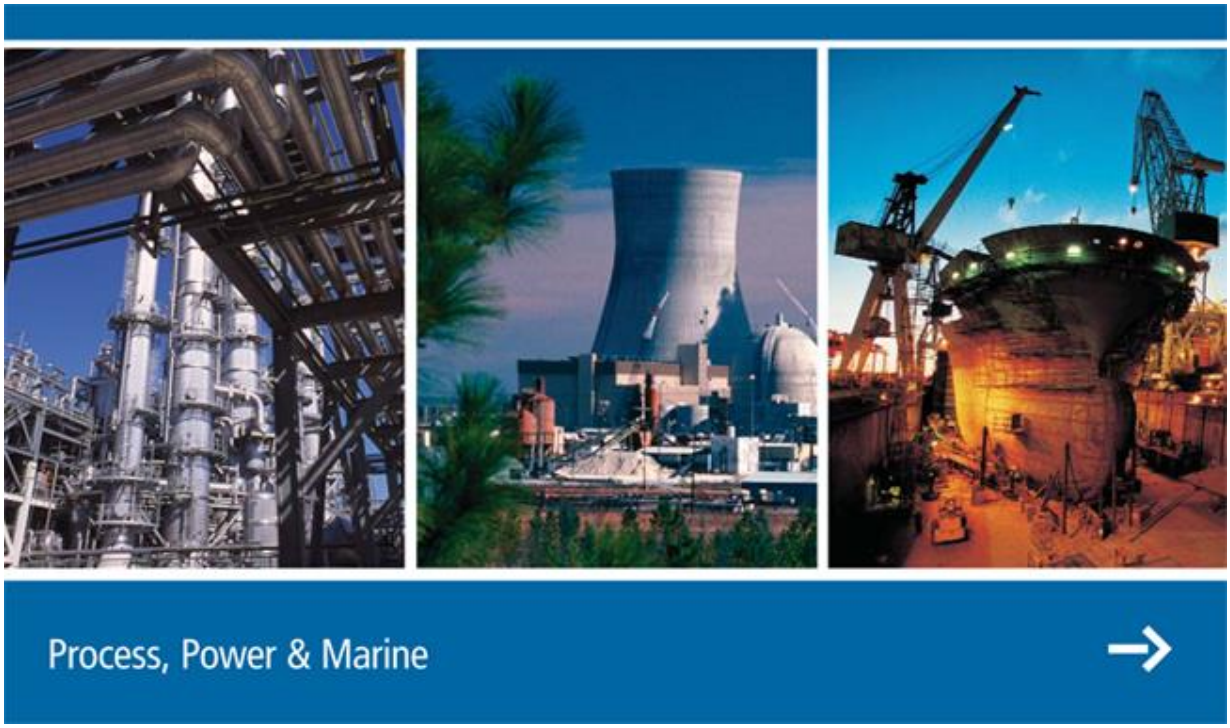
Smart Plant Reference Data
SPRD Labs



Version 7.1.1 **Oct 2014** **Timothy Foreman**

Copyright

U.S. Government Restricted Rights Legend

Intergraph Corporation
Huntsville, Alabama 35894-0001

Terms of Use

Warranties and Liabilities

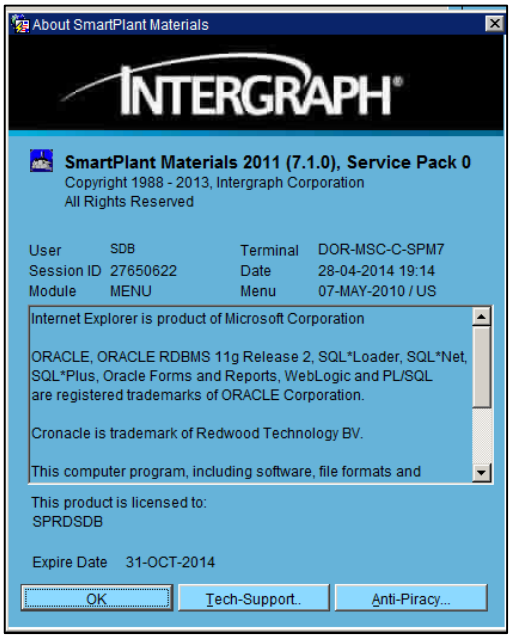
Trademarks

Contents

Note: Replace all occurrence of <Init> in the labs with your initials. Replace all occurrence of <ID> with the id number assigned to you.

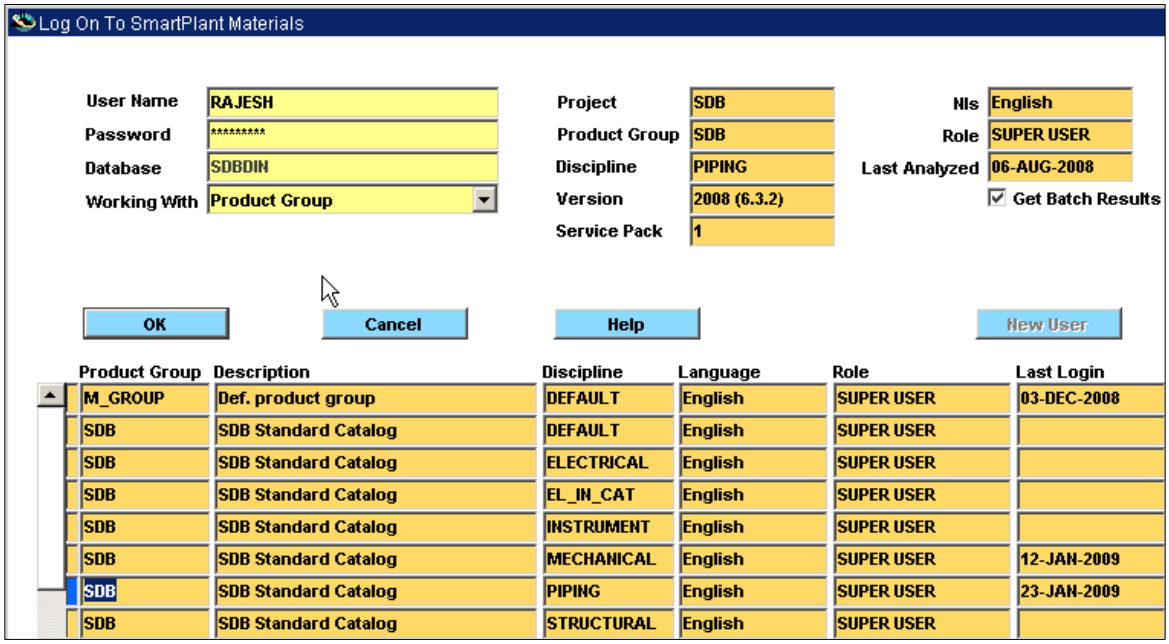
Lab 1. Login to SPRD / SP Materials

a. Launch Internet Explorer and type in url for your SPRD installation



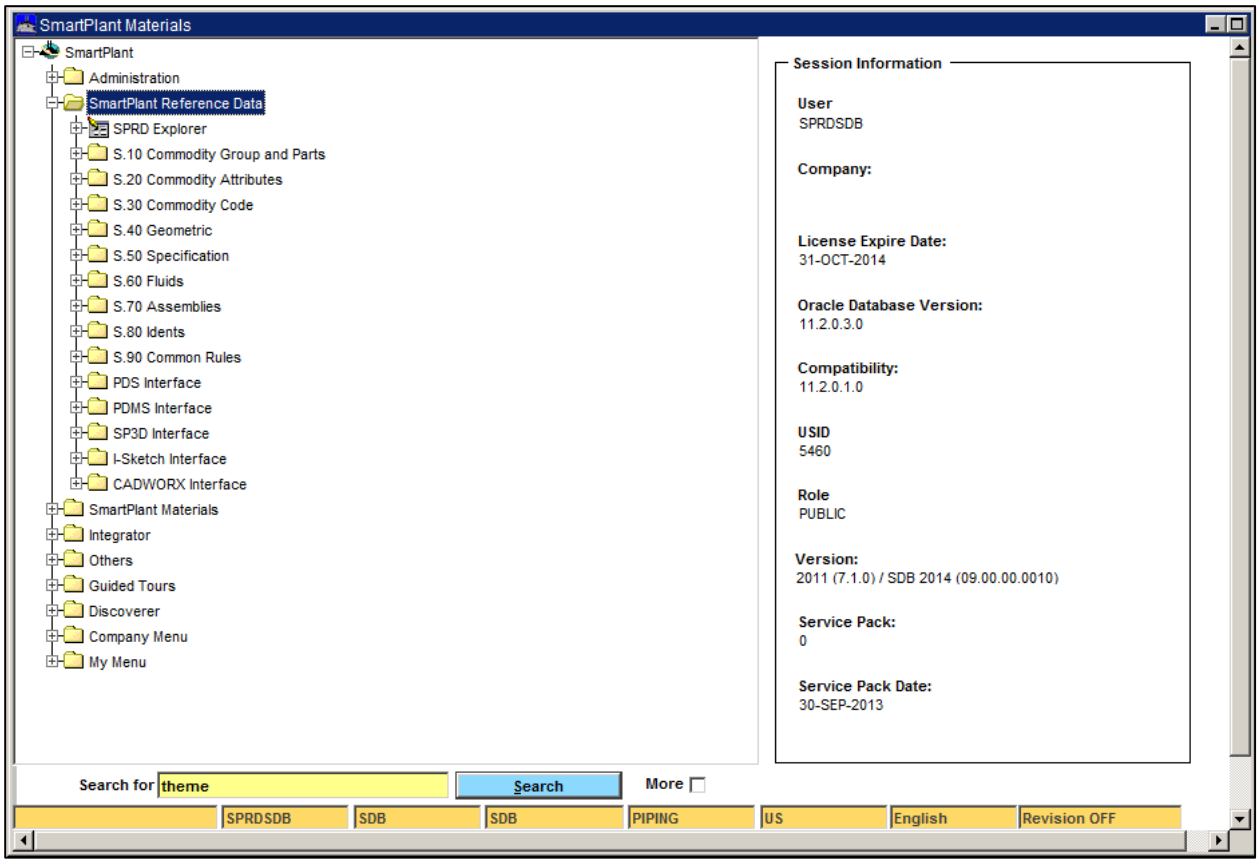
b. FYI: If the Java component JInitiator is not installed the system will automatically download and install it. Please accept all default prompts during installation.

c. After installation you will be presented with the Login window. Type in your **User Name**, **Password** and set **Working With** to **Product Group**. System will display a list of product groups / discipline.



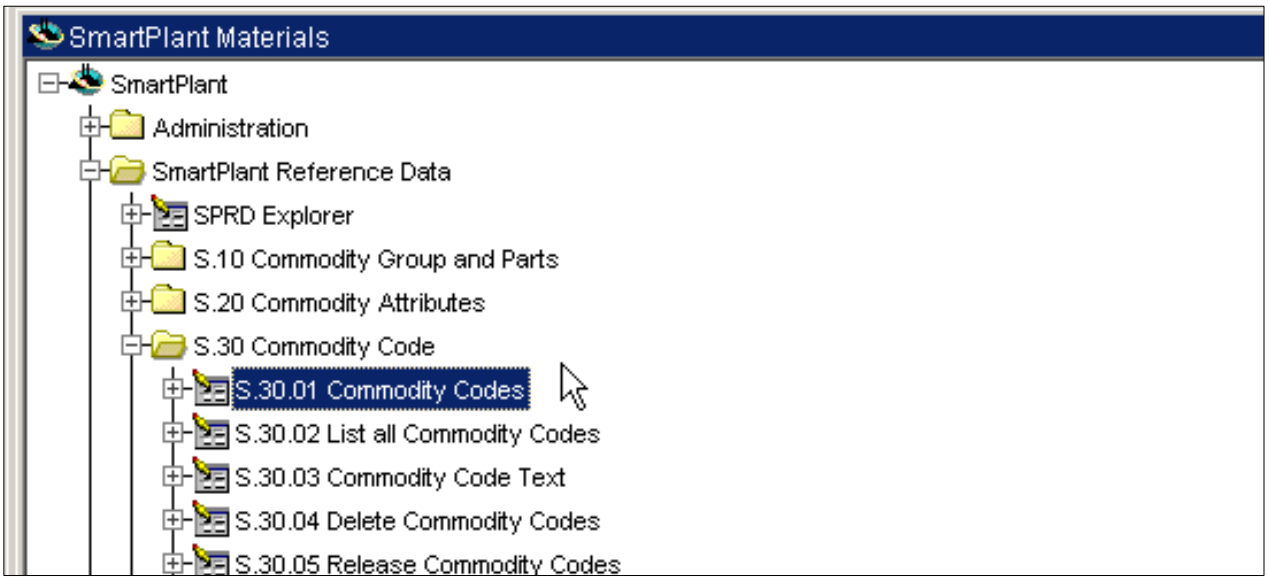
d. Select **SDB** Product Group and **Piping** discipline and **click** the **OK** button to login.

e. On successful login you will be presented with the SPRD / SP Materials Menu.

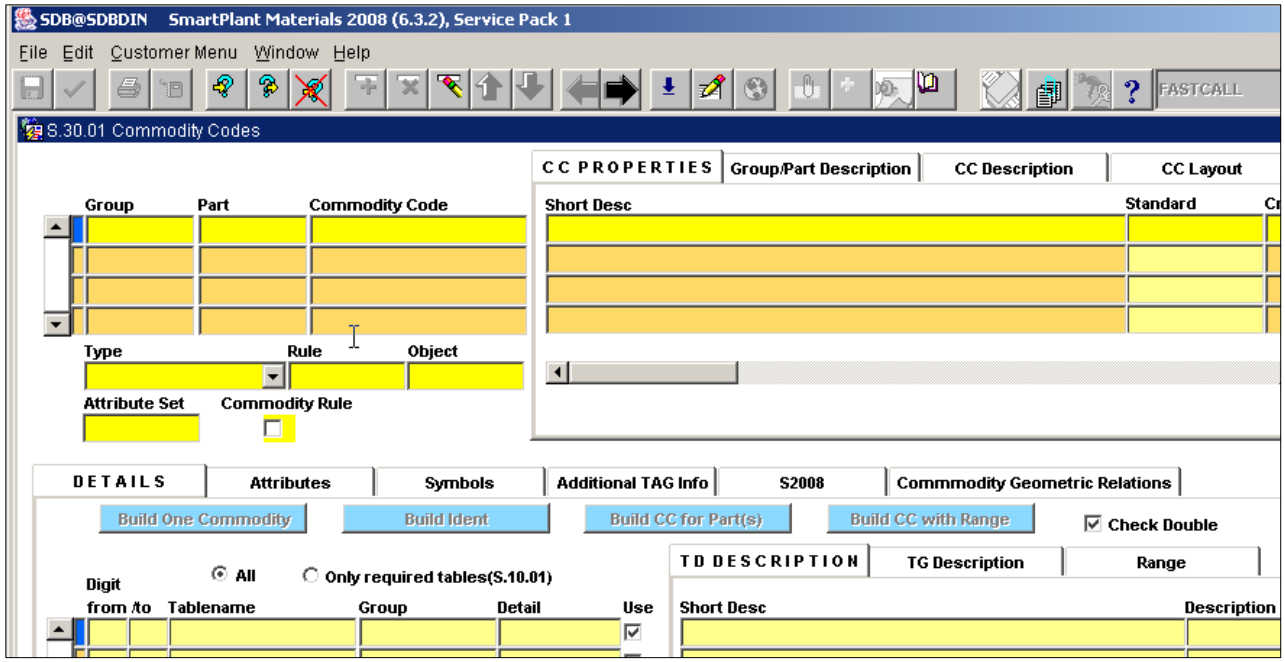


Lab 2. Review toolbar icons

a. Launch **"S.30.01 Commodity Codes"**



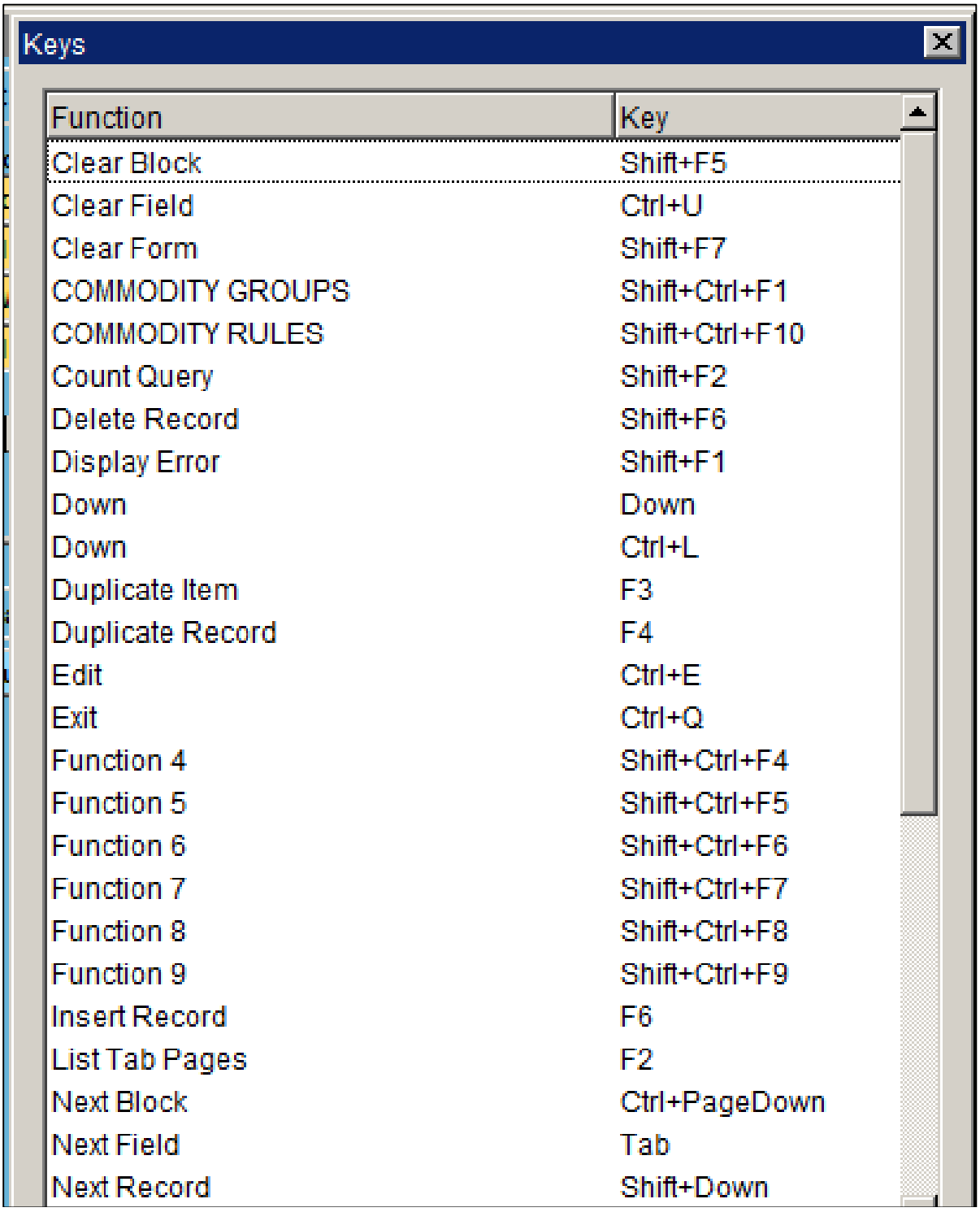
i. FYI: By default the system opens this screen in the Query mode. Searchable fields such as Group, Part, Commodity Code, Short Desc etc. have a bright yellow background.

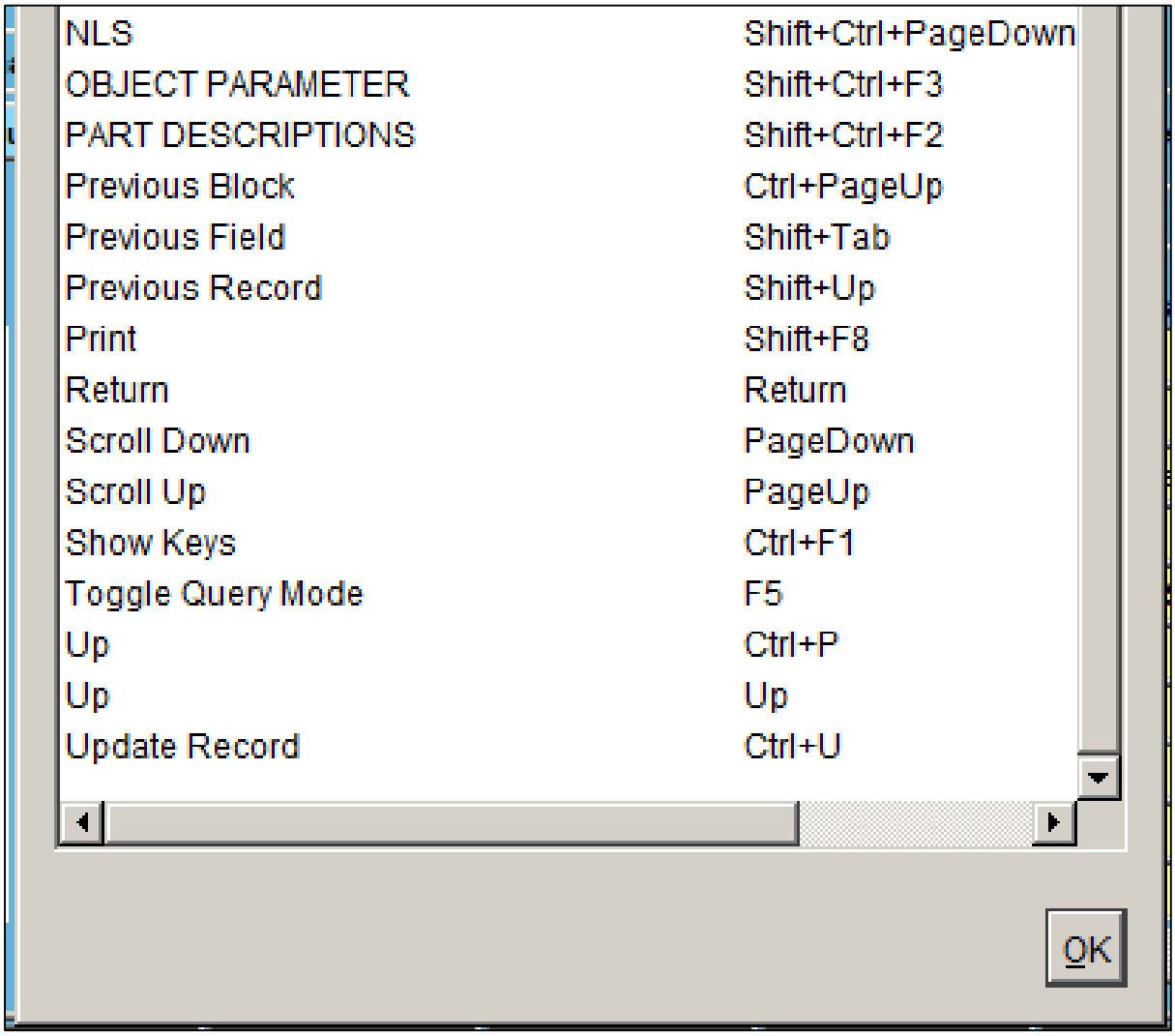


b. Move the mouse over the toolbar icons and understand their function based on the list below

Icon	Function	Description
	Save, F10	Saves record modifications
	Save and Proceed	Saves record changes and moves to the next record
	Print Screen	Prints a snapshot of the active SmartPlant Materials screen to the default printer
	Excel Export	Prints the information in the displayed SmartPlant Materials screen to a data file in the default location.
	Enter Query, F7	Initiates Enter Query mode for a user to set up a database query. Search conditions in yellow fields restrict queries.
	Run Query, F8	Runs a database query after it is defined with Enter Query and displays the data in the SmartPlant Materials screen
	Cancel Query, CTRL+Q	Stops a query and changes from Enter Query mode to Input mode. In Input mode, users can insert records.
	New Record, F6	Adds (inserts) a new record behind the cursor
	Delete Record, SHIFT+F6	Deletes the selected record. If dependent data exists, the user is prompted to click the Delete Record icon again to delete the data and all of its dependent data.
	Clear Record, SHIFT+F4	Clears the record the cursor is on
	Go To Previous Record, SHIFT+↑	Moves to the previous record of a block
	Go To Next Record, SHIFT+↓	Moves to the next record of a block
	Go To Previous Block, CTRL+PgUp	Moves to the previous block
	Go To Next Block, CTRL+PgDn	Moves to the next block
	List of Values (LOV), F9	Displays the list of values (LOV). Click a value to select it for the input field. Click Cancel to dismiss the list and not select a value.

