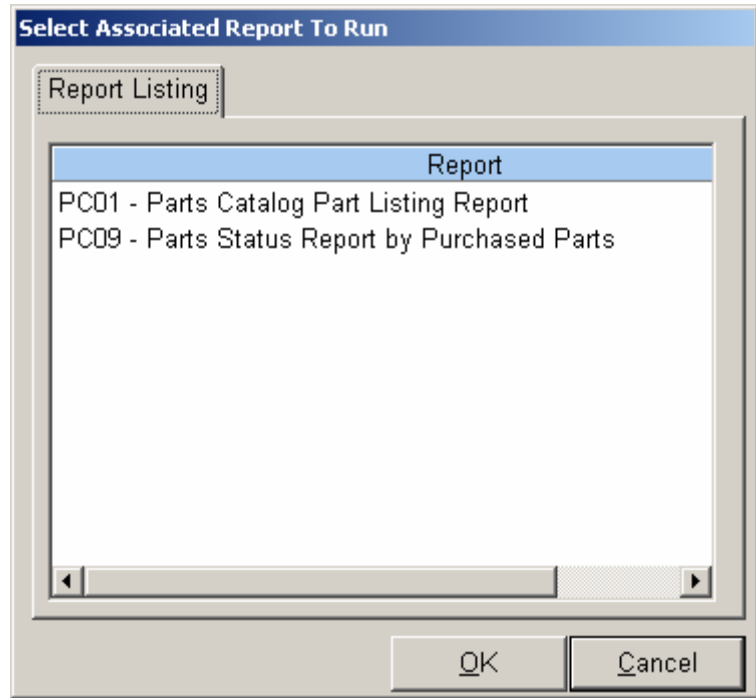
**Special Note: If the Parts Catalog is being actively used by the system's purchasing functions, the unit prices will always be updated automatically by each purchase.**

Parts Catalog listings and reports can be generated from different system operating environments.

Some environments offer more reports than others, depending on the level of reporting required for that environment.

The diagram illustrates the process of selecting a report from a system environment. On the left, a menu structure is shown under the 'Environment' header. The 'Material Control' option is selected, which opens a sub-menu containing 'Request for Quote', 'Requisitions', 'Requisition Items', 'Pallets', 'Pallet Items', 'Material Control Toolbox...', 'Rollup...', 'Reports...', and 'Exceptions...'. A red arrow points from the 'Reports...' option to a dialog box titled 'Select Report To Run'. This dialog box features a 'Report List' section with a tree view. The 'Perception Reports Collection' is expanded, showing sub-categories: 'Drawing BOM Reports', 'Expediting Reports', 'Material Budget and Cost Reports', 'Pallet Reports', 'Parts Catalog Reports', 'Purchase Order Reports', and 'Requisition Reports'. Under 'Parts Catalog Reports', four specific reports are listed: 'PC09 - Parts Status Report by Purchased Parts', 'STK4 - Stock Retail Price Report', 'STK5 - Project Stock Usage Report by Period', and 'STK9 - Parts Status Report by Stock Parts'. The dialog box also includes 'OK' and 'Cancel' buttons at the bottom right.

Another option for generating Parts Catalog lists and reports is to select those parts in the catalog worksheet, then click on the *Run Associated Reports* button  and select the report desired.



Part ID	Description	UoM	Grade	Size	Weight	Unit Price	Last Purchase Date	Markup %
1PV	Bronze Gate Valve - 2 inch - threaded 150 psi	EA		2"	61.00	45.00	00/00/0000	0.00