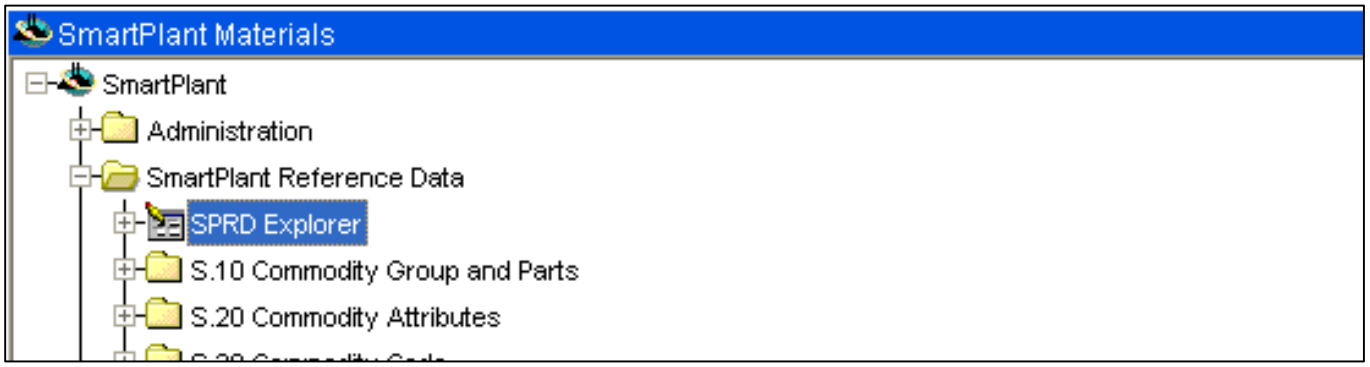
Icon	Function	Description
	Edit Field, CTRL+d	Opens an editor field to allow entry of extensive text into a field
	NLS Description, CTRL+>	Opens a window for polygot input. Click a second time to return to the previous block. (NLS = National Language Support.)
	Record Information	Displays detailed information about the selected record
	Where Condition	Displays the A.60.06 Query Condition screen, for a user to change selection limitations. It displays a user-defined list, for example, a list of all pipe carbon steel items.
	Comments	Allows users to add comments to the displayed SmartPlant Materials record.
	Valid Settings	Opens the Valid Settings dialog box with all project settings relative to the active SmartPlant Materials screen.
	JCS Monitor	Checks background processing initiated from the Start Batch icon available on screens where batch processing is possible. Displays the A.60.41 JCS Jobs screen (Job Control System) where the jobs are listed.
	Help, F2	Displays SmartPlant Materials Help
	FASTCALL	Displays a list of additional SmartPlant Materials screens related to the active task


Keys
Function
Key
Clear Block
Shift+F5
Clear Field
Ctrl+U
Clear Form
Shift+F7
COMMODITY GROUPS
Shift+Ctrl+F1
COMMODITY RULES
Shift+Ctrl+F10
Count Query
Shift+F2
Delete Record
Shift+F6
Display Error
Shift+F1
Down
Down
Down
Ctrl+L
Duplicate Item
F3
Duplicate Record
F4
Edit
Ctrl+E
Exit
Ctrl+Q
Function 4
Shift+Ctrl+F4
Function 5
Shift+Ctrl+F5
Function 6
Shift+Ctrl+F6
Function 7
Shift+Ctrl+F7
Function 8
Shift+Ctrl+F8
Function 9
Shift+Ctrl+F9
Insert Record
F6
List Tab Pages
F2
Next Block
Ctrl+PageDown
Next Field
Tab
Next Record
Shift+Down


NLS Shift+Ctrl+PageDown
OBJECT PARAMETER Shift+Ctrl+F3
PART DESCRIPTIONS Shift+Ctrl+F2
Previous Block Ctrl+PageUp
Previous Field Shift+Tab
Previous Record Shift+Up
Print Shift+F8
Return Return
Scroll Down PageDown
Scroll Up PageUp
Show Keys Ctrl+F1
Toggle Query Mode F5
Up Ctrl+P
Up Up
Update Record Ctrl+U
OK

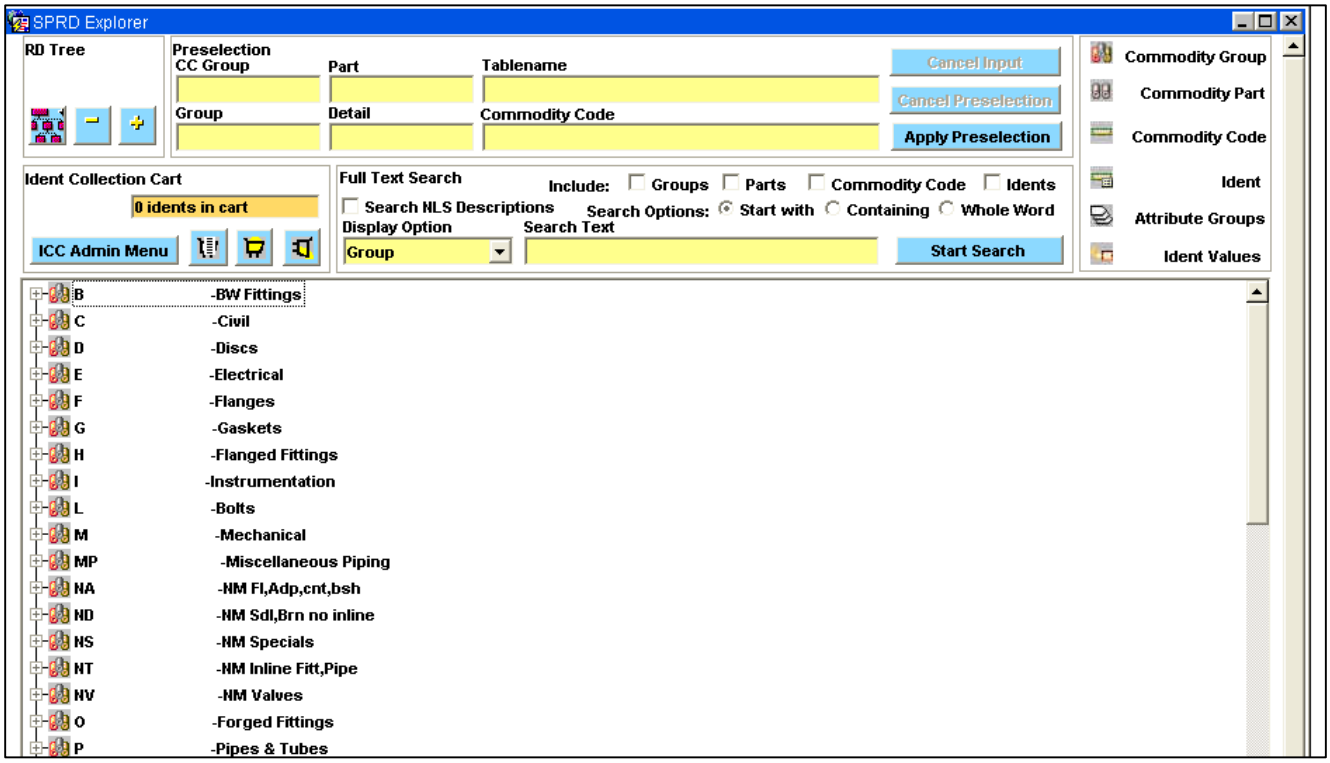
Lab 3. Search for a commodity using the SPRD Explorer

a. Launch **"SPRD Explorer"** by double clicking on the SPRD Explorer menu option



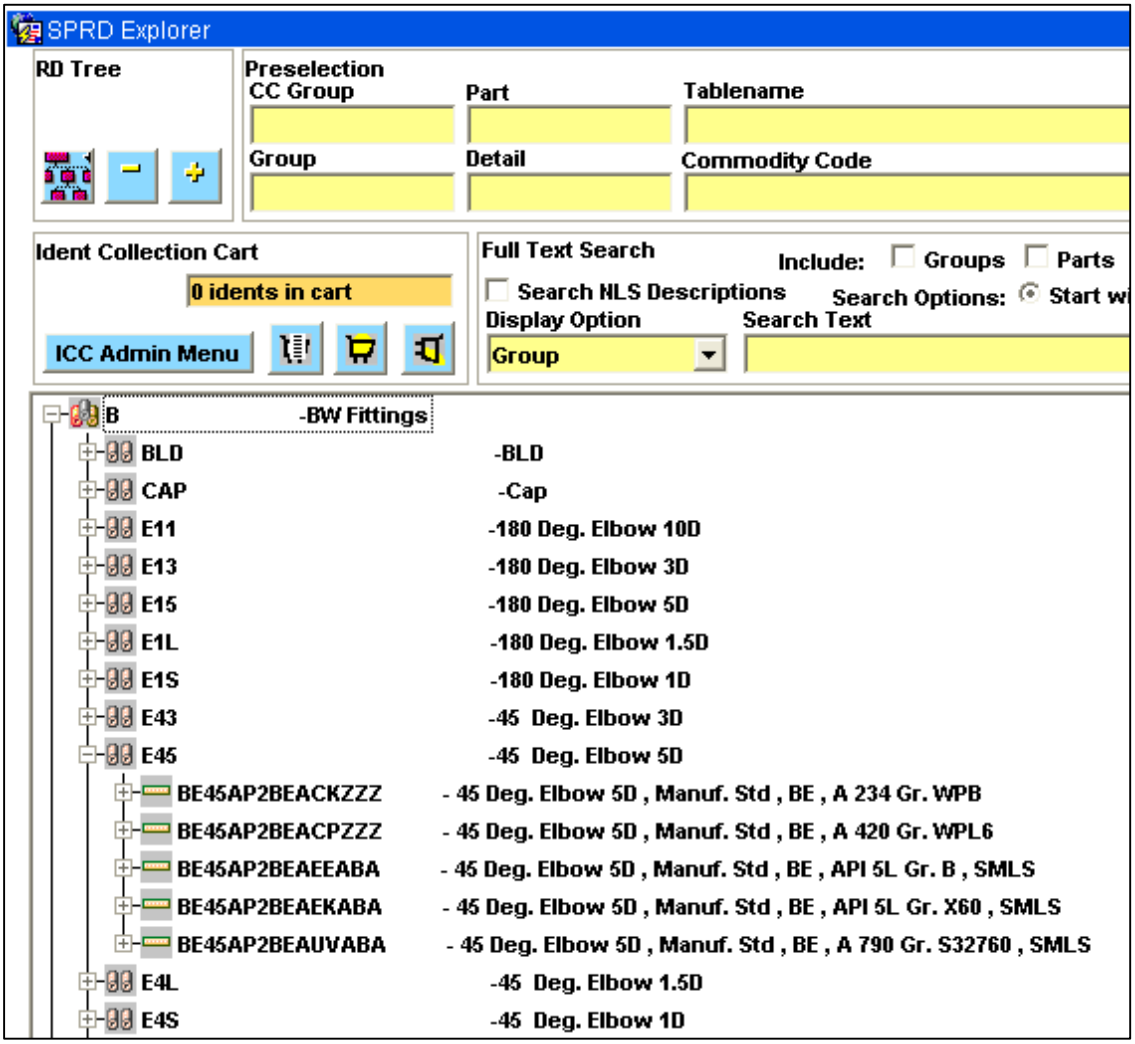
b. System displays a list of Commodity Groups defined in the Catalog

i. FYI: The catalog is classified into a two level hierarchy of Commodity Group and Commodity Parts.



c. **Click** on the **"+"** sign to the left of the Group **B – BW Fittings** to display the parts defined for **Butt Weld Fittings**.

d. **Click** on the **"+"** sign to the left of the Part **E45** to display the Commodity Codes defined for **45 Deg Elbow 5D**.

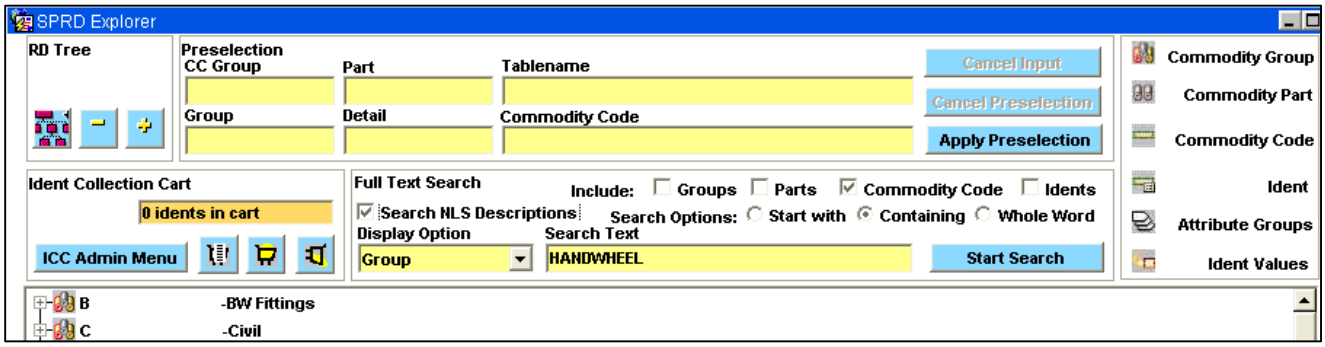


e. Let us say we want to search for all CC that have **HANDWHEEL** in their description.

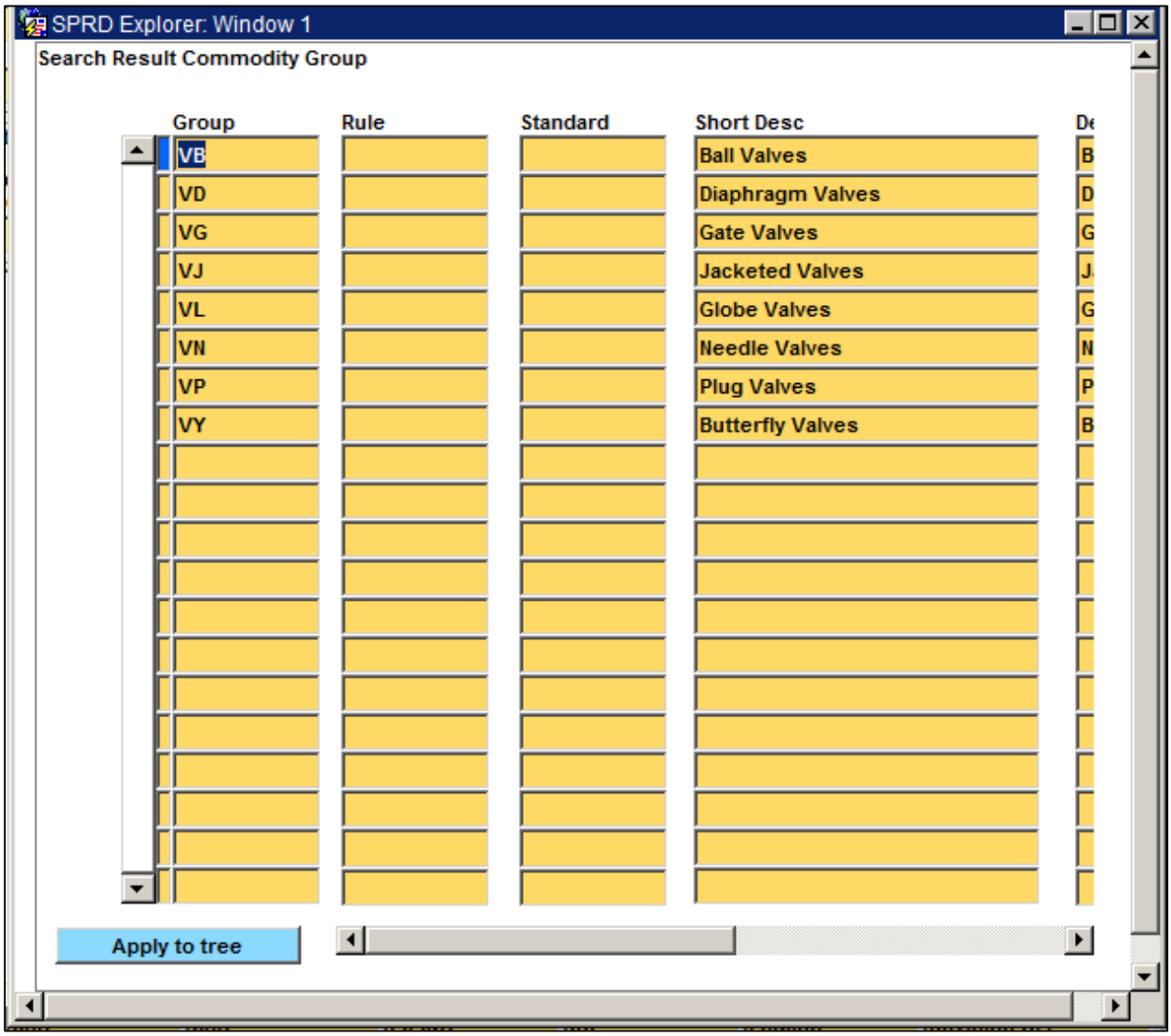
f. **Check** the **Include: Commodity Code** and **Search NLS Description** checkboxes.

g. Set the **Search Option** to **Containing**

h. Type **HANDWHEEL** in the **Search Text** as shown below.

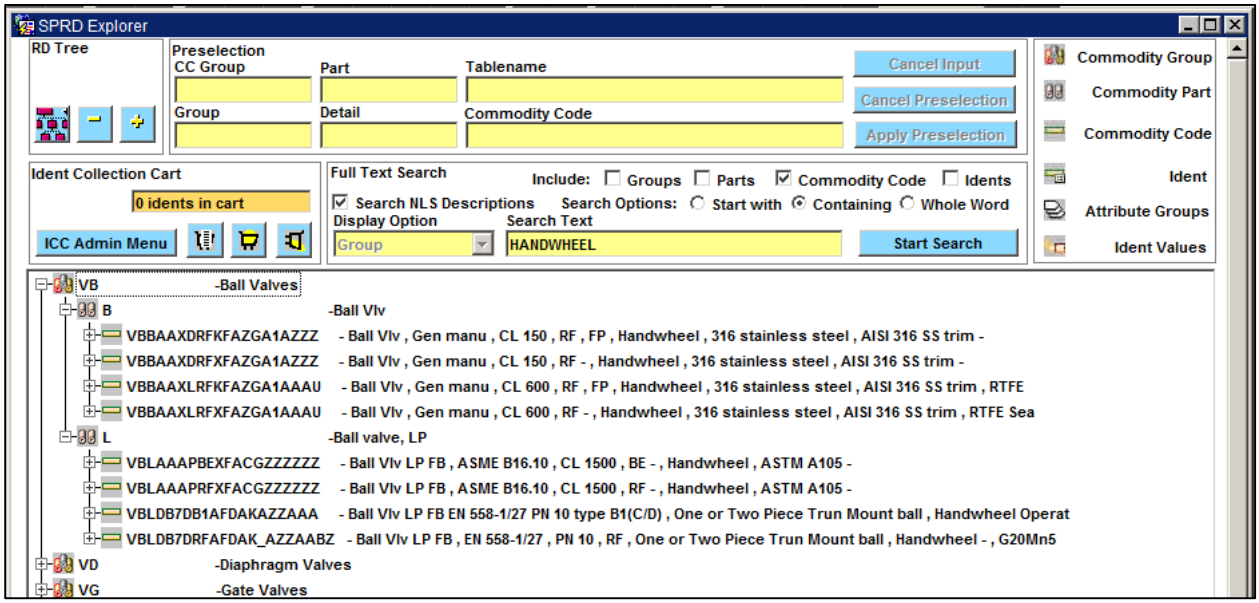


i. Click on the Start Search button. The system will display a list of all Commodity Groups that have Commodity Codes containing the word HANDWHEEL.



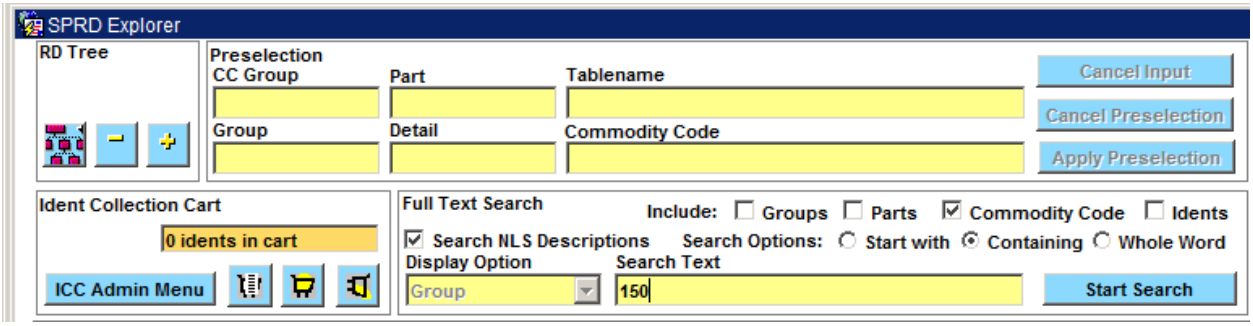
j. Click the **Apply to tree** button to narrow the Catalog tree.

k. Expand the **Ball Valve** Group / Parts by clicking on the **"+"** to the left to get a list of valves with **Handwheel** Operator.

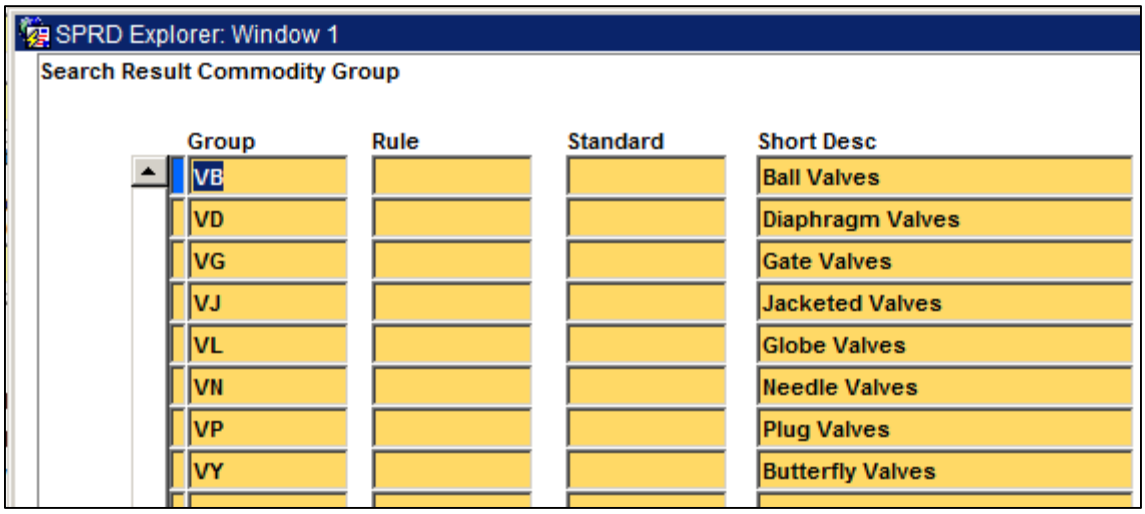


l. Let us say we wanted to further limit our search to just those Handwheel Operator valve with "150" Rating.

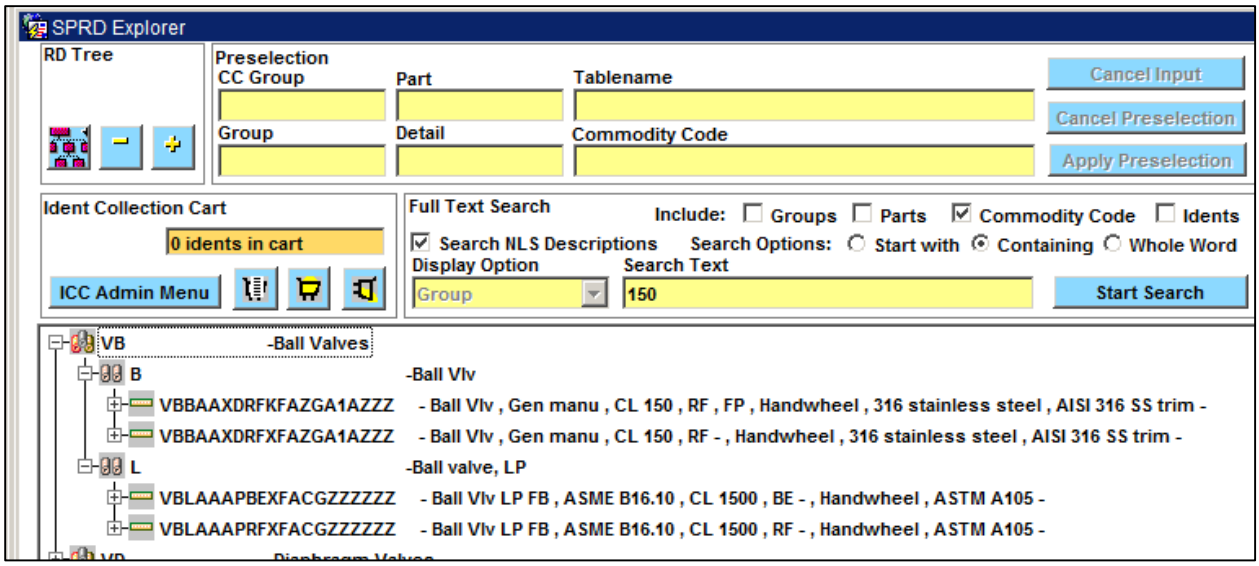
m. Type **150** in the **Search Text** and click on the **Start Search** button.



n. The system will display those Groups where the operator is **Handwheel** and Rating contains the word **150**.

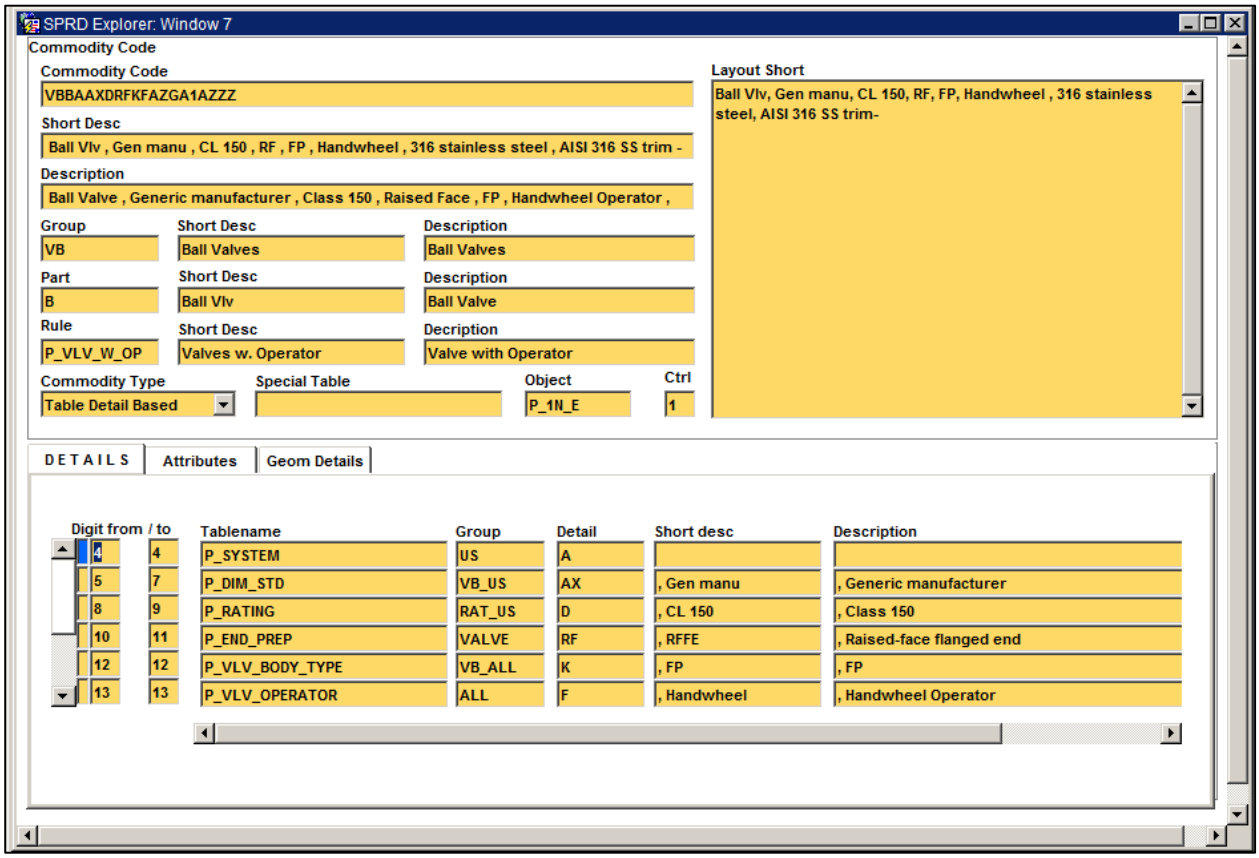


o. **Click** on the **Apply to tree** button to view the Commodity Codes.



p. The same results could have been got in one search by typing in **150%HANDWHEEL**

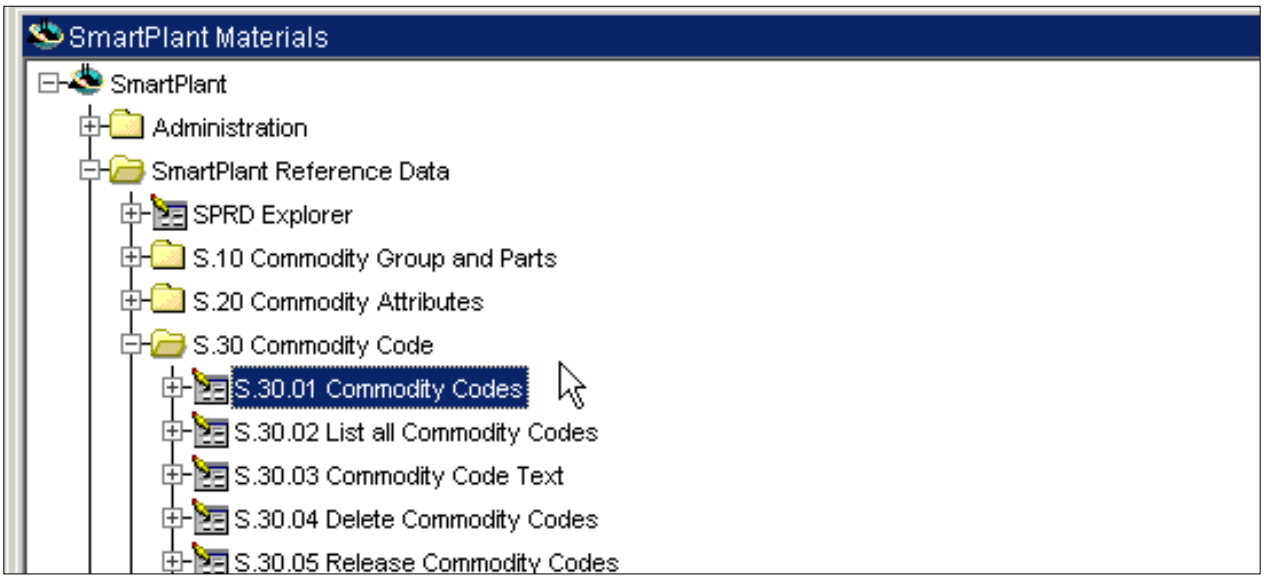
q. **Double click** on the first **Commodity Code** to view the details



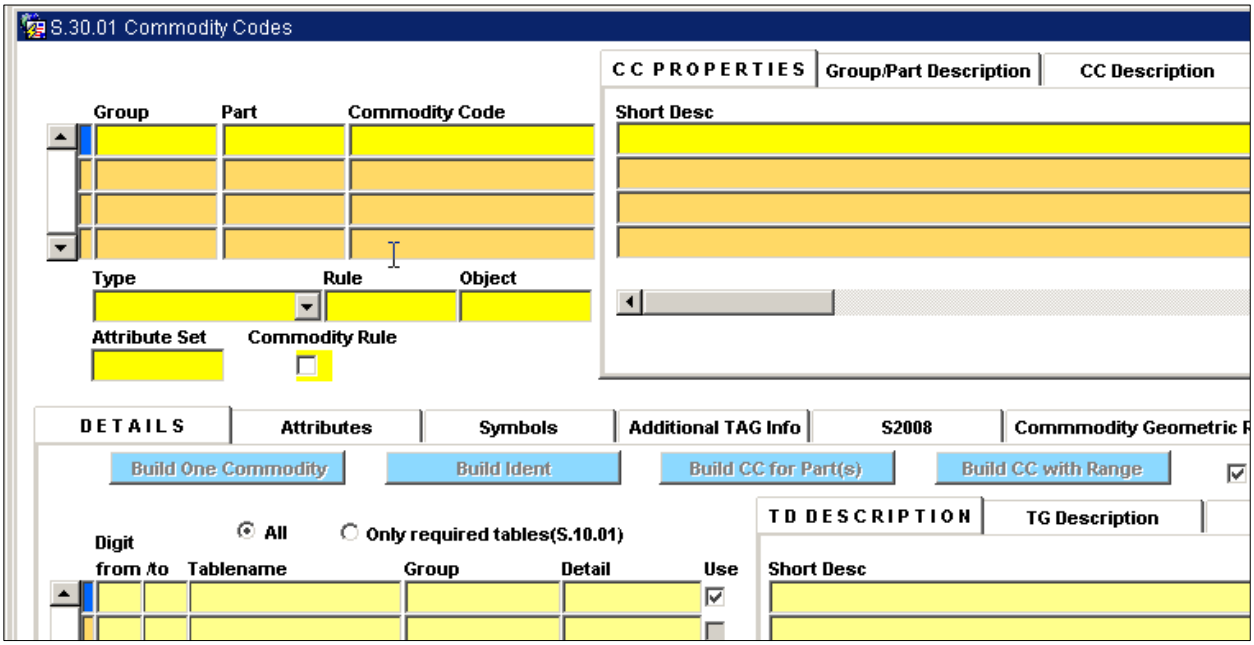
r. Close all windows.

Lab 4. Search for an existing commodity

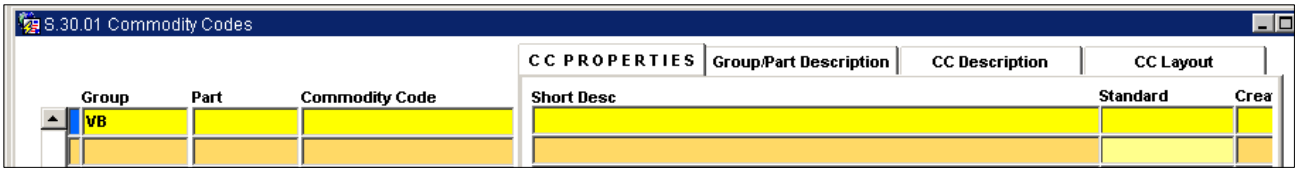
a. Launch **"S.30.01 Commodity Codes"**

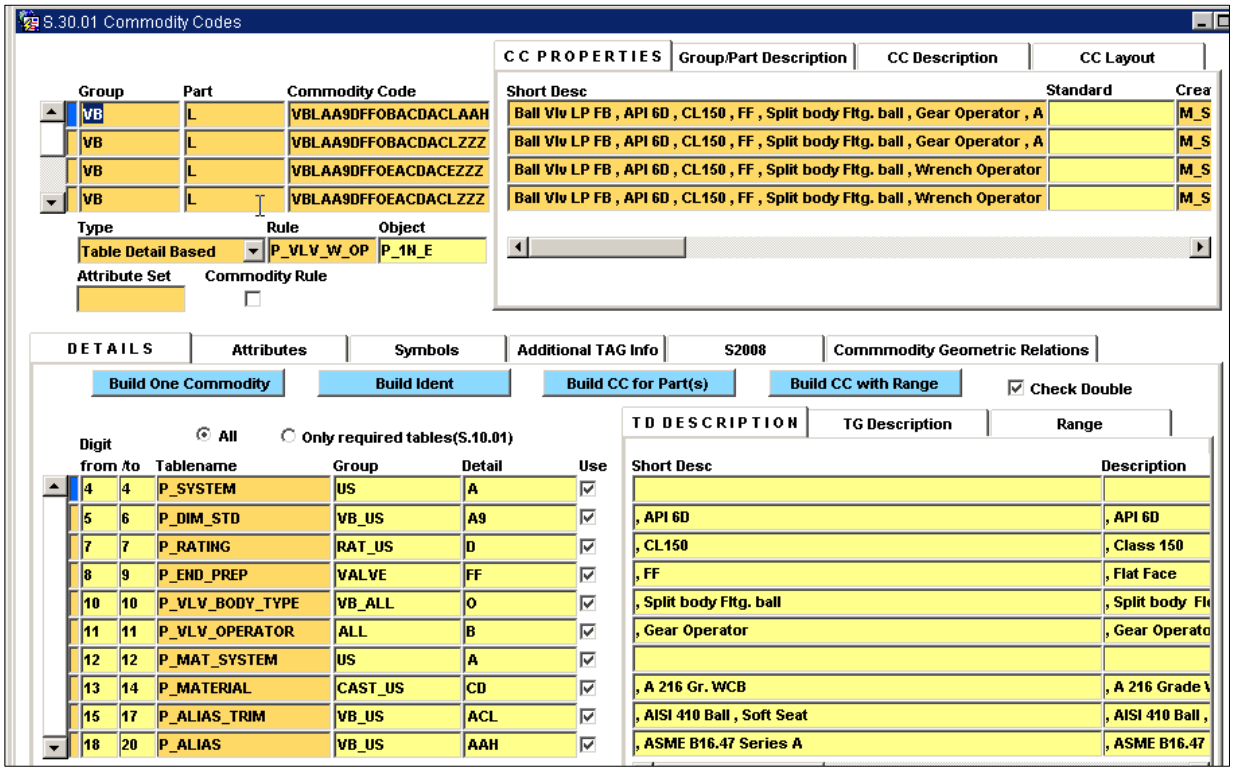


b. Ensure you are in **Query mode** (fields will have a yellow background) by pressing function key **F7**



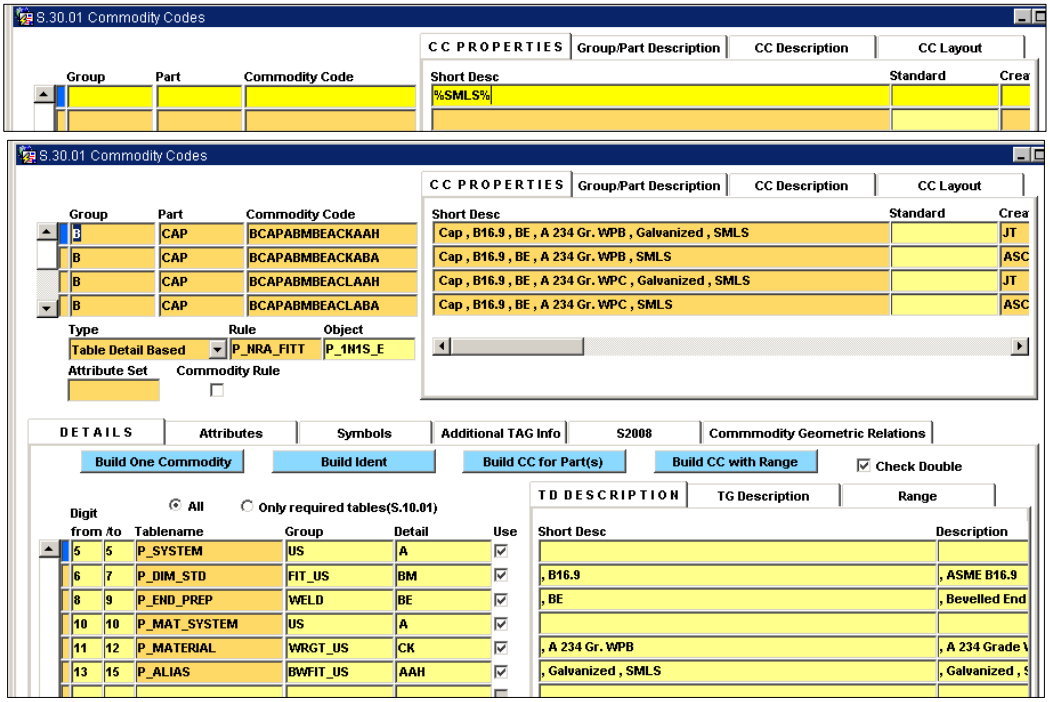
c. Type **VB** in the **Group Code** field and **Run the Query** by pressing **F8**. The system will display all the Ball Valves.



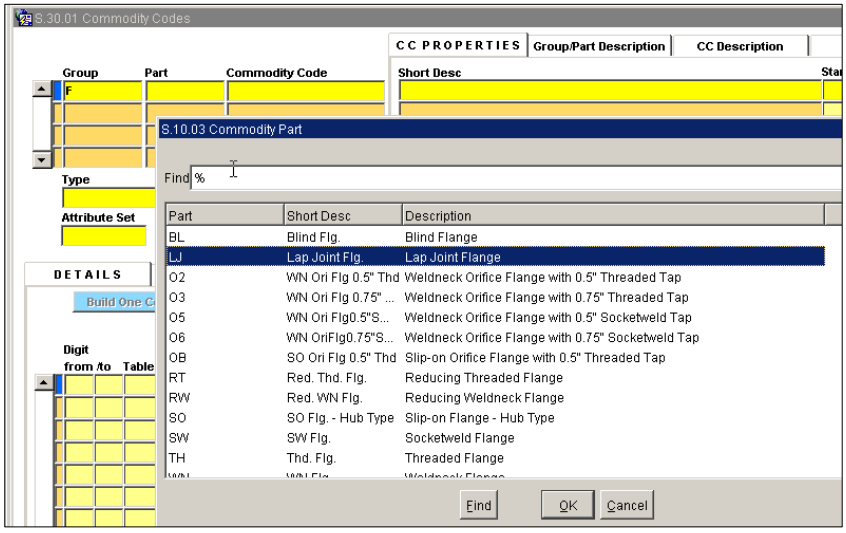


d. Press **F7** to back to the **Query Mode**

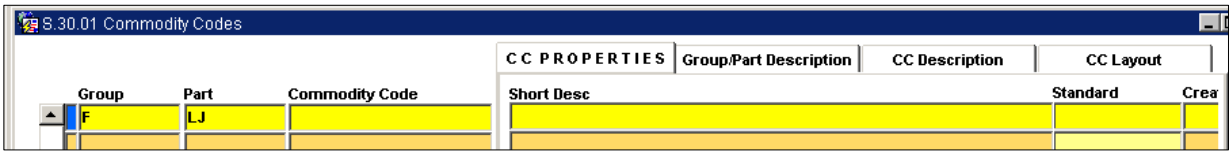
e. Type **%SMLS%** in the **Short Desc** field and **Run the Query** by pressing **F8**.
   i. FYI: In Query Mode **%** acts as a wildcard. So typing **%SMLS%** in the **Short Desc** field, tells the system to search for all commodities that have the word **SMLS** anywhere in the short description.
   ii. FYI: If your Oracle is configured to be **"Case Sensitive"** then **%smls%** will not find the Seamless Components.

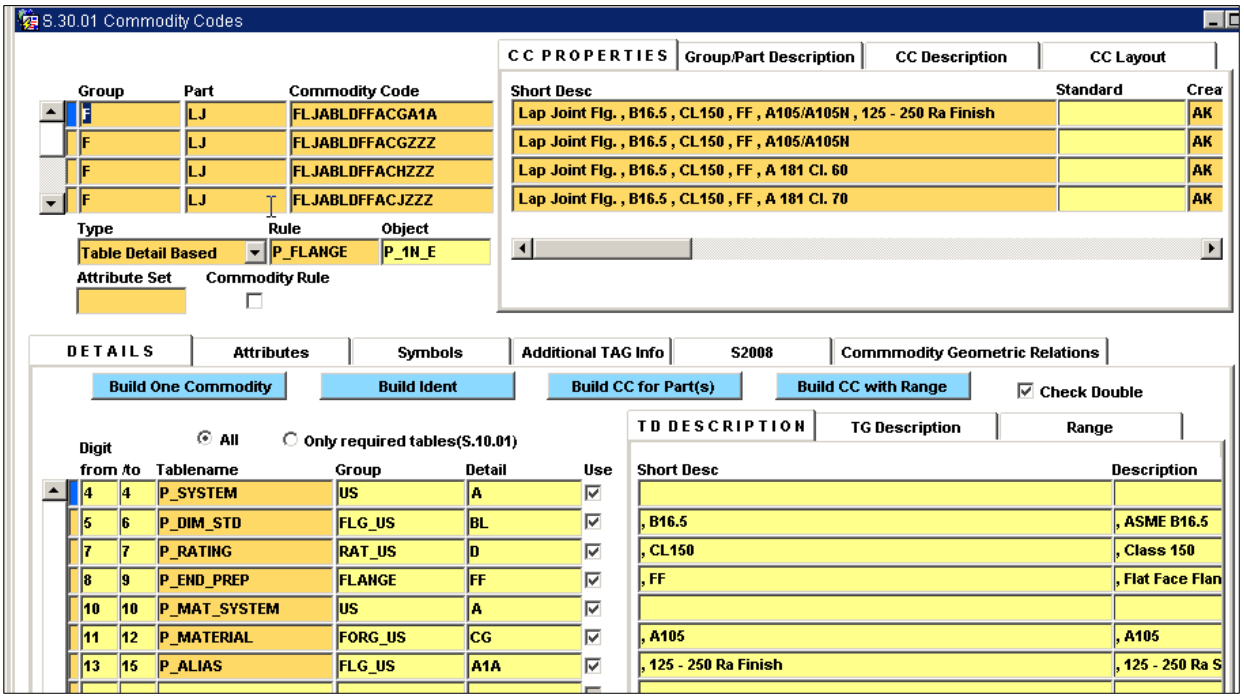


f. Press **F7** to return to the **Query Mode**. Type **F** in the **Group** field and press **Tab** to move the **Part** field
g. Click on the List of Values (**LOV**) icon or press **F9** to view a list of valid part
   i. FYI: The title of the LOV has the screen name where the list is maintained
h. Select **LJ** and click on the **OK** button

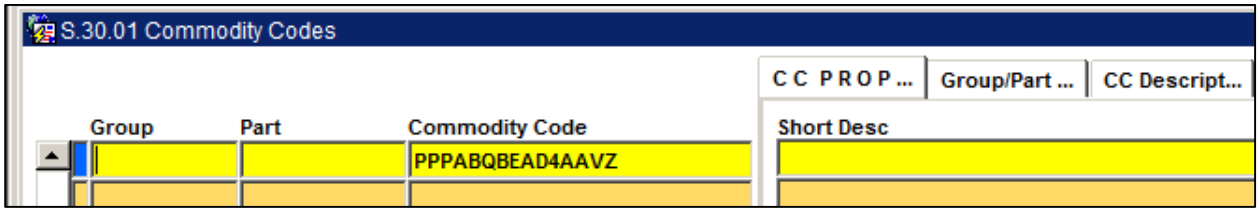


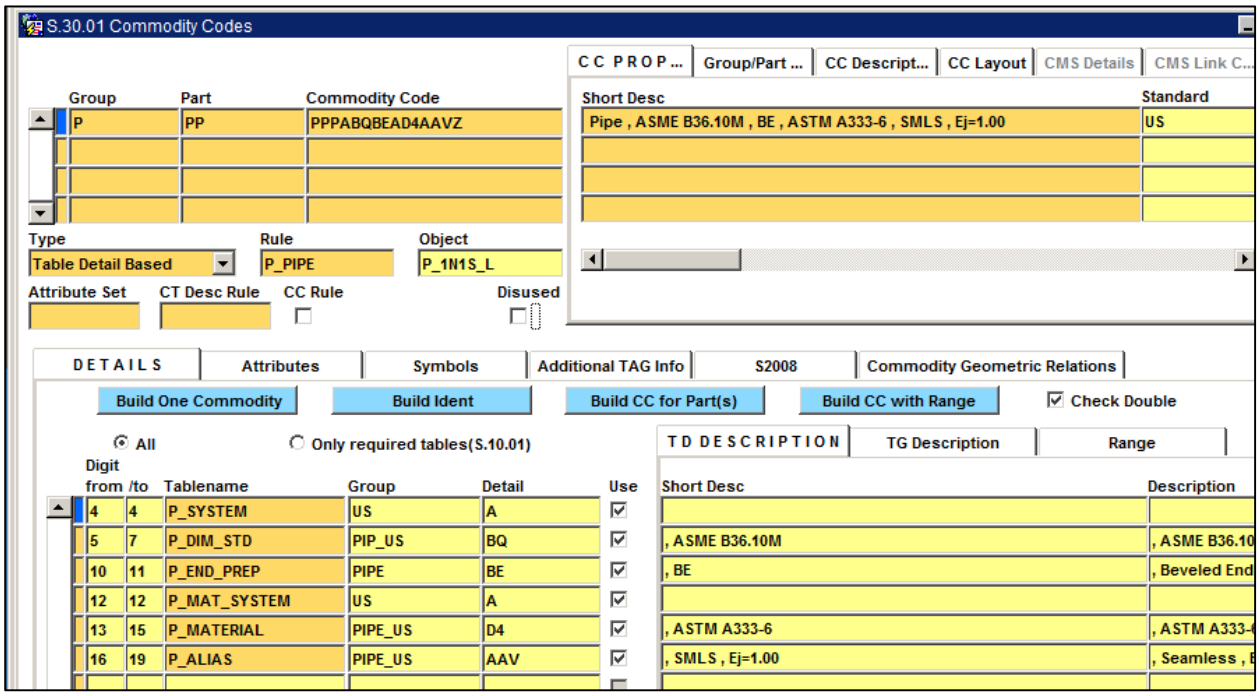
i. The system will set the **Part** field to **LJ**. **Run the Query** by pressing **F8** to view all the Lap Joint Flanges.



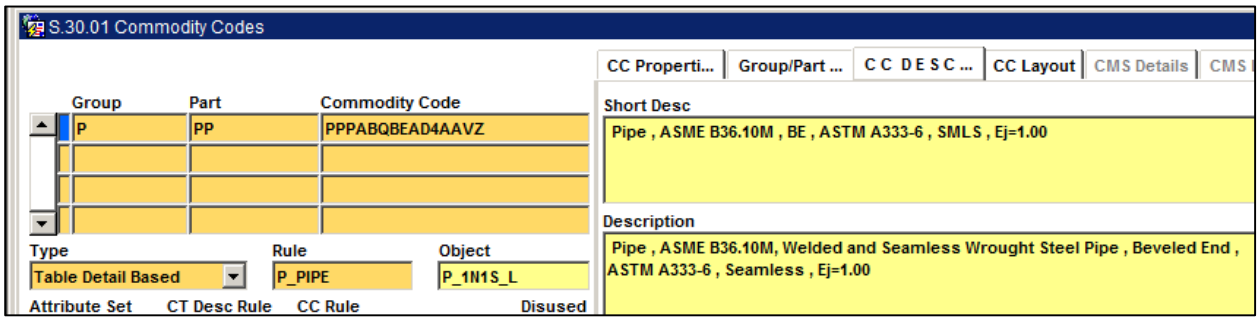


j. Ensure you are in **Query Mode** (**F7**). Type **PPPABQBEAD4AAVZ**in the **Commodity Code** field and **Run the Query** by pressing **F8** to view details of the "Pipe , ASME B36.10M , BE , ASTM A333-6 , SMLS , Ej=1.00" commodity





k. Click on the **CC Description** tab to view the complete description.

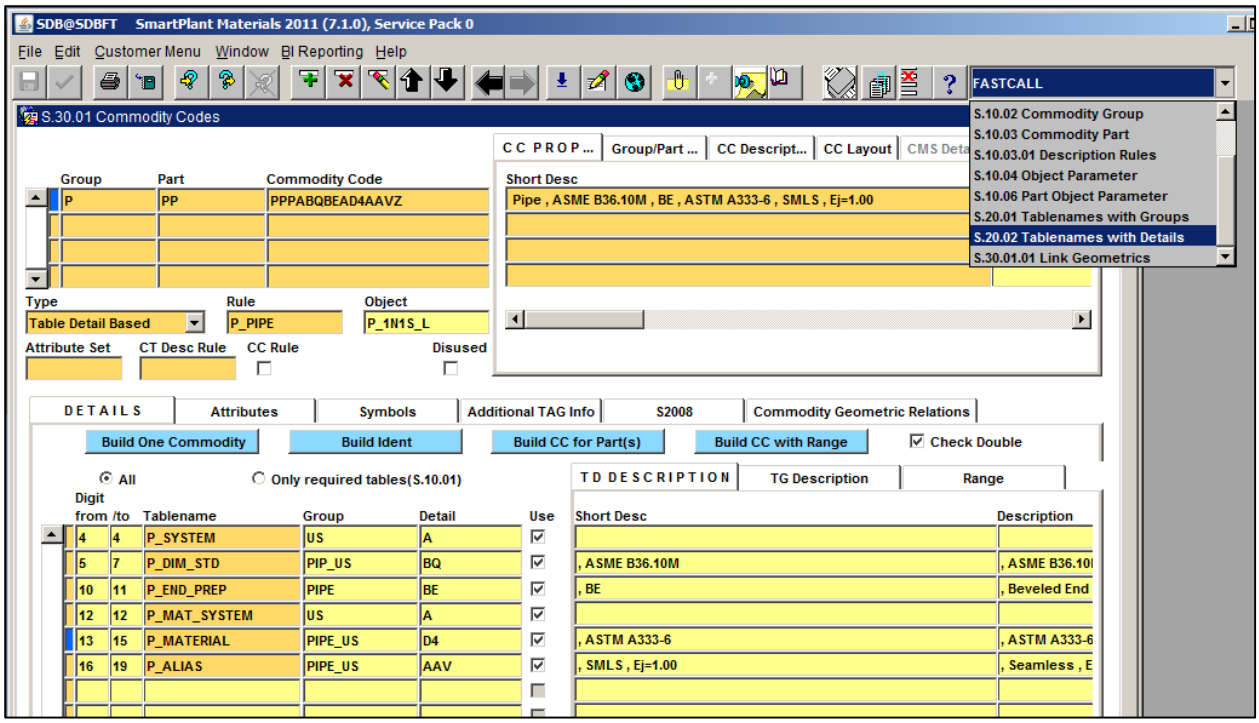


l. Do not close the **"S.30.01 Commodity Codes"** screen

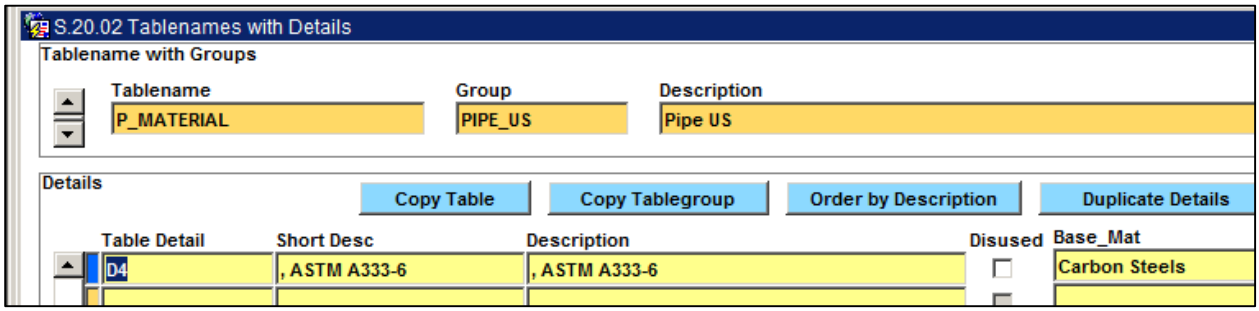
Lab 5. Add new Material

a. In the **Details** tab, click on the table **Detail** field **D4** of the **P_MATERIAL** row

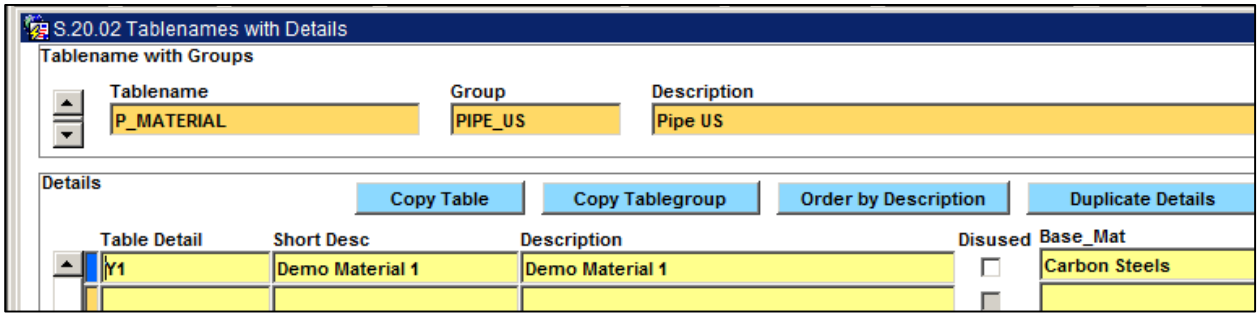
b. Click on the **Fast Call** drop down to access the **"S.20.02 Tablenames with Details"** screen



c. System will display the material code and its description



d. Click on a blank row in the **Details** tab to add a new material **Y<ID>** with a description **Demo Material Y<ID>**. Note: The material will be added in the **PIPE_US** group, as shown in the **Tablename with Groups** section.



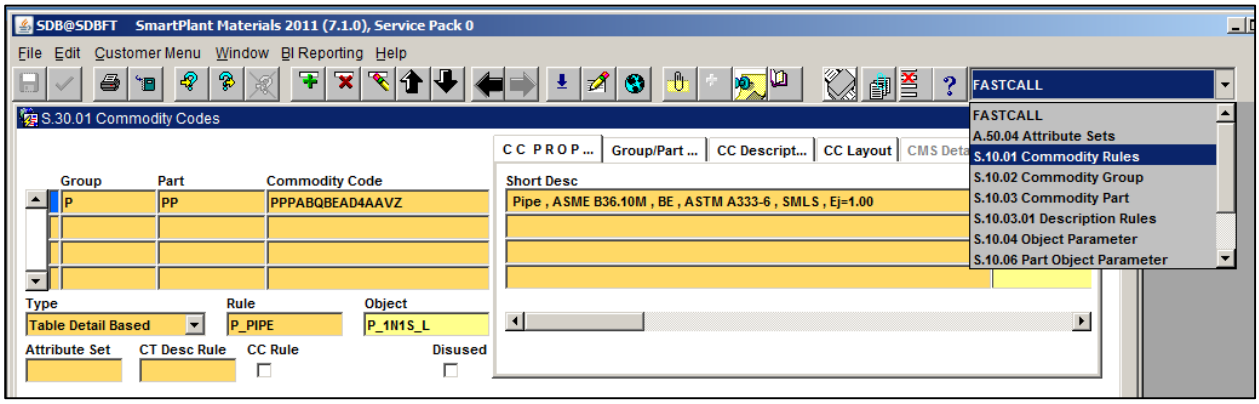
e. **Save** the changes

f. Close the **"S.20.02 Tablenames with Details"** to return to **"S.30.01 Commodity Codes"** screen.

g. Do not close the **"S.30.01 Commodity Codes"** screen

Lab 6. Review Commodity Rule

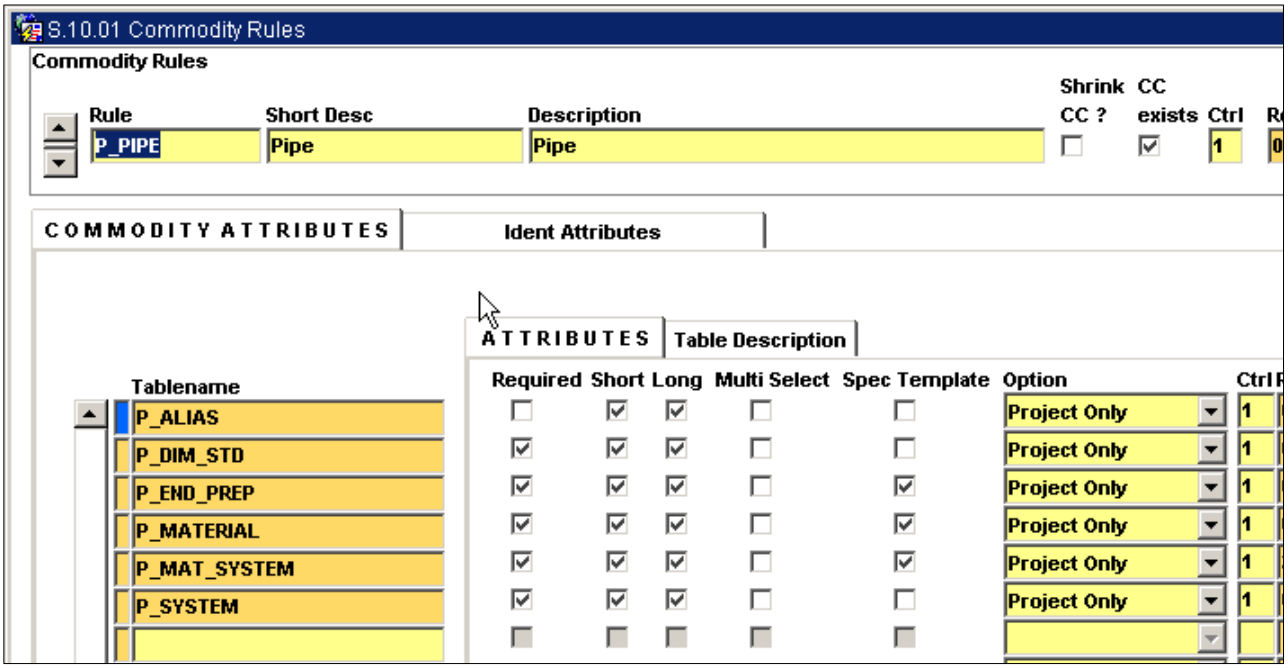
a. Click on the **Fast Call** drop down to access **"S.10.01 Commodity Rule"** screen



b. The screen **"S.10.01 Commodity Rules"** will open in the query mode

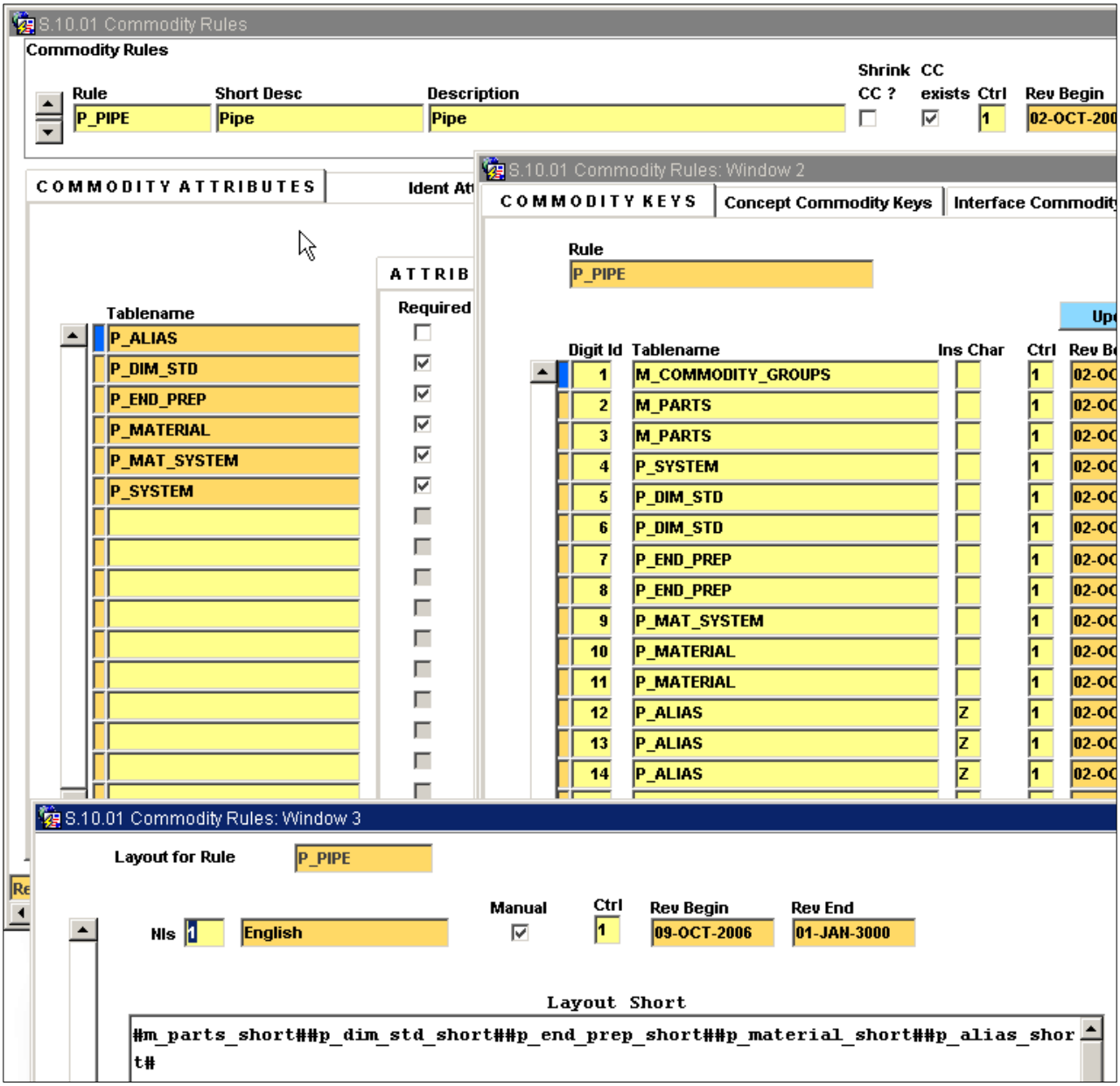
c. Type **P_PIPE** in the **Rule** field and **Run the Query**

d. System will display the tables required to build the commodity code with this rule.



e. Click on the **Go To Next Block** Icon (big black arrow pointing right) twice to open the **"S.10.01 Commodity Rules: Window 2"** screen, which shows how the Commodity Code will be built based on table details.

f. Click on the **Go To Next Block** Icon to open the **S.10.01 Commodity Rules: Window 3"** screen, which shows how the descriptions will be built from table details

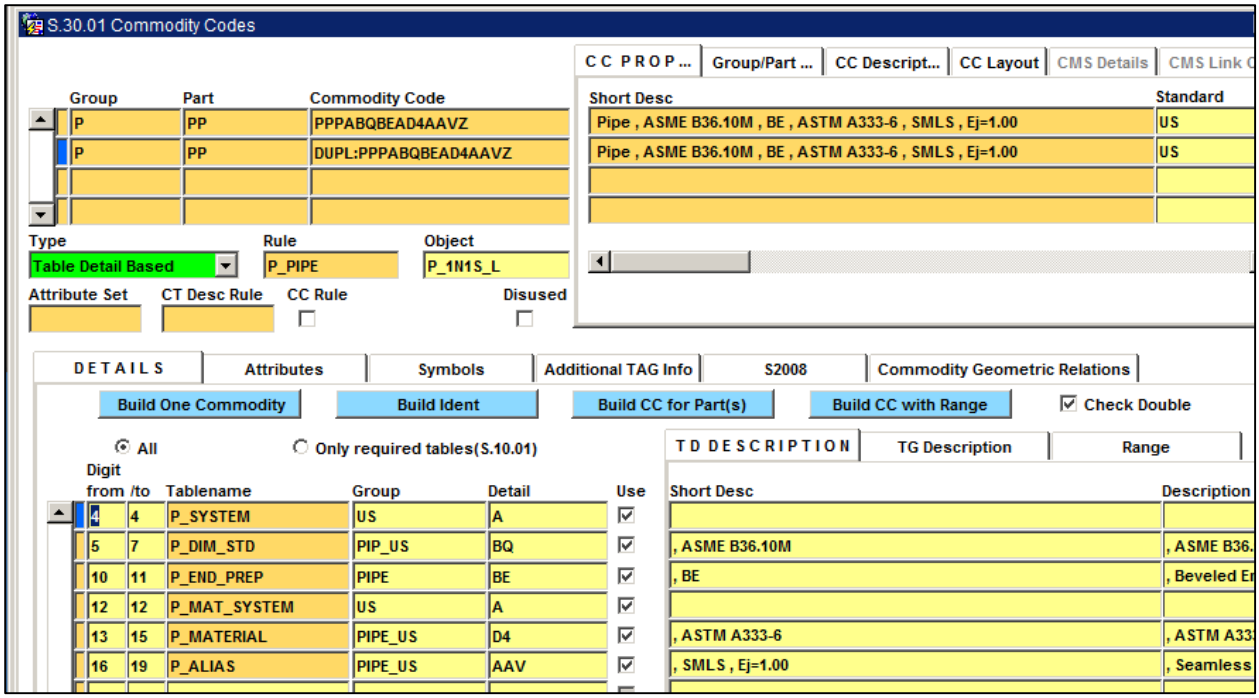


g. Close the three **"S.10.01 Commodity Rule"** screens to return to the **"S.30.01 Commodity Codes"** screen

Lab 7. Copy an existing Commodity Code

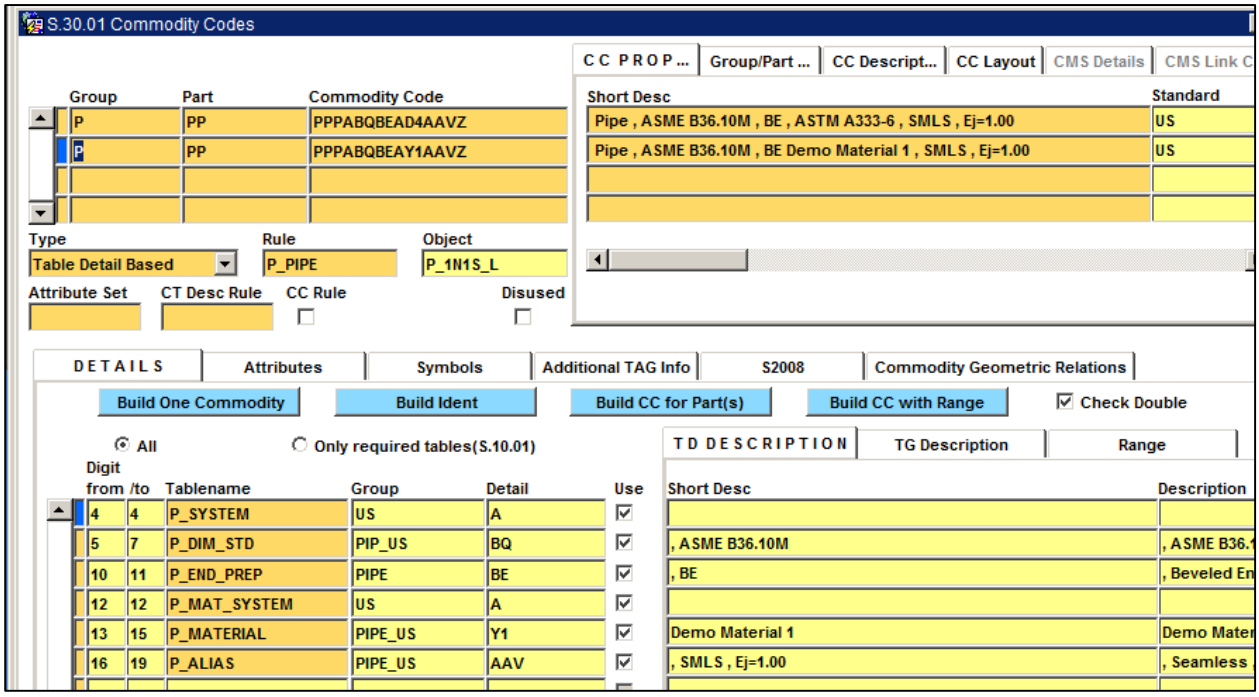
Note: If multiple students are working on the same server, it is possible that you may encounter an error in this lab, in which case, please repeat the lab by selecting a different commodity code in step a, l, m and n respectively.
Note: If you do not find the specific commodity code in your installation, choose the closest Commodity Code.

a. Search for the commodity code **PPPABQBEAD4AAVZ**
b. Select the first commodity code that is returned, by placing the cursor in Commodity Code field in the upper section.
c. Add a new row by clicking on the **New Record** (Green Plus sign) icon
d. Duplicate the commodity code by pressing function key **F4**
e. The new commodity code will read as **DUPL: PPPABQBEAD4AAVZ**
f. In the **Details** tab, navigate to the **P_MATERIAL** row and change the Material code to **Y<ID>** using **List of Values** (**F9**). Add the Material Code Y1 if it does not exists.
g. Save the changes

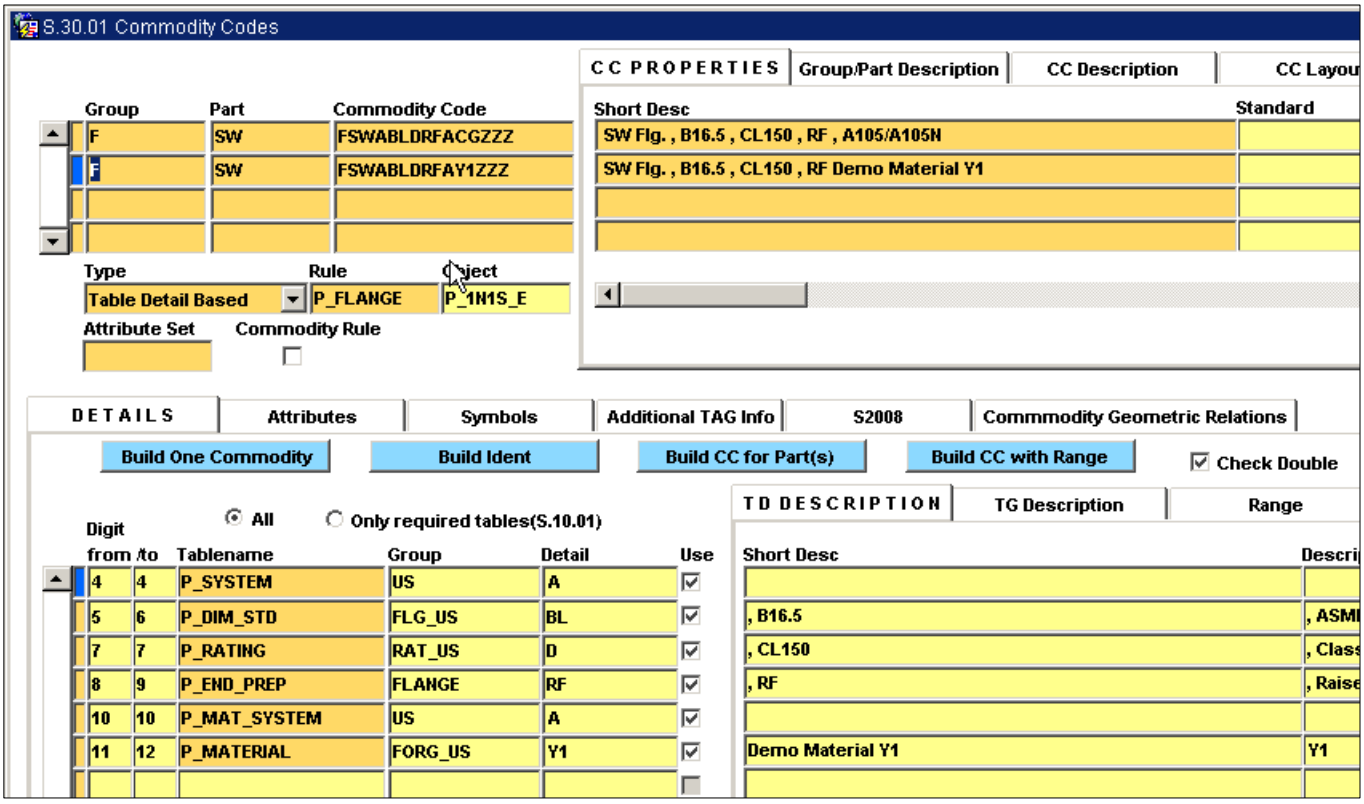


h. Click on the **Build One Commodity** button to create a new commodity code
i. System will ask if you want to generate **Only CC** or **CC+Idents**
j. Click on the **Only CC** button

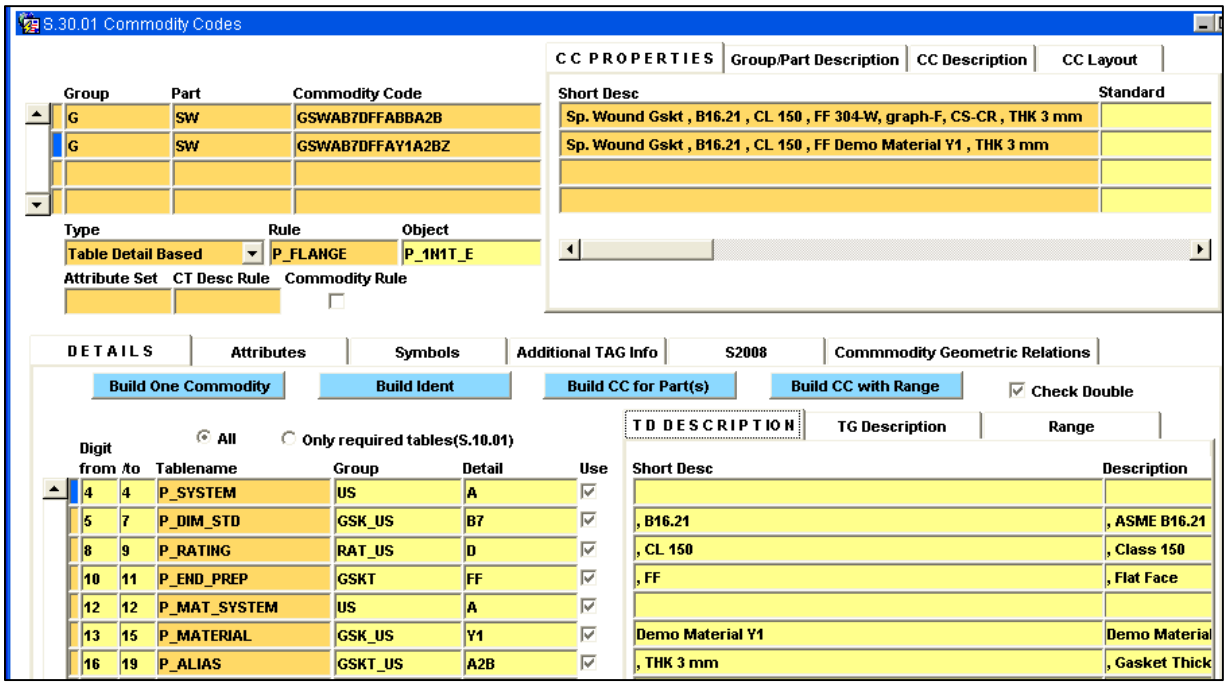
k. System will assign a new Commodity Code **PPPABQBEAY<ID>AAVZ**



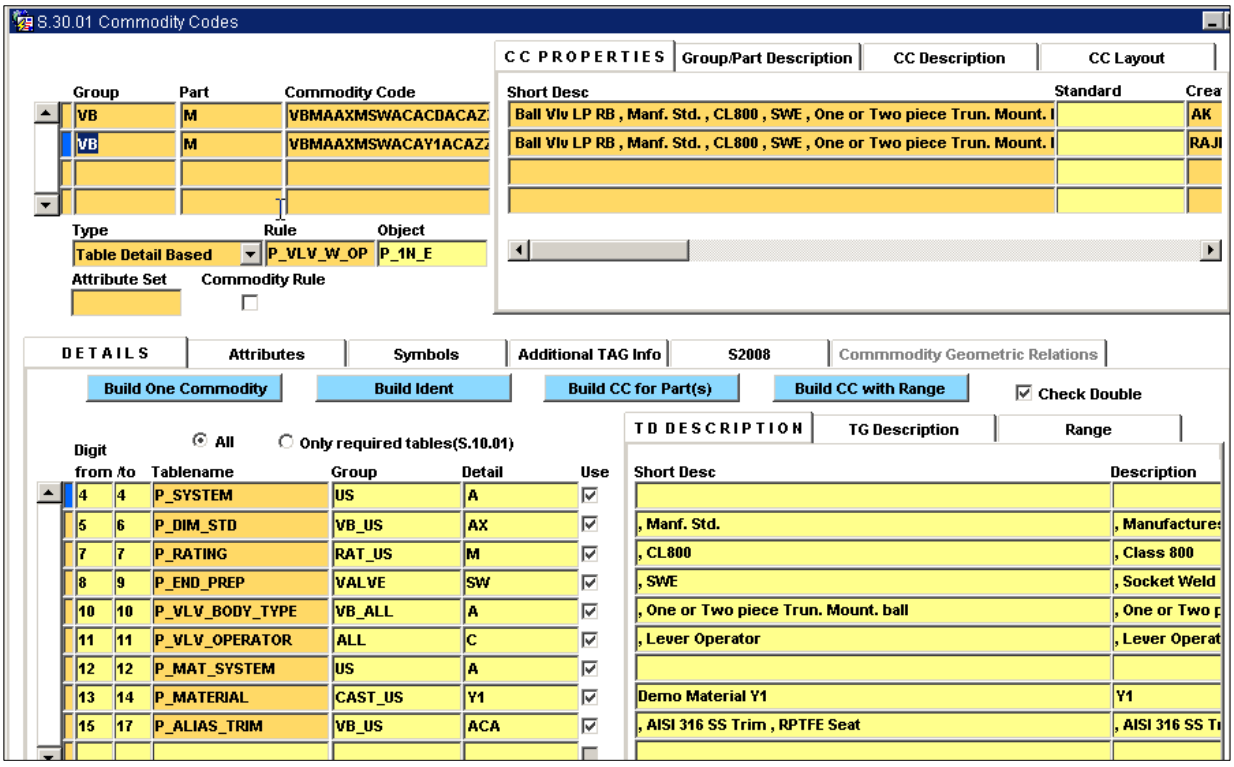
l. Next search for a flange **FSWABLDRF%** and build a flange with material **Y<ID>**



m. Similarly build a gasket from any one returned by searching for **GSWAB%.** Add the Material Code Y1 if it does not exists.



n. Similarly build a ball valve from any one returned by searching for **VBBAAXD%.** Add the Material Code Y1 if it does not exists.



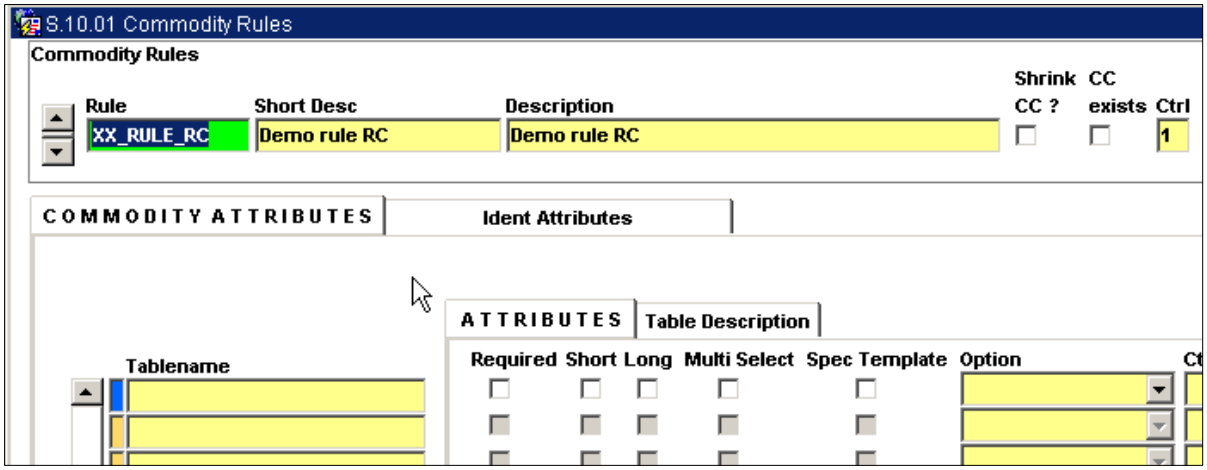
Lab 8. Extending the SDB - Build a custom Commodity Rule

a. Launch **"S.10.01 Commodity Rules"**

b. Ensure you are in the **Data Entry (Green Background)** mode (Rule field will have a green background) and not the **Query Mode**. (Click the **Blue Question mark** with a **Red X** icon to change from **Query** mode to **Data Entry** mode)

c. Enter a Rule code of **XX_RULE_<Init>** and Description (**Demo Rule <Init>**).

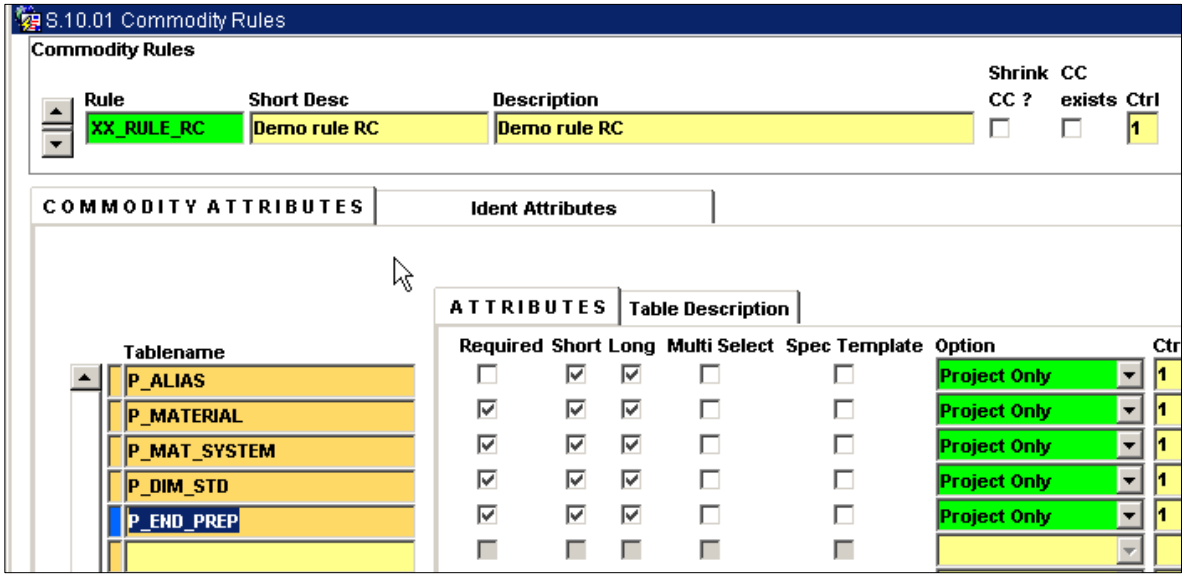
d. Save the changes



e. Add the table **P_ALIAS** in the **Commodity Attributes** tab as **Not Required** by clicking on a blank row and pressing Function Key **F9** to select **P_ALIAS** from **LOV** for the **Tablename**.

f. Similarly add the tables **P_MATERIAL, P_MAT_SYSTEM, P_DIM_STD, P_END_PREP** in the **Commodity Attributes** tab but mark them as **Required**.

g. Save the changes

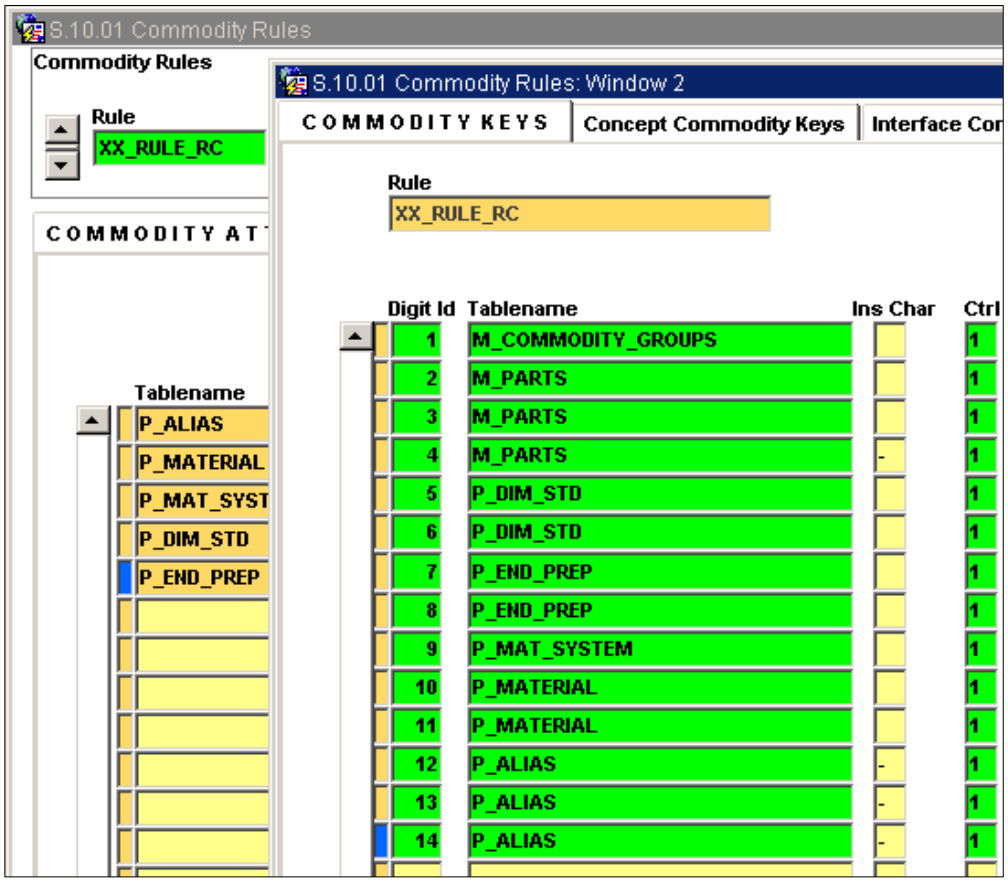


h. Click on the **Go To Next Block** Icon to view **"S.10.01 Commodity Rules: Window 2"**.

i. Enter the sequence in which the table codes will be concatenated to build the commodity code as follows

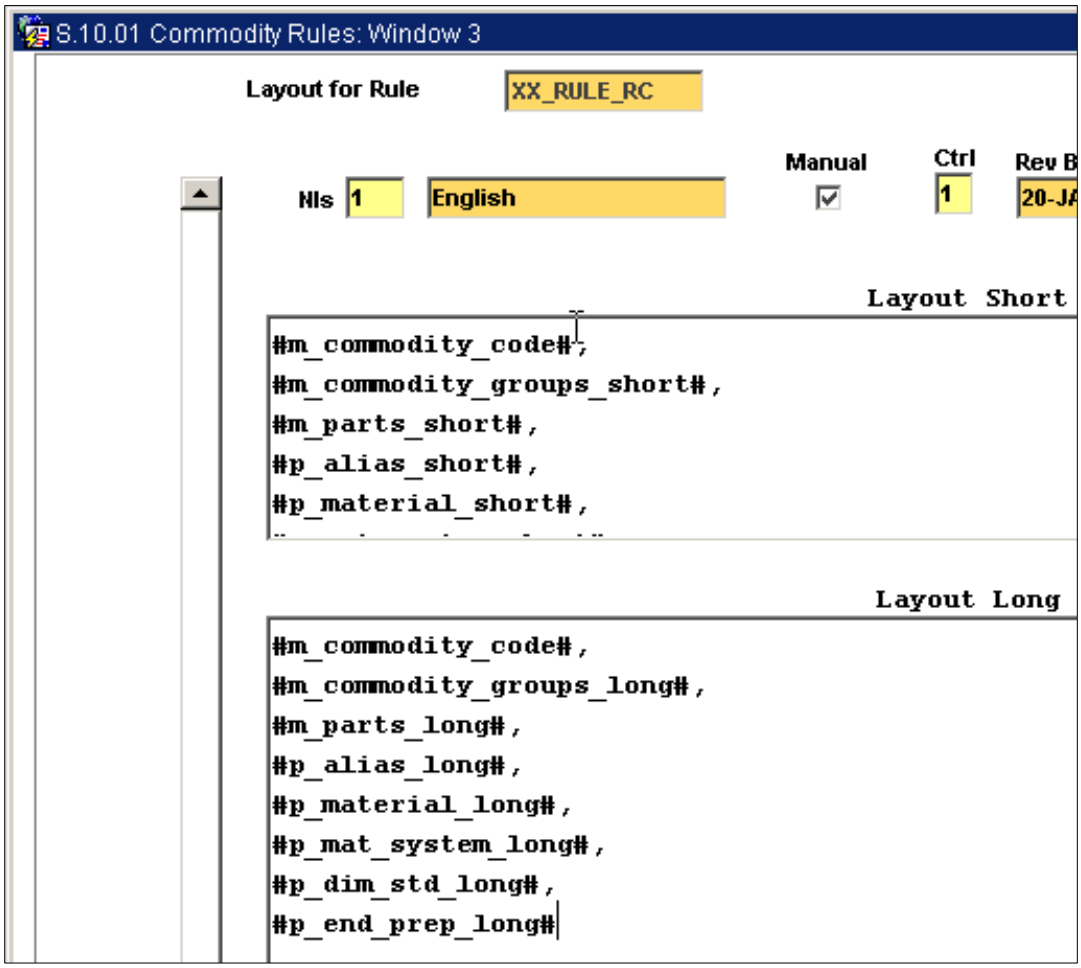
1. M_COMMODITY_GROUPS
2. M_PARTS
3. M_PARTS
4. M_PARTS (Ins Char: -)
5. P_DIM_STD
6. P_DIM_STD
7. P_END_PREP
8. P_END_PREP
9. P_MAT_SYSTEM
10. P_MATERIAL
11. P_MATERIAL
12. P_ALIAS (Ins Char: Z)
13. P_ALIAS (Ins Char: Z)
14. P_ALIAS (Ins Char: Z)

j. Save the changes



k. Click on the **Go To Next Block** Icon to view **"S.10.01 Commodity Rules: Window 3"**.

l. View the default **Short** and **Long Layout** that will be used to generate the commodity description. Place a **comma** between each of the codes.



m. Save the changes

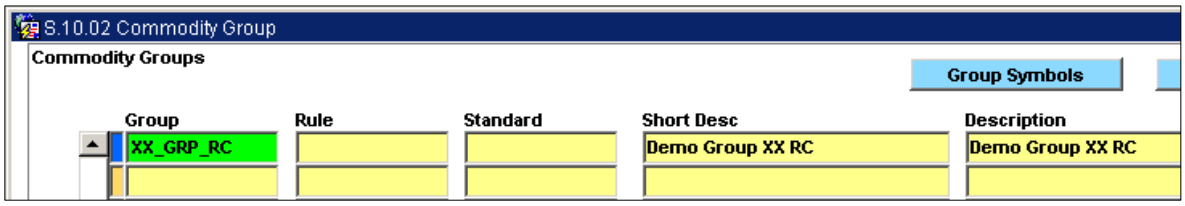
n. Close all the screens.

Lab 9. Extending the SDB - Build a new Commodity Group

a. Launch **"S.10.02 Commodity Group"**

b. Ensure you are in the **Data Entry (Green Background)** mode and not the **Query Mode**

c. Enter a Group Code **XX_GRP_<Init>** with description of **Demo Group XX <Init>**.



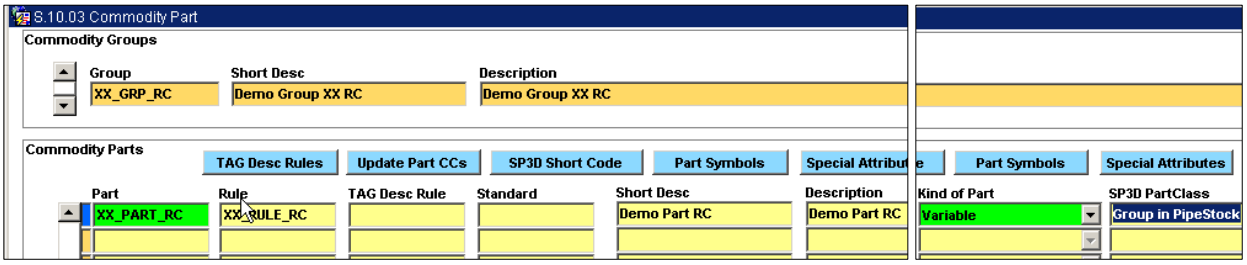
d. Leave the **Rule** and the **Standard** field blank.

e. Save the changes

f. Close all the screens

Lab 10. Extending the SDB - Build a new Commodity Part

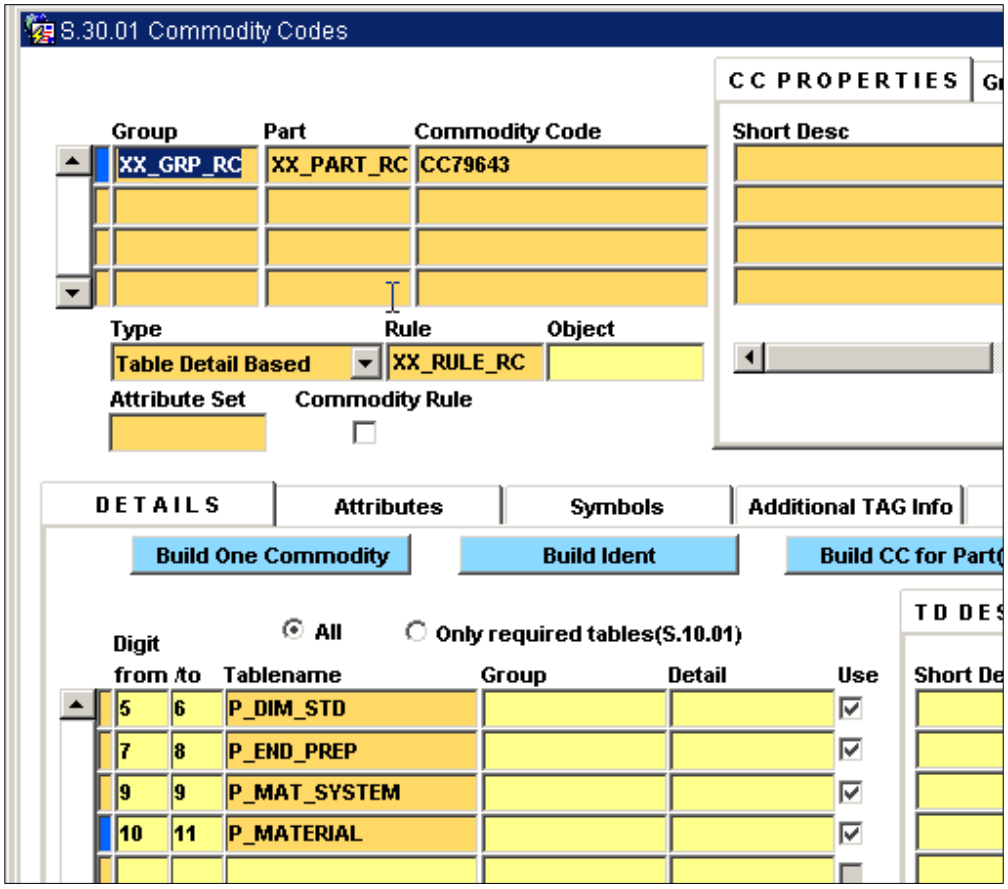
a. Launch **"S.10.03 Commodity Part"**
b. Ensure you are in the **Query Mode** and not the **Data Entry (Green Background)** mode
c. In the upper section, type **XX_GRP_<Init>** in the Group Code and **Run the Query**
d. In the bottom section, add a new Part **XX_PART_<Init>** with description **Demo Part XX <Init>** and **BR_LEGEND = 1.**
e. Select the **Rule XX_RULE_<Init>** created in previous lab via the **LOV (F9)**.
f. Leave the **Standard** field blank. Ensure that the **Kind of Part** is set to **Variable**
g. From the List of Values for **SP3D Part Class** select **PipeStock**. This will ensure that all the piping commodity codes created for this part will be exported in the PipeStock sheet in the SP3D Catalog workbooks.



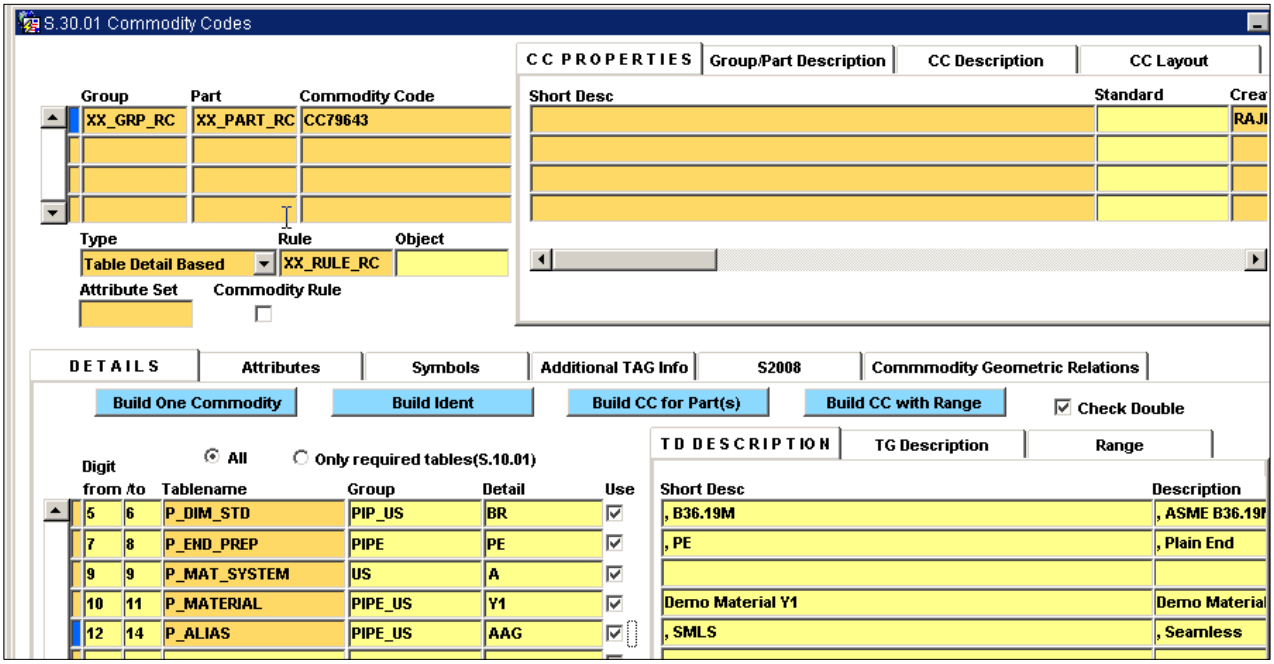
h. Save the changes
i. Close all the screens.

Lab 11. Build a new Commodity Code

a. Launch **"S.30.01 Commodity Codes"**
b. Ensure you are in the **Data Entry (Green Background)** mode and not the **Query Mode**
c. Set the **Group XX_GRP_<Init>** and **Part XX_PART_<Init>** from **LOV** (**F9**)
d. Save the changes
e. The system will assign a dummy commodity code **CC1234567**, **Rule XX_RULE_<Init>** and show the required tables in the **Details** tab based on the rule

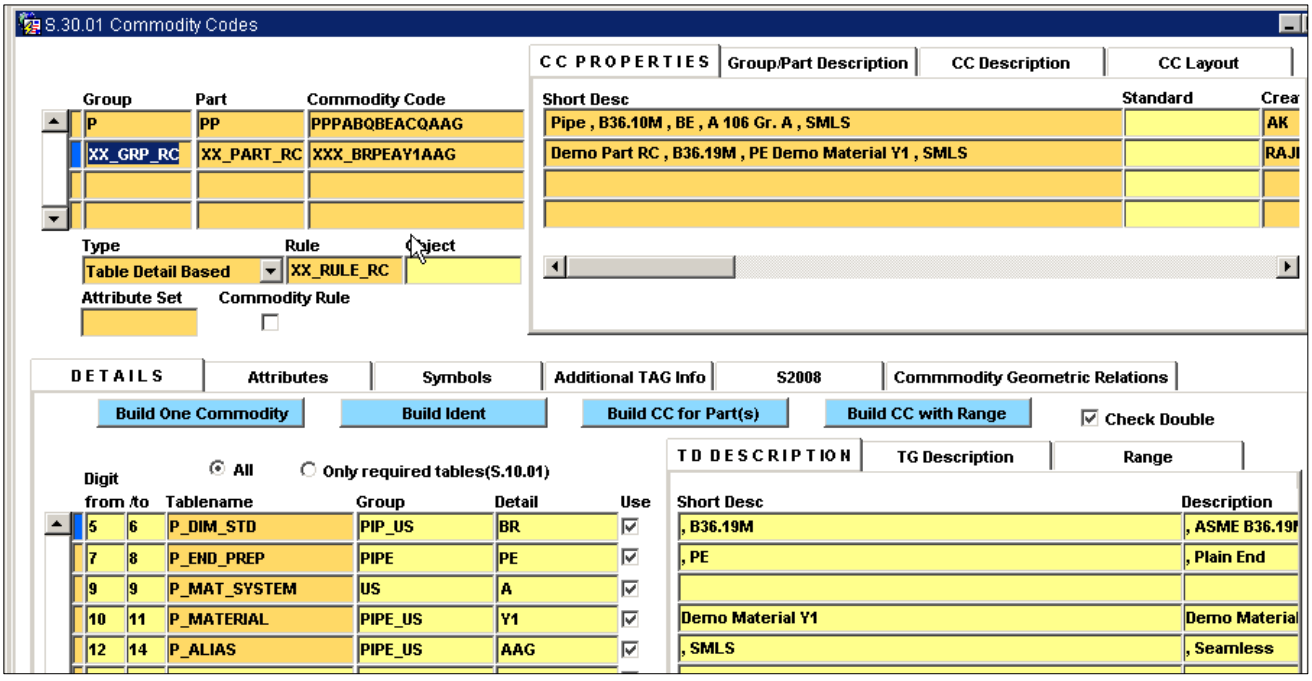


f. In the **Details** tab click on the **Group** field and select the codes as shown below for each of the tables.
g. Click on the **Digit From** field of the first blank row in the **Details** tab and select the **P_ALIAS** table from the **LOV**.
h. Click on the **Group** field and select the group **PIPE_US** code **AAG** for **P_ALIAS** as shown below
i. Save the changes



j. Click on the **Build One Commodity** button to create a new commodity code. System will ask if you want to generate **Only CC** or **CC+Idents**. Click on the **Only CC** button

k. Verify that the system assigns the following commodity code **XXX_BRPEAY<ID>AAG**

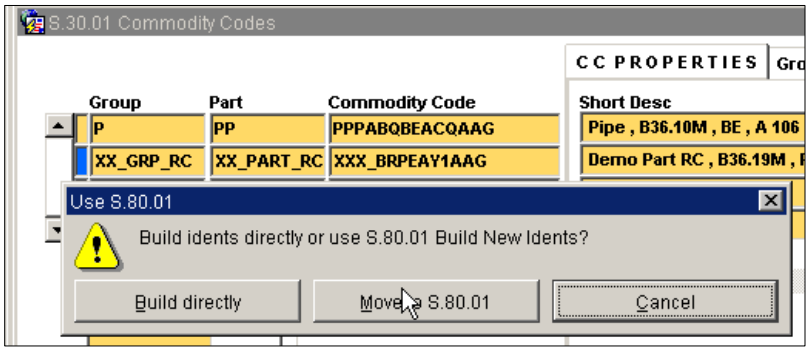


l. Close all the screens

Lab 12. Build Idents using existing Geometrics

a. Launch **"S.30.01 Commodity Codes"** Screen

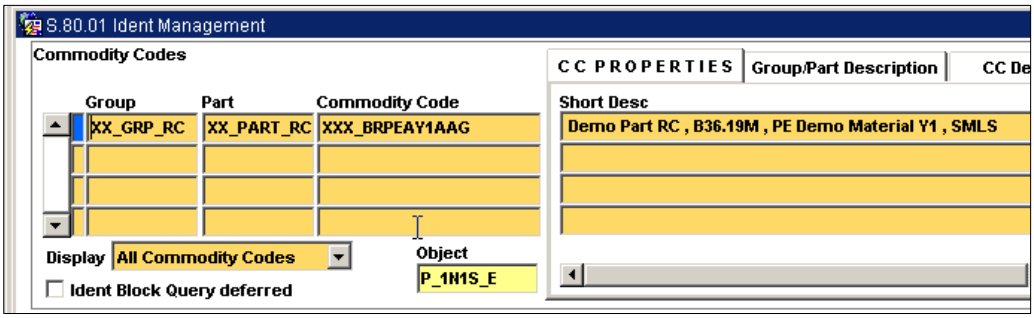
b. Search for commodity code **XXX_BRPEAY<ID>AAG** and **click** the **Build Ident** button



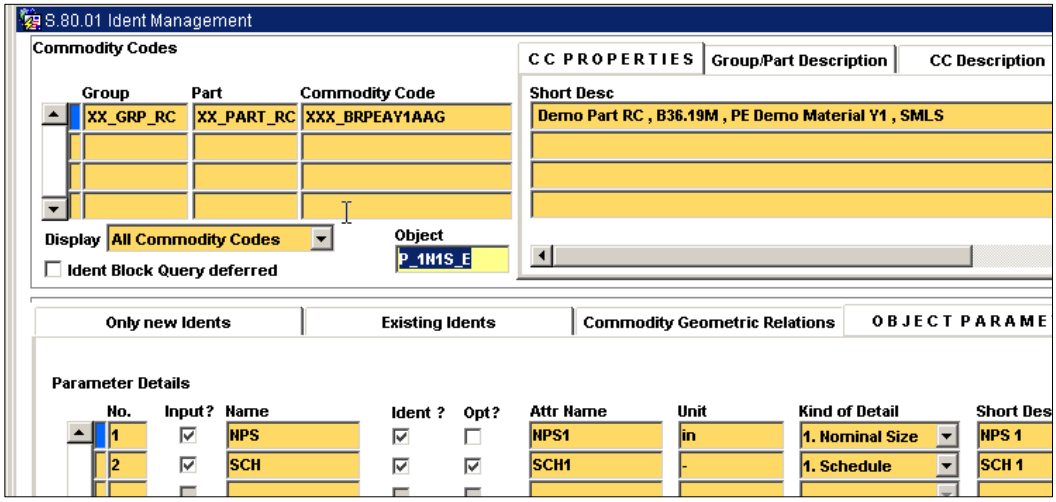
c. From the prompted dialog, click on the **Move to S.80.01** screen button.

   i. FYI: Alternatively you could have launched **"S.80.01 Ident Management"** screen and searched for the Commodity Code **XXX_BRPEAY<ID>AAG**.

d. From the List of Values select **P_1N1S_E** for the **Object** field and save the changes



e. Click on the **Object Parameter** tab to view the attributes needed to fully qualify the CC to build Idents. These attributes are associated with the **Object P_1N1S_E**.

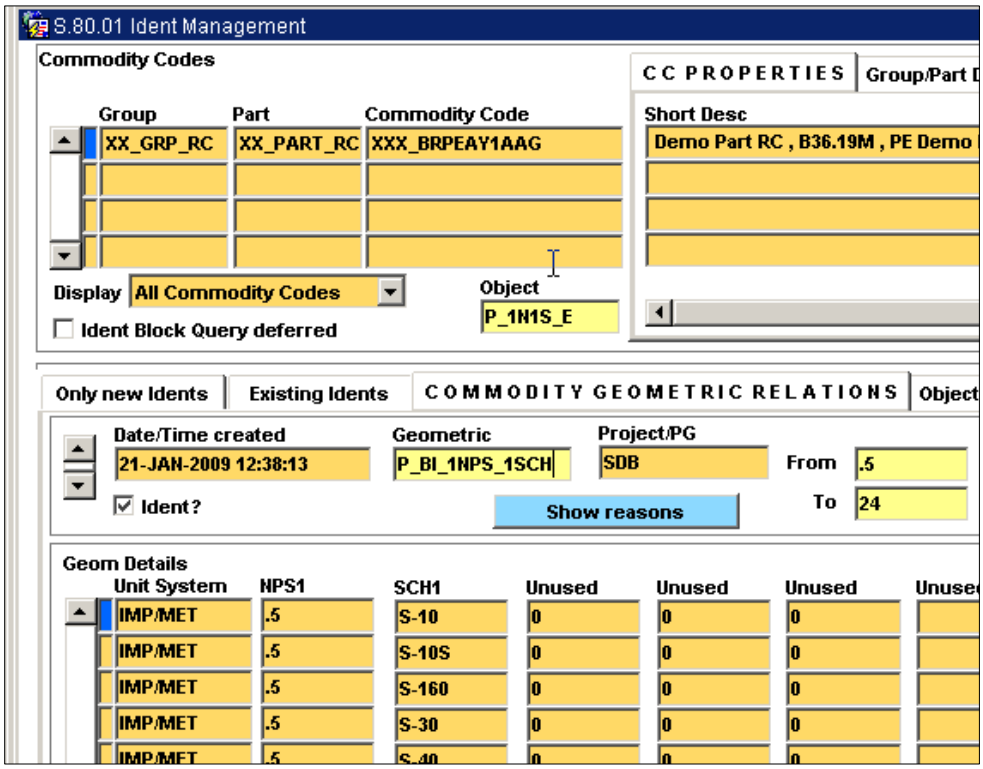


f. Click on the **Commodity Geometric Relations** tab

g. Add a new relation by selecting the **Geometric** table **P_BI_1NPS_1SCH** (via **LOV**) with **From** and **To** range of **.5** to **24.** Also check the **Ident?** Checkbox.

h. Save the changes

i. System will display all the Size / Schedule combinations associated with the **Geometric P_BI_1NPS_1SCH** in the **Geom Details** section of the **Only New Idents** tab.

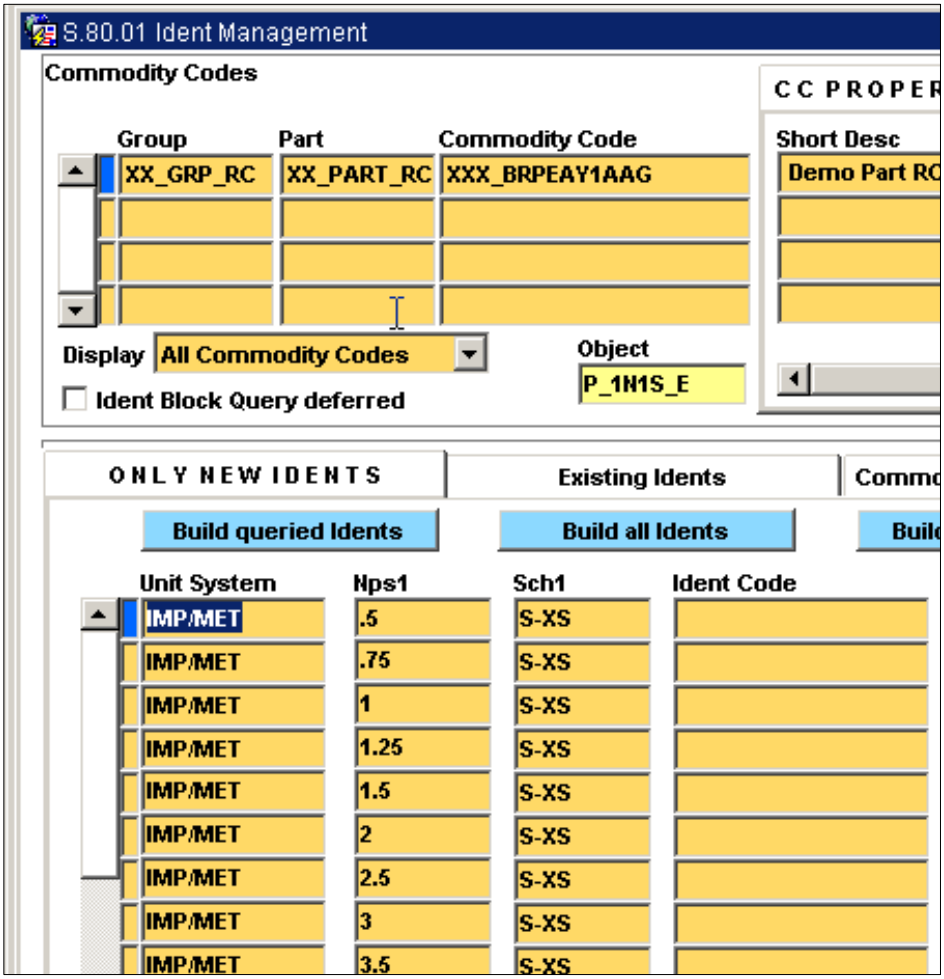


i. FYI: In the **Commodity Geometric Relations** tab, if the **Idents?** Is checked then the relationship will be used to build idents. Other relationships can be defined to specify unit weight, surface area and physical dimensions such as Face to Face, Face to Center etc. required by Designing and Modeling tools such as SP3D, PDS, PDMS. Do not check the **Idents?** for these relationships.

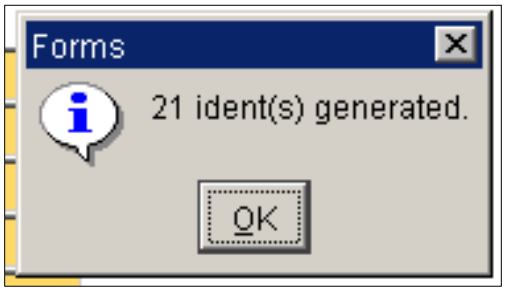
i. FYI: There are the four types of Geometric Tables i.e. **Commodity Geometric**s (to build Idents), **Standard Geometrics** (dimensions as per Standards), **Other Geometrics** (Non Commodity or Standards related geometric i.e. Gasket thickness) and **Filter Geometrics** (to limit valid idents for Specs).

ii. FYI: Multiple relationships can be defined for the Commodity Group / Part by qualifying it with filters based on sizes and table details.

j. Let us assume that for this pipe we use only the Extra Strong Schedule. To limit the idents to those sizes associated with schedule S-XS, press **F7** to enter **Query Mode**. Type **S-XS** in **Sch1** field and **Run the Query**.

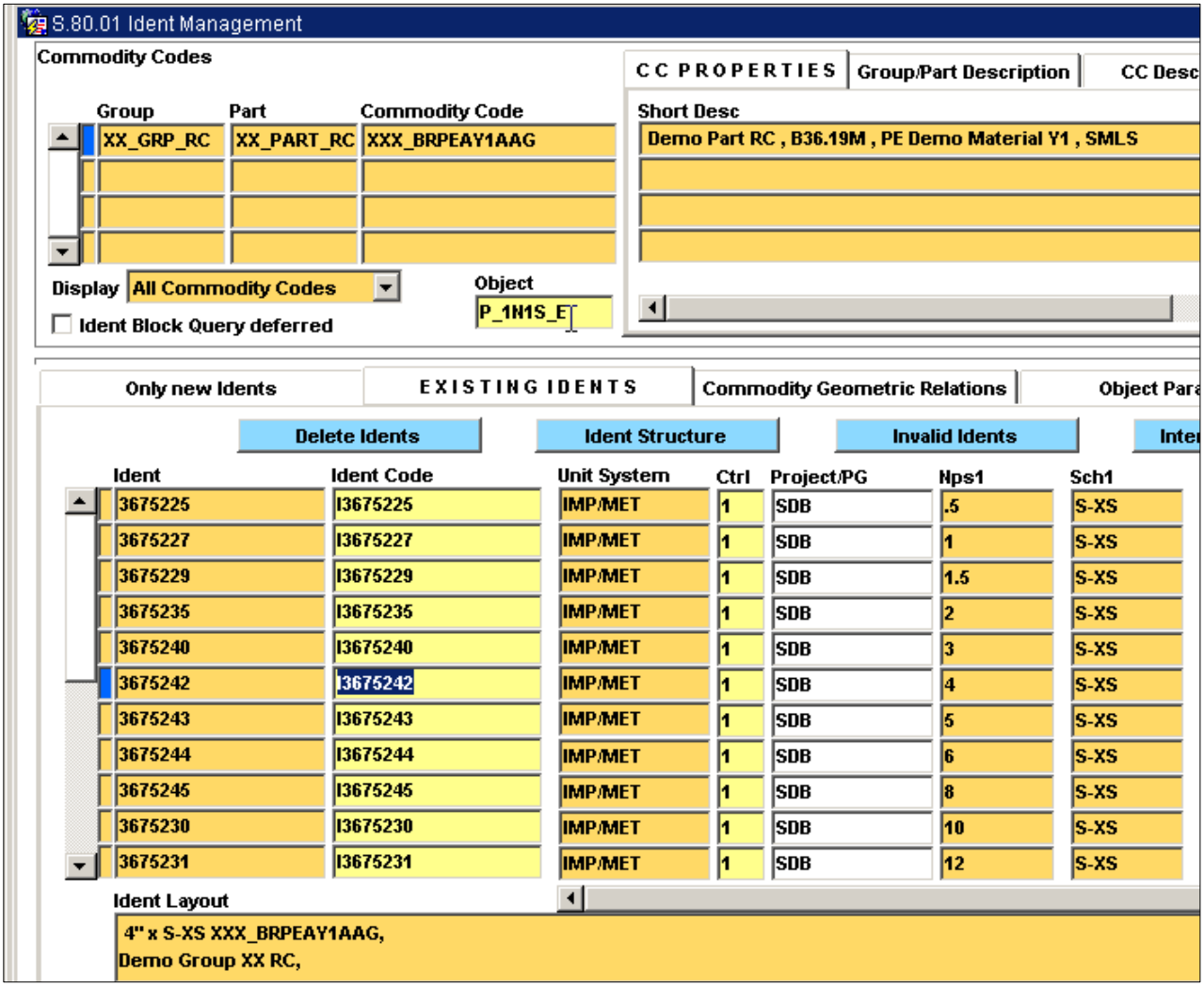


k. Click on the **Build Queried Idents** to build idents with schedule **S-XS**. System will display the number of Idents created.



l. Click on the **Existing Idents** tab to review the idents that have been created.

m. Let us assume that for this pipe, the sizes .75”, 1.25”, 2.5” and 3.5” are not valid. **Click** on any field in these rows and press the **Delete** icon to delete the idents associated with sizes **.75**, **1.25**, **2.5** and **3.5**



i. FYI: Every **Ident** is assigned a unique no. (**Ident** field). Additionally the system assigns an **Ident Code** (default is **Ident no** with a prefix of **I**). Rules can be defined to build ident codes as per user requirement.

n. Close all the screens

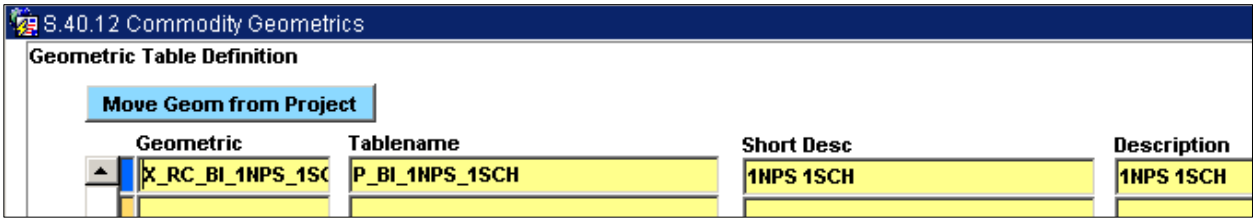
Lab 13. Extending the SDB – Build a new Commodity Geometric Table

a. Launch **"S.40.12 Commodity Geometrics"** screen to create a new Commodity Geometric table.

b. Ensure you are in the **Data Entry (Green Background)** mode and not the **Query Mode**

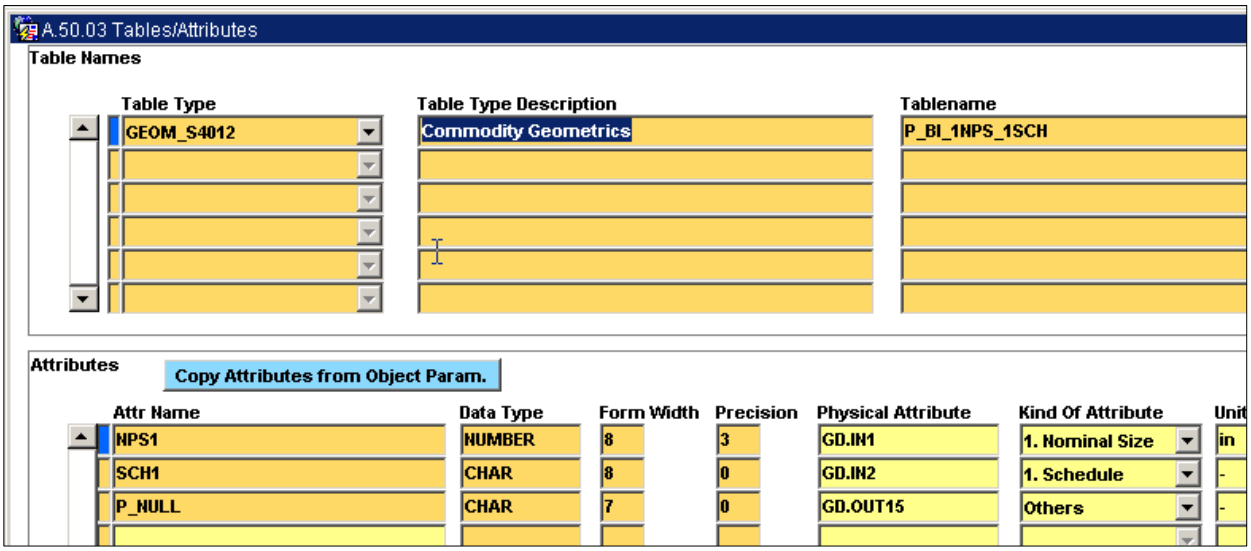
c. Type **X_<Init>_BI_1NPS_1SCH** in the **Geometric** field and select **Tablename** of **P_BI_1NPS_1SCH** from **LOV.**

d. Type in a **Description** of **1NPS 1SCH** and select **Standard** of **US** from **LOV**.



e. Save the changes

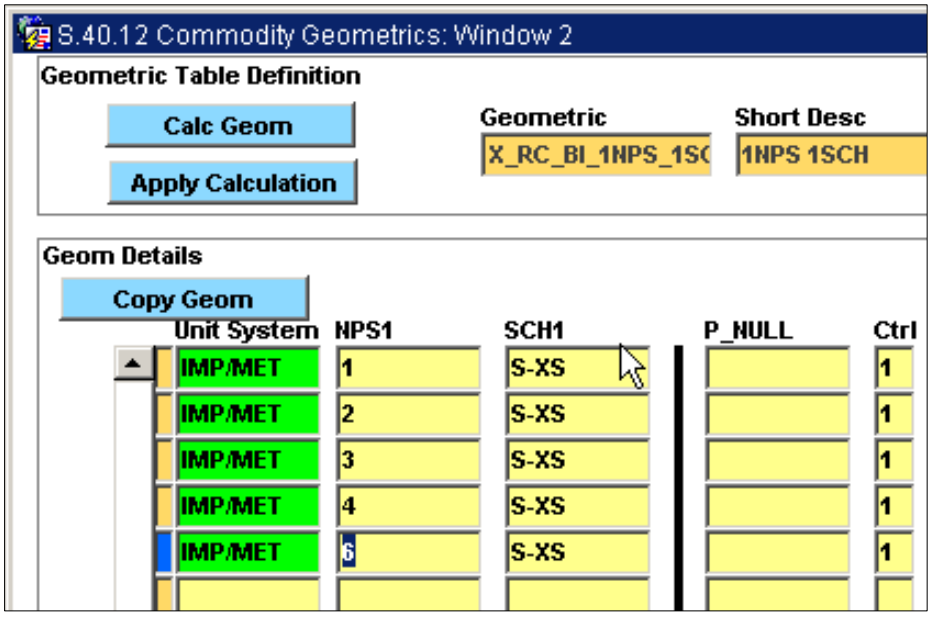
f. Double Click on the **Tablename P_BI_1NPS_1SCH** to view the attributes associated with it. Note that the table **P_BI_1NPS_1SCH** has two input fields **NPS1** and **SCH1**, which means that our Geometric table will consist of size and schedule.



g. Close the **"A.50.03 Tables/Attributes"** screen to return to **"S.40.12 Commodity Geometrics"**

h. Click on the **Go To Next Block** Icon to move to **"S.40.12 Commodity Geometrics: Window 2"** to enter the valid size / schedule combinations.

i. Enter Size / Schedule combinations as shown below and save the changes



j. Close all the screens

Lab 14. Building Idents using the new Geometric Table

a. Build a new Commodity Code

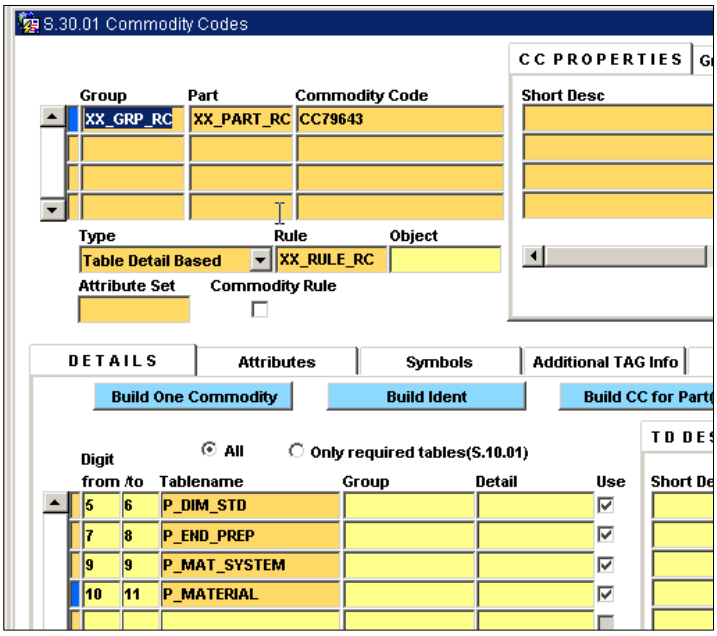
i. Launch **"S.30.01 Commodity Codes"**

ii. Ensure you are in the **Data Entry (Green Background)** mode and not the **Query Mode**

iii. Set the **Group XX_GRP_<Init>** and **Part XX_PART_<Init>** from **LOV** (**F9**)

iv. Save the changes

v. The system will assign a dummy **commodity code CC1234567**, **Rule XX_RULE_<Init>** and required tables in the **Details** tab.



vi. In the **Details** tab click on the **Group** field and select the codes as shown below for each of the tables.

Tablename	Group	Detail	Short Desc
P_DIM_STD	PIP_US	BR	, B36.19M
P_END_PREP	PIPE	BE	, BE
P_MAT_SYSTEM	US	A	
P_MATERIAL	PIPE_US	Y<ID>	Demo Material <ID>

vii. Click on the **Digit From** field of the first blank row in the **Details** tab and select the **P_ALIAS** table from the **LOV**.

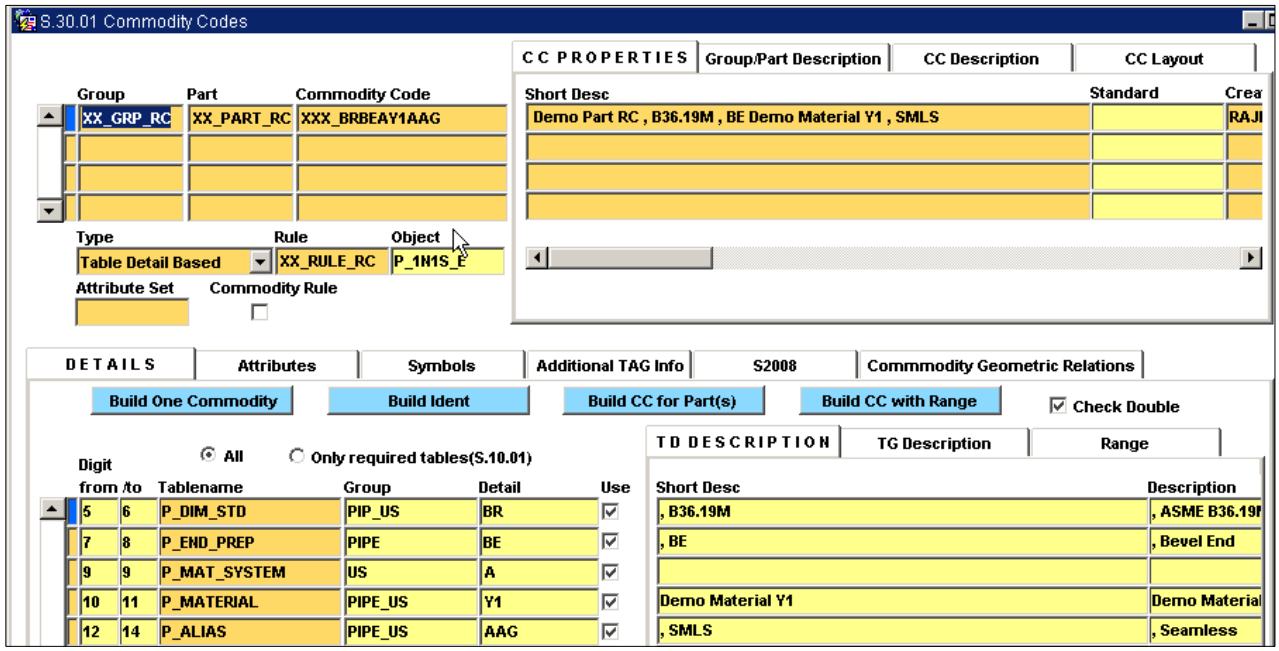
viii. Click on the **Detail** field and select the code **AAG** as shown below

ix. Save the changes

x. Click on the **Build One Commodity** button to create a new commodity code. System will ask if you want to generate **Only CC** or **CC+Idents**. Click on the **Only CC** button

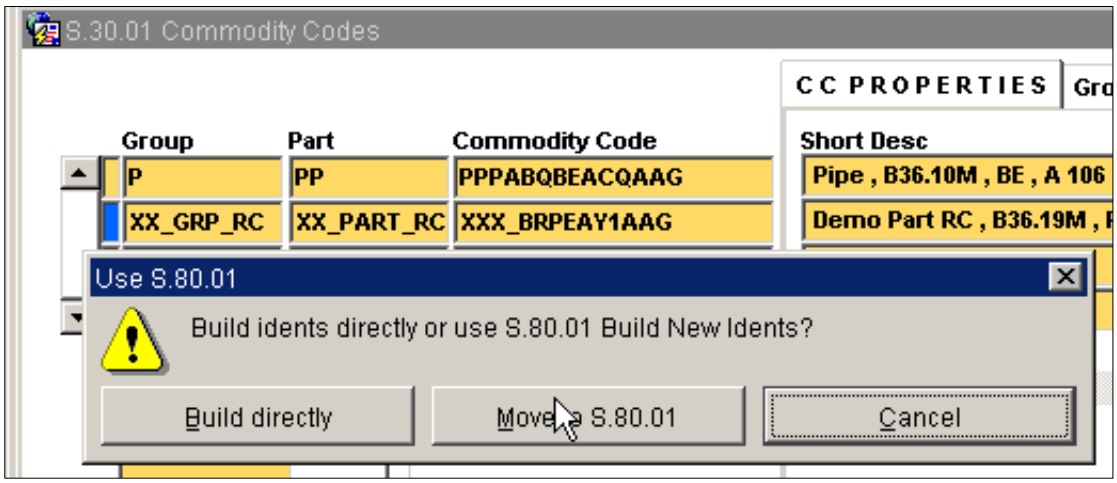
xi. Verify that the system assigns the commodity code **XXX_BRBEAY<ID>AAG.**

I. FYI: Note that the system assigned the **Object P_1N1S_E** based on the first commodity code we created for **Group XX_GRP_<Init>** and **Part XX_PART_<Init>**



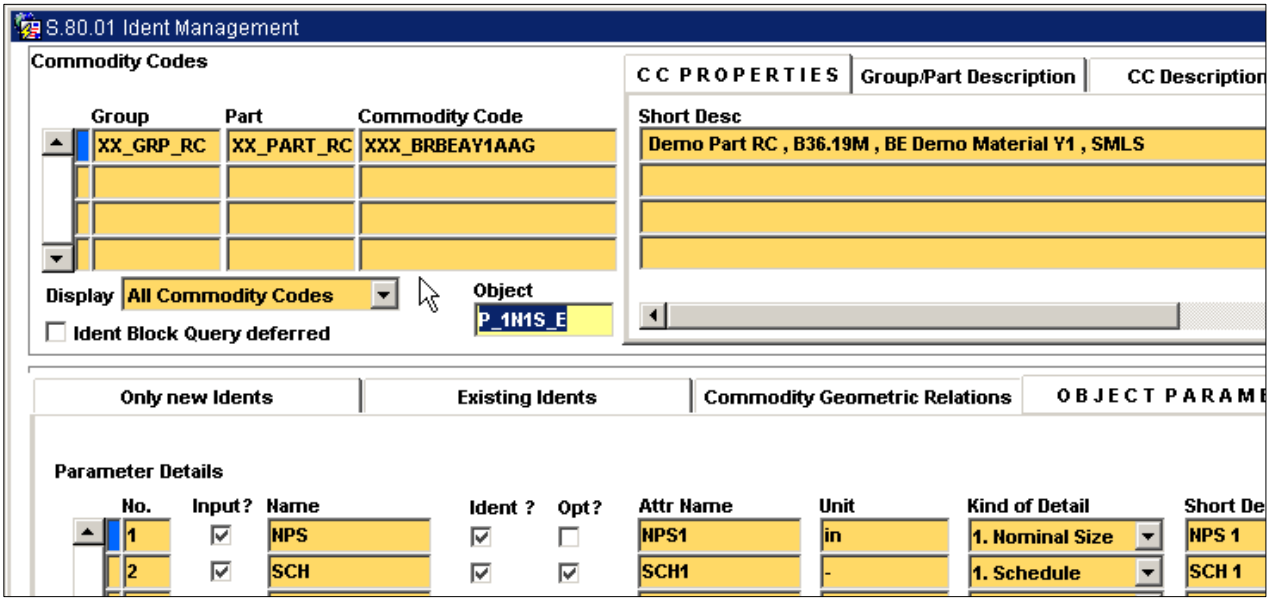
b. <u>Build Idents using the new Geometric Table</u>

i. Click on the **Build Ident** button



ii. From the prompted dialog, click on the **Move to S.80.01** screen button.

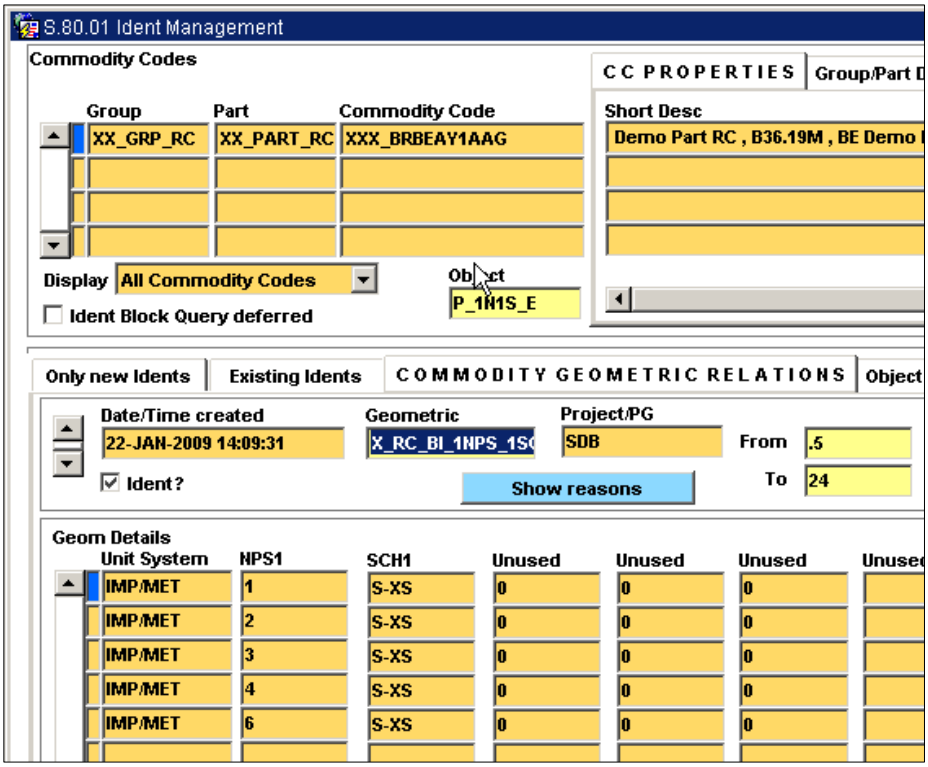
iii. Click on the **Object Parameter** tab to view the attributes needed to fully qualify the CC to build Idents.



iv. Click on the **Commodity Geometric Relations** tab

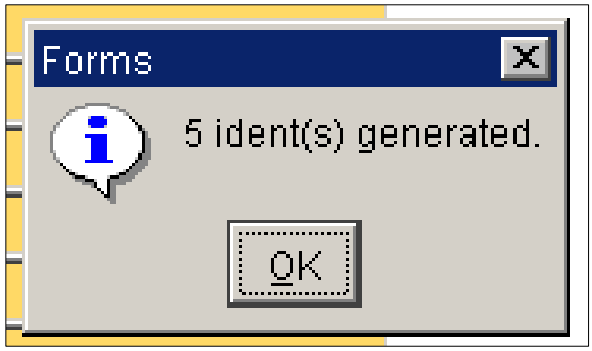
v. Add a new relation by selecting the **Geometric** table **X_<Init>_BI_1NPS_1SCH** (via **LOV**) with **From** and **To** range of **.5** to **24.** Also check the **Ident?** checkbox and save the changes

vi. System will display all the Size / Schedule values associated with the **Geometric P_BI_1NPS_1SCH** in the **Geom Details** section.

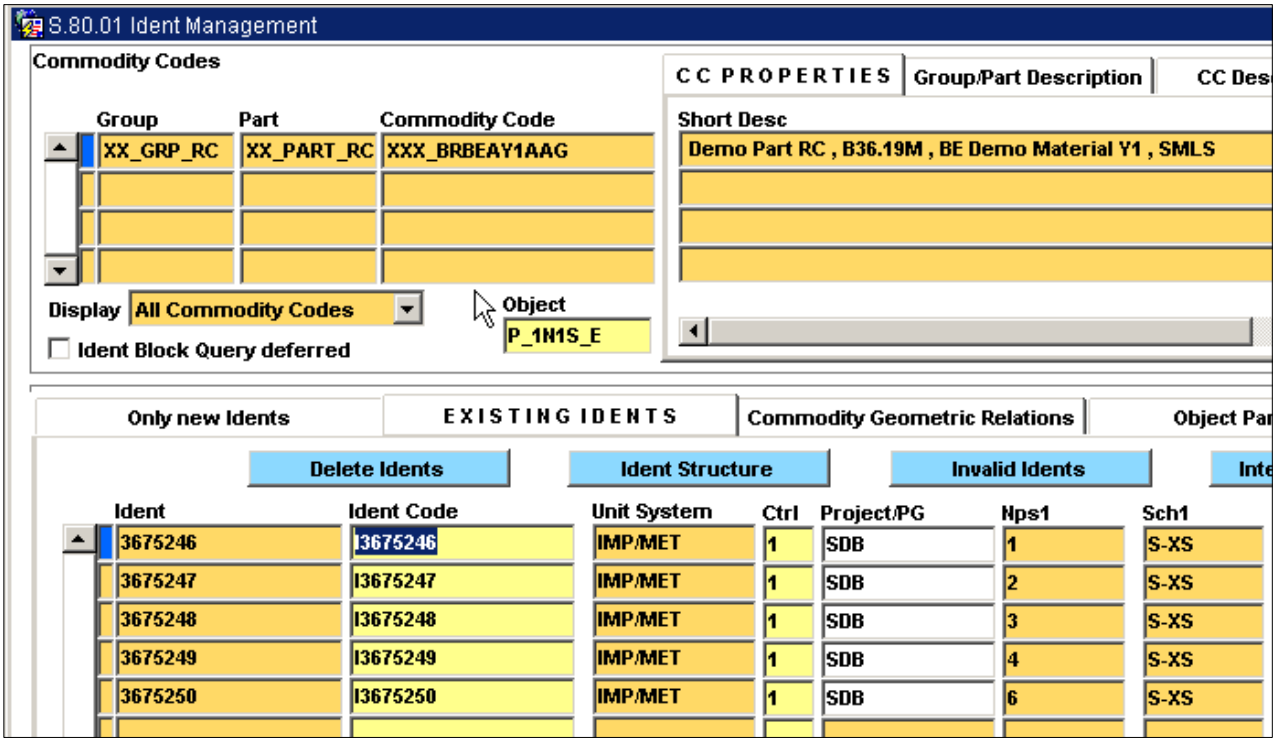


vii. Click on the **Only New Idents** tab to see which idents can be created.

viii. Click on the **Build All Idents**. System will create the 5 idents.



ix. Click on the **Existing Idents** tab to review the new idents

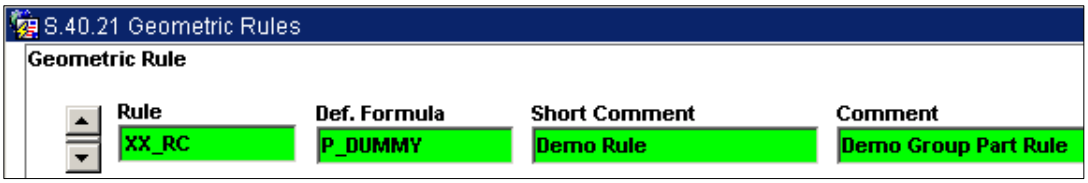


I. FYI: Every **Ident** is assigned a unique no. (**Ident** field). Additionally the system assigns an **Ident Code** (default is **Ident no** with a prefix of **I**). Rules can be defined to build ident codes as per user requirement.

c. Close all the screens

Lab 15. Extending the SDB – Build a new Geometric Rule

a. Launch **"S.40.21 Geometric Rules"** to create a new Geometric Rule
b. Ensure you are in the **Data Entry (Green Background)** mode and not the **Query Mode**
c. Type **XX_<Init>** as the **Rule** name and set **Def. Formula** to **P_DUMMY**
d. Type in a **Short Comment** of **Demo Rule** and **Comment** of **Demo Group Part Rule**

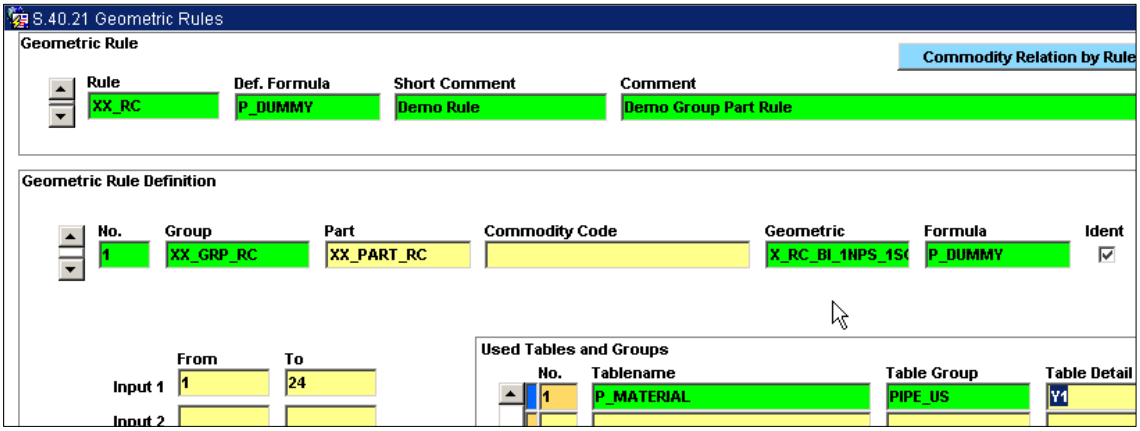


e. Save the changes
f. Click on the **Geometric Rule Definition** section and create new definition as follows

Field	Value
No.	1
Group	XX_GRP_<Init>
Part	XX_PART_<Init>
Geometric	X_<Init>_BI_1NPS_1SCH
Formula	P_DUMMY
Ident	Check
Input 1 From	1
Input 1 To	24

g. Click on the **Used Tables and Groups** section to limit the definition to the Demo Material Y<ID> as follows

Field	Value
No.	1
Tablename	P_MATERIAL
Table Group	PIPE_US
Table Detail	Y<ID>

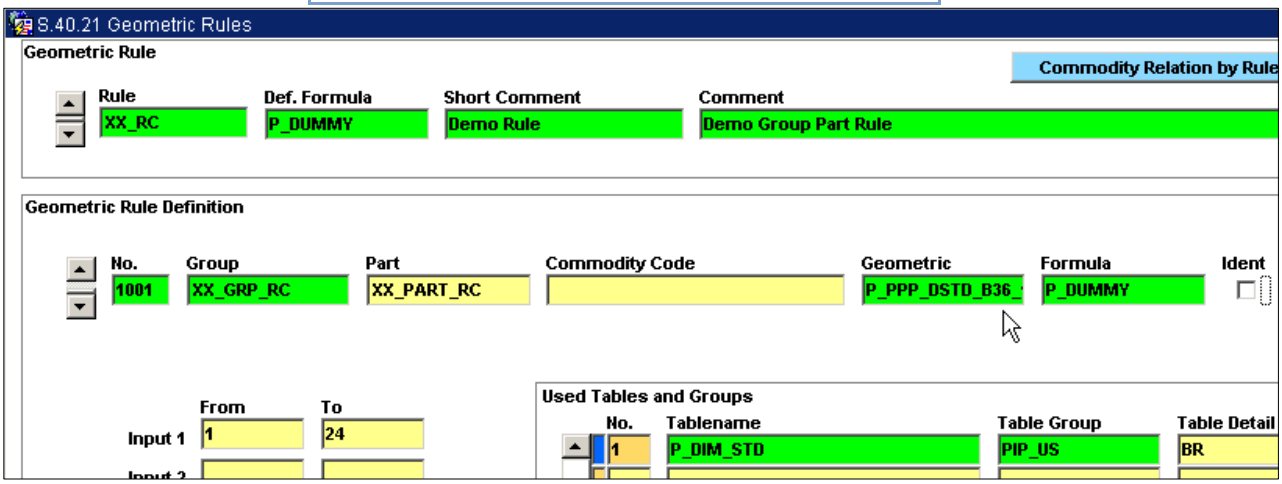


h. Save the changes

i. In the **Geometric Rule Definition** section click on the **No.** field

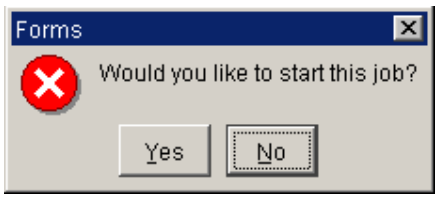
j. Add a new rule to link the Dimensional Standard to the Part, by clicking on the **New Record** icon and entering the following values

Section	Field	Value
Geometric Rule Definition		
	No.	1001
	Group	XX_GRP_<Init>
	Part	XX_PART_<Init>
	Geometric	P_PPP_DSTD_B36_19
	Formula	P_DUMMY
	Ident	Not Checked
Used Tables and Groups		
	No.	1
	Tablename	P_DIM_STD
	Table Group	PIP_US
	Table Detail	BR

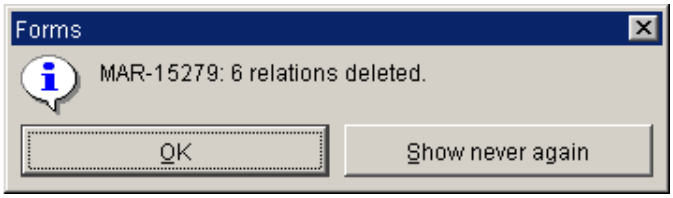


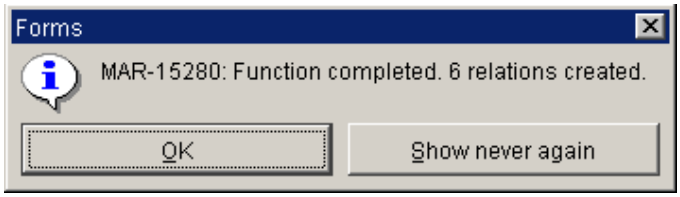
k. Save the changes

l. Click on the **Commodity Relation** button to recreate all the Commodity Geometric Relationships associated with this **Group / Part**. Click **Yes** to start the job.



m. The system will display messages indicating the number of relationships deleted and created. Note any relationships created manually will not be deleted.



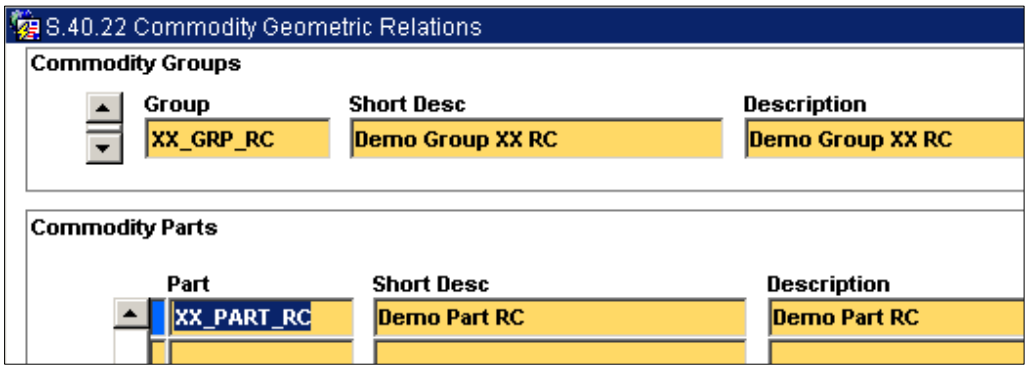


n. Close all screens

o. Click on **"S.40.22 Commodity Geometric Relations"** to view the new relationships that have been created.

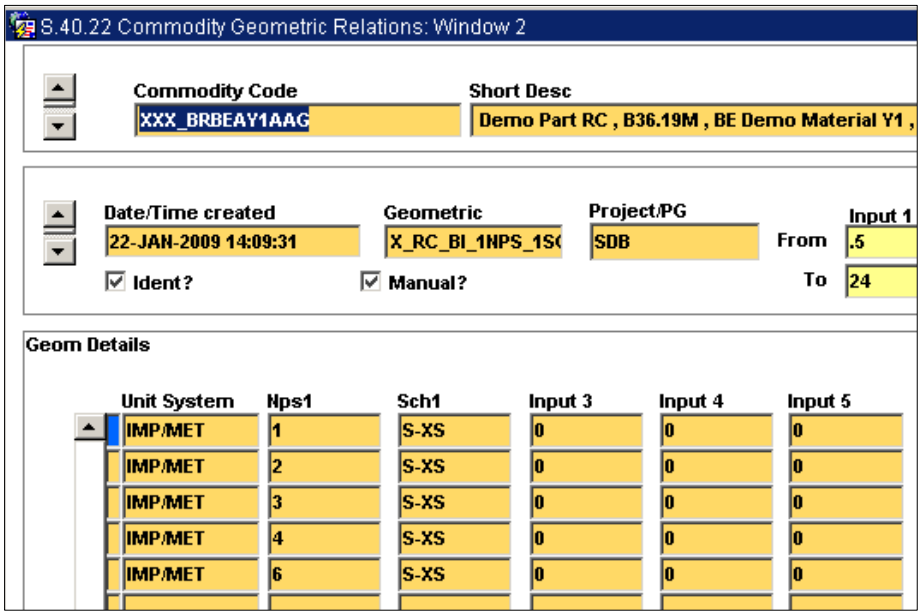
p. Ensure you are in the **Query Entry** mode and search for the **Group XX_GRP_<Init>**

q. In the **Commodity Parts** section system will display the parts associated with this group as shown below.

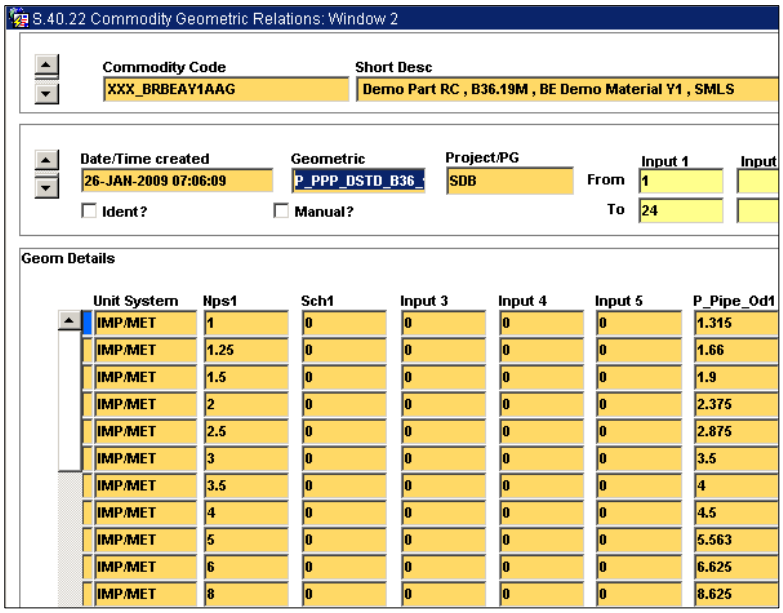


r. Click on the **Go To Next Block** to view **"S.40.22 Commodity Geometric Relations: Window 2"**

s. System will display the **Commodity Code XX_BREAY<ID>AAG** along with the first relationship to the **Geometric X_<Init>_BI_1NPS_1CSH**. Note the **Ident** and **Manual** checkboxes are checked indicating that this relationship was manually created and will be used to build idents.



t. In the middle section which displays Geometric, **click** on the **down arrow** of the scroll bar to see the system generated relationships tying the OD to the commodity based on the size schedule



u. Close all screens

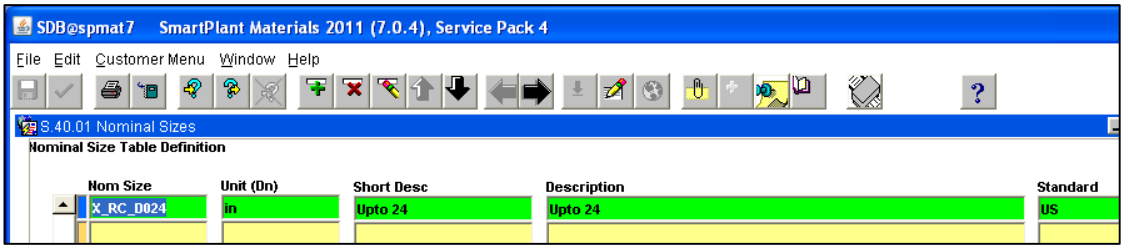
Lab 16. Extending the SDB – Build a new Nominal Sizes Table

a. Launch **"S.40.01 Nominal Sizes"** to create a new Nominal Size table

b. Ensure you are in the **Data Entry (Green Background)** mode and not the **Query Mode**

c. Type **X_<Init>_D024** in the **Nom Size** field and **Unit** as **in**

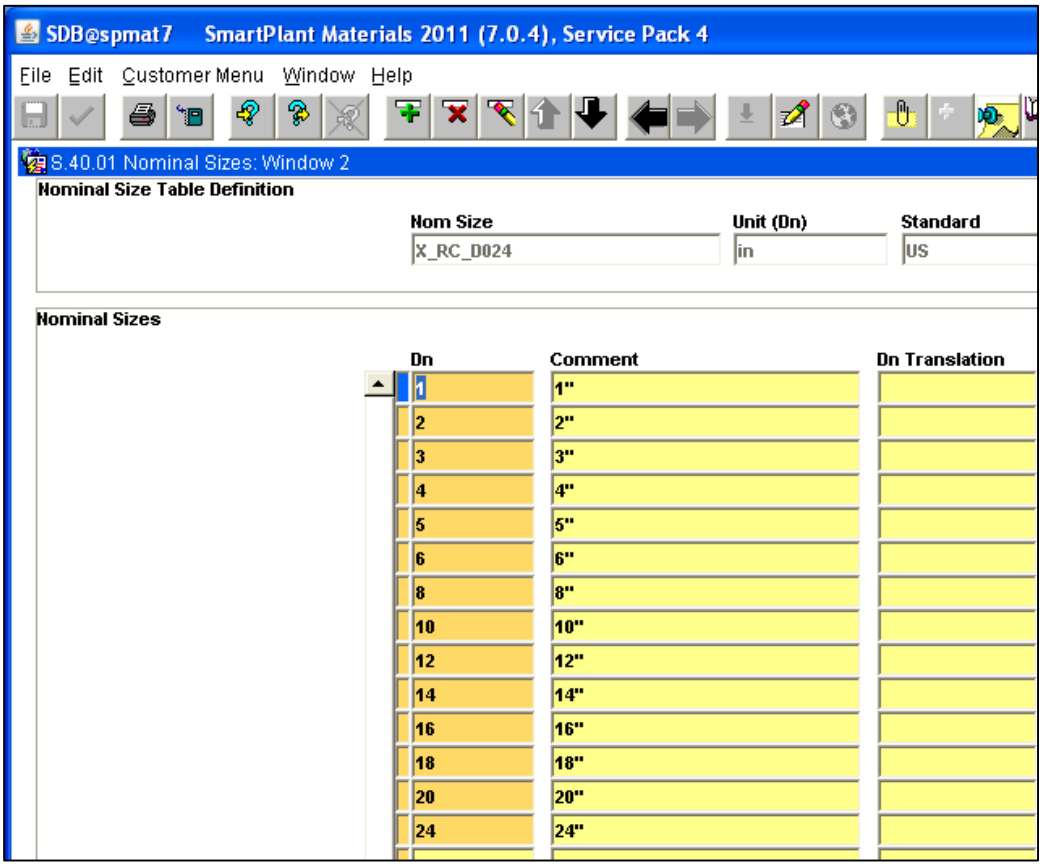
d. Type in a **Description** of **Upto 24 in** and select **Standard** of **US** from **LOV**.



e. Save the changes

f. Click on the **Go To Next Block** Icon to move to **"S.40.01 Nominal Sizes: Window 2"** to enter the valid nominal sizes.

g. Enter sizes shown below and save the changes

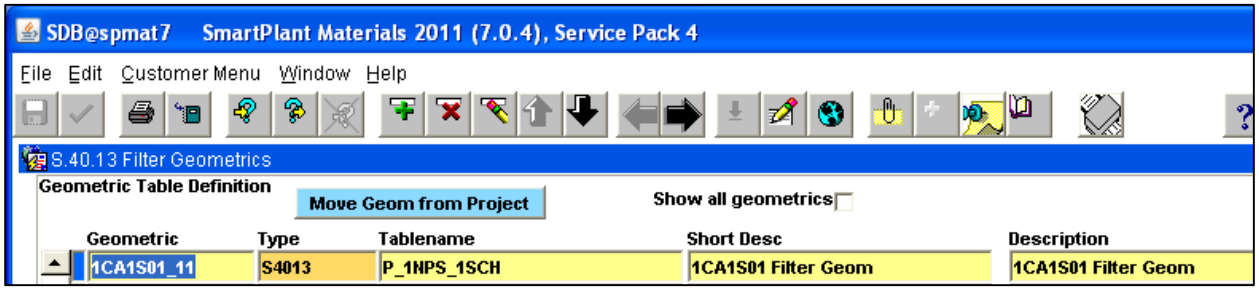


h. Close all the screens

Lab 17. Extending the SDB – Copy Spec Filter

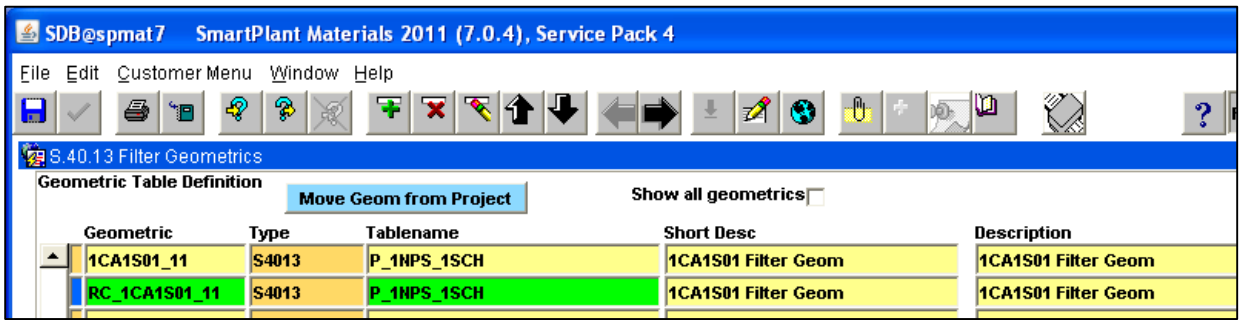
a. Launch **"S.40.13 Filter Geometrics"** to create a spec filter

b. Ensure you are in the **Query Mode** and search for the filter **1CA1S01_11**



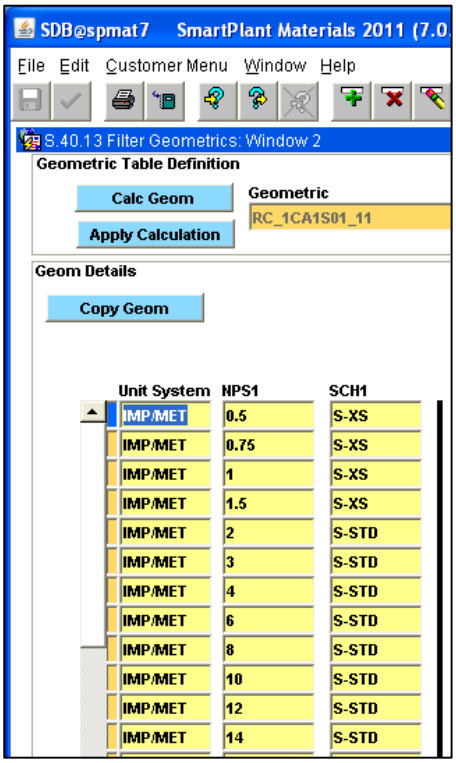
c. **Click** on the first blank row and **Duplicate above record** by pressing **F4**. The system will duplicate the previous row details.

d. Change the name of the Spec Filter **Geometric** to **<Init>_1CA1S01_11**

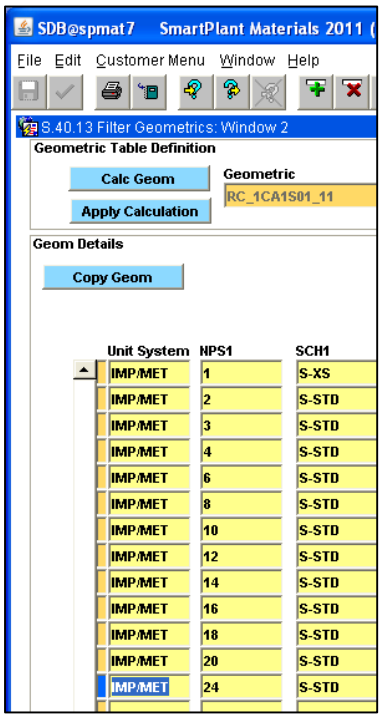


e. Save the changes.

f. **Click** on the **Go to Next Block** icon to specify the valid Size / Schedule combination in the **"S.40.13 Filter Geometrics: Window 2"**. The system will display all the size / schedule combinations from the geometric **1CA1S01_11** as it did a deep copy.



g. **Delete** the following sizes **.5, .75, 1.5, 2.5** and **all sizes above 24** as shown below.

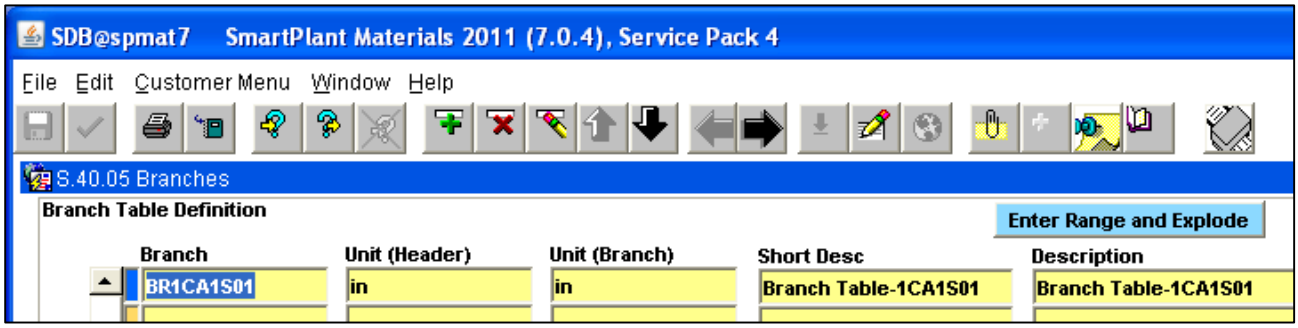


h. Save the changes
i. Close all screens

Lab 18. Extending the SDB – Copy Branch Filter

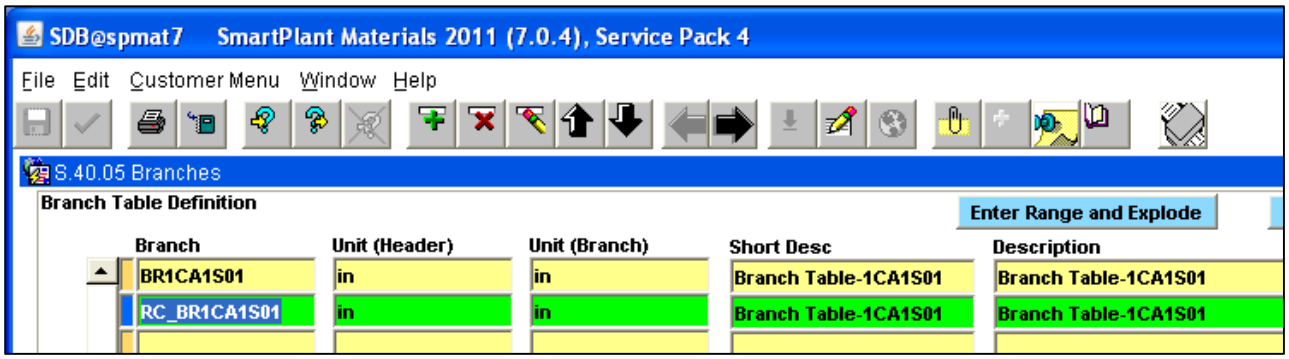
a. Launch **"S.40.05 Branches"**

b. Ensure you are in the **Query Mode** and search for the filter **BR1CA1S01**



c. **Click** on the first blank row and **Duplicate above record** by pressing **F4**. The system will duplicate the previous row details.

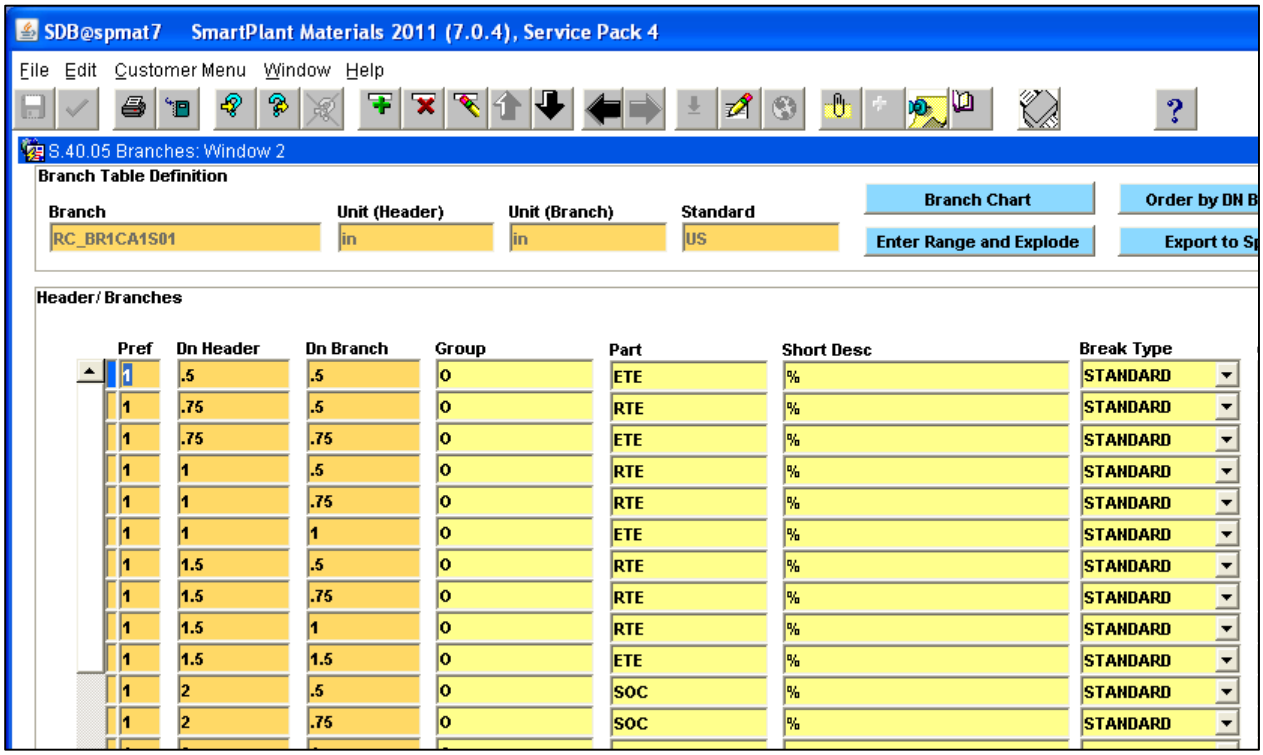
d. Change the name of the **Branch** to **<Init>_BR1CA1S01**



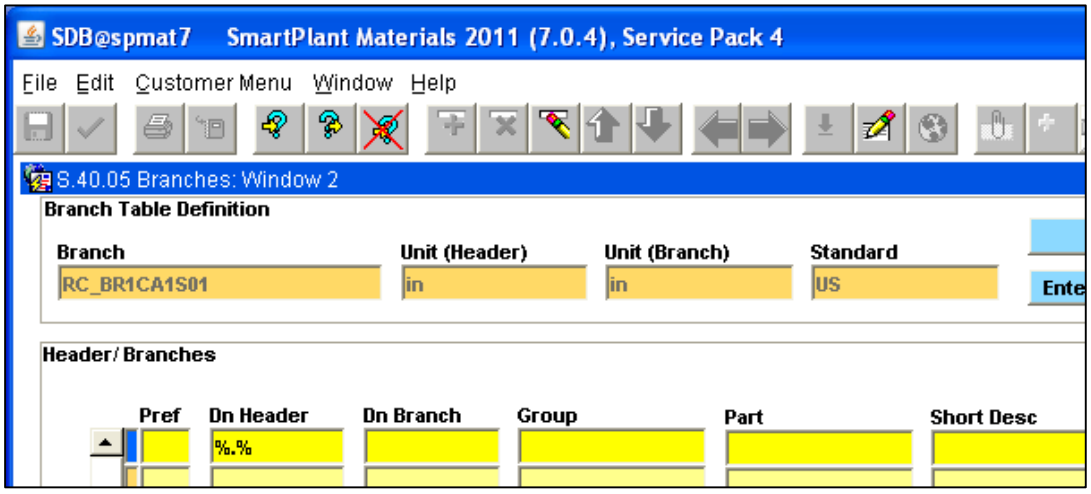
e. Save the changes

f. **Click** on the **Go to Next Block** icon to specify the valid Size / Schedule combination in the **"S.40.05 Branches: Window 2"**

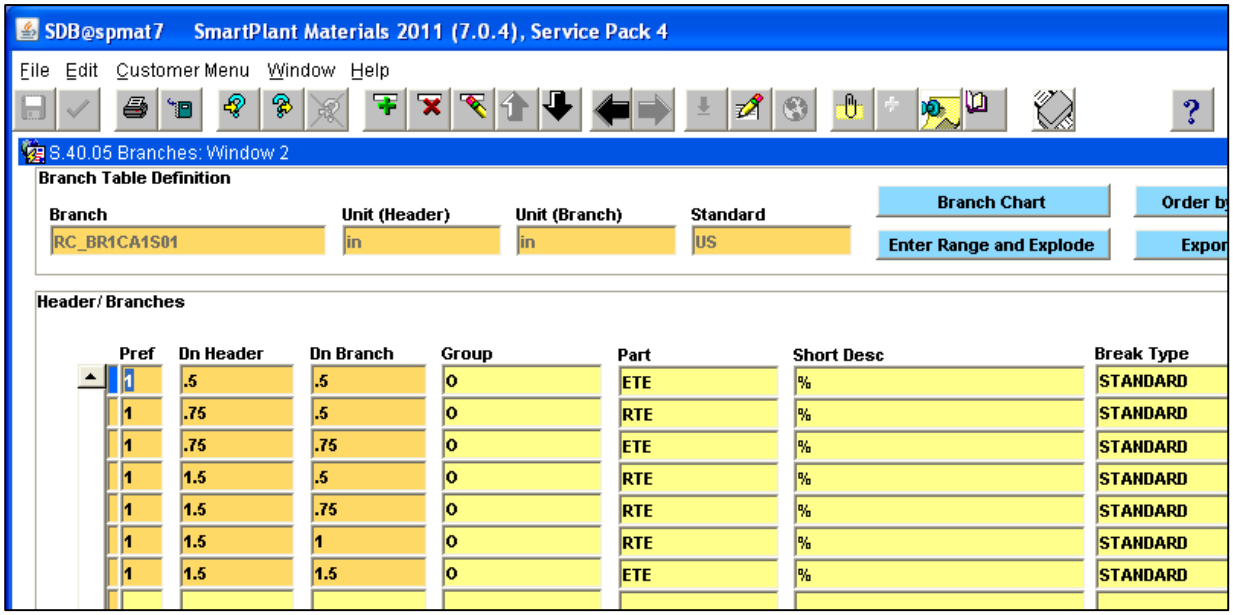
g. The system will display all the Header & Branch sizes with corresponding Parts from the branch table **BR1CA1S01** as it performed a deep copy.



h. Press **F7** to **Enter Query** mode and search for header size with fractions by typing in **%.%** in the **Dn Header** field and **Run the Query**.



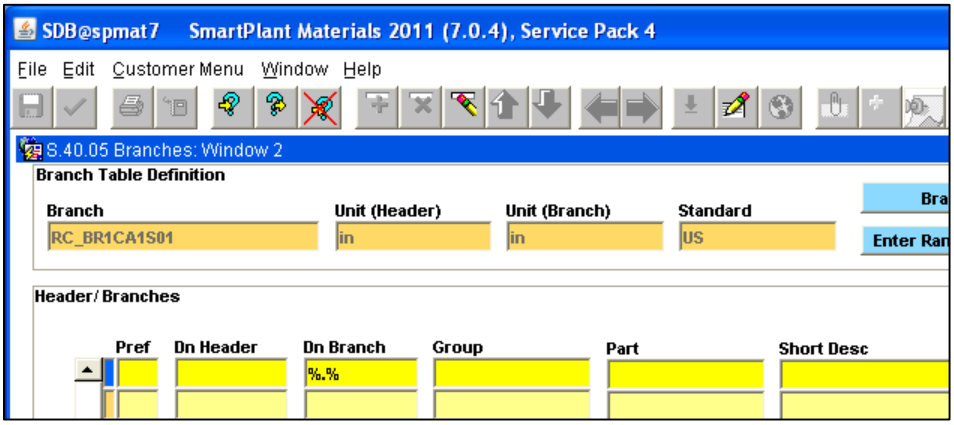
i. System will display all the branches with fractional header sizes



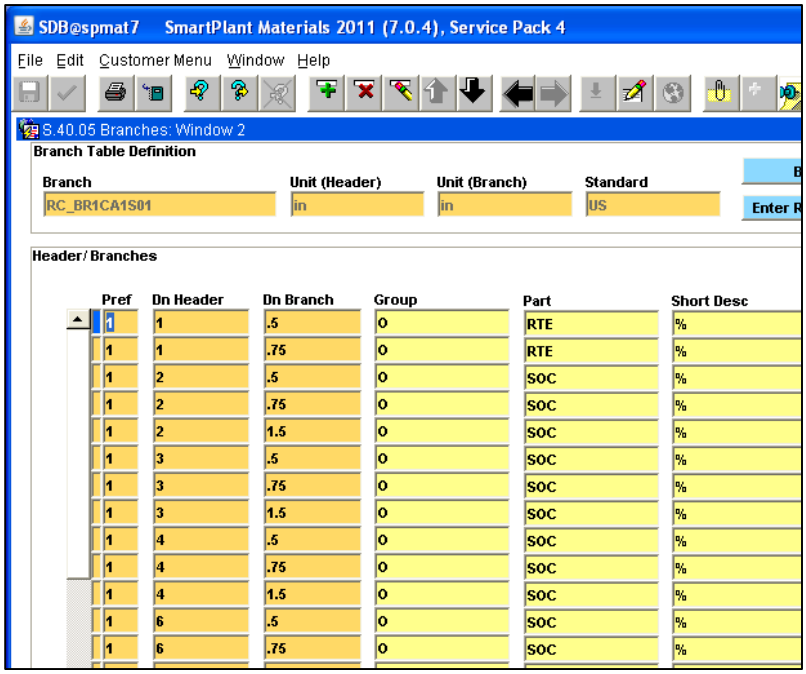
j. **Delete** all the branch details

k. Save the changes

l. Press **F7** to **Enter Query** mode and search for header size with fractions by typing in **%.%** in the **Dn Branch** field and **Run the Query**.



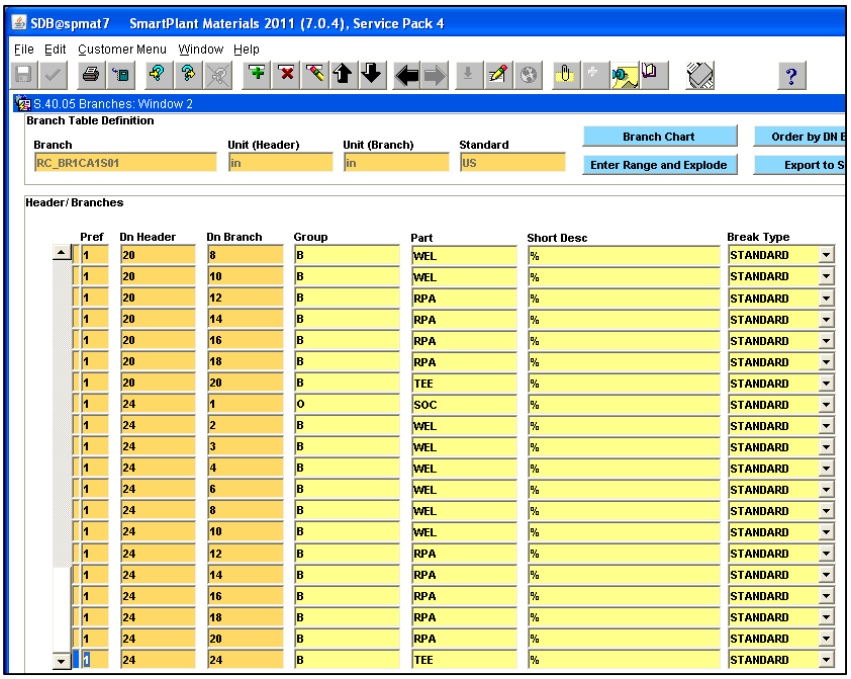
m. System will display all the fractional branch sizes



n. **Delete** all the branch details and Save the changes

o. Press **F8** to **Run the Query** and retrieve all branch details. Scroll to the bottom of the list and **delete** all header and branch sizes **greater than 24”**.

p. Save the changes.

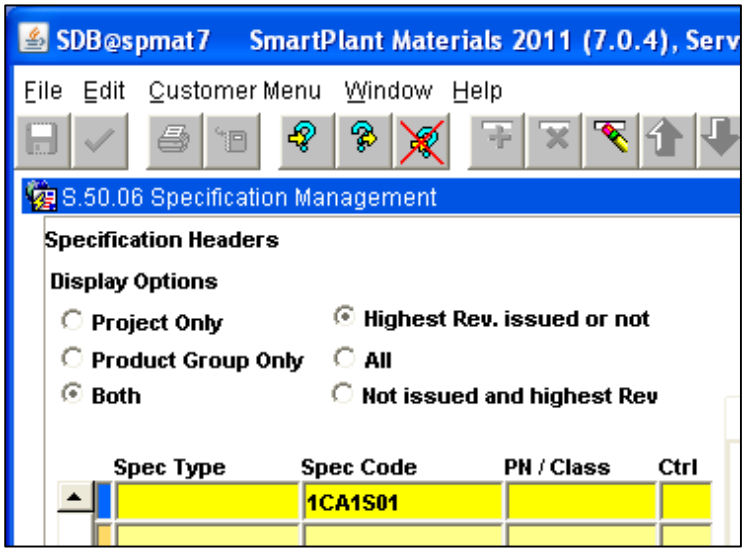


q. Close all screens

Lab 19. Copy a Specification 1CA1S01

a. Launch **"S.50.06 Specification Management"**

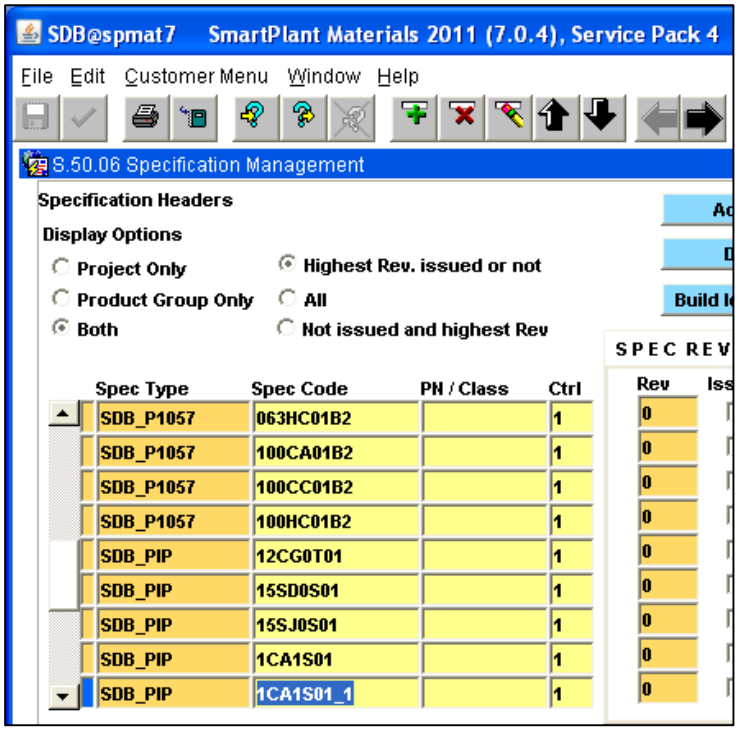
b. Ensure you are in the **Query Mode** and search for the Spec **1CA1S01**



c. Create a **new record** by pressing **F6** and **Duplicate above record** by pressing **F4**. The system will copy the spec and refresh the screen.

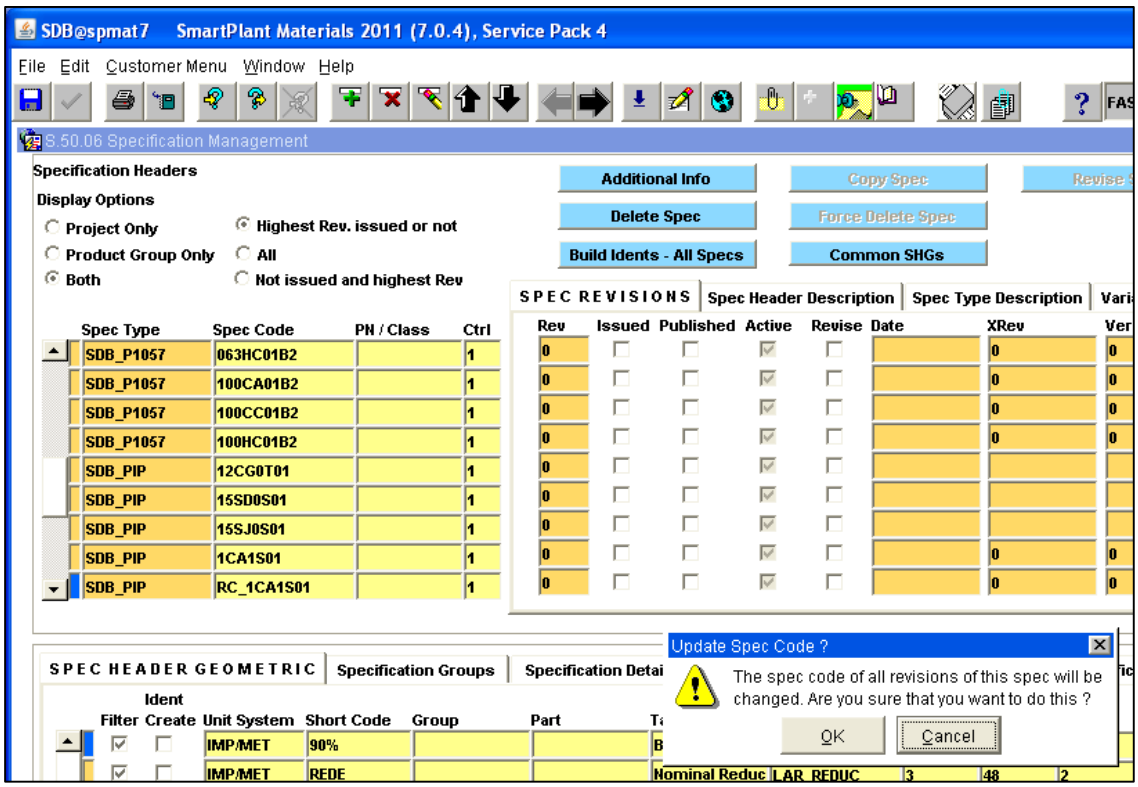
d. **Scroll** down till you find the spec **1CA1S01_1**

   i. *Note: If multiple users perform this step at the same time, your spec will be assigned the next number i.e. 1CA1S01_1, 1CA1S01_2, 1CA1S01_3 etc.*

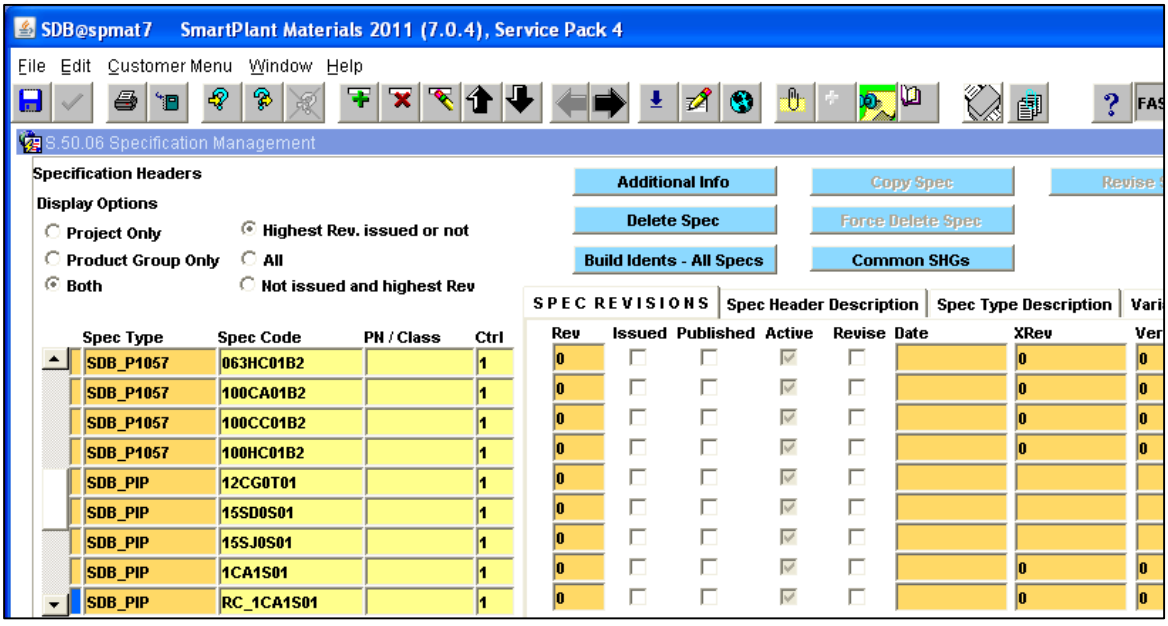


e. Change the name of the **Spec** to **<Init>_1CA1S01**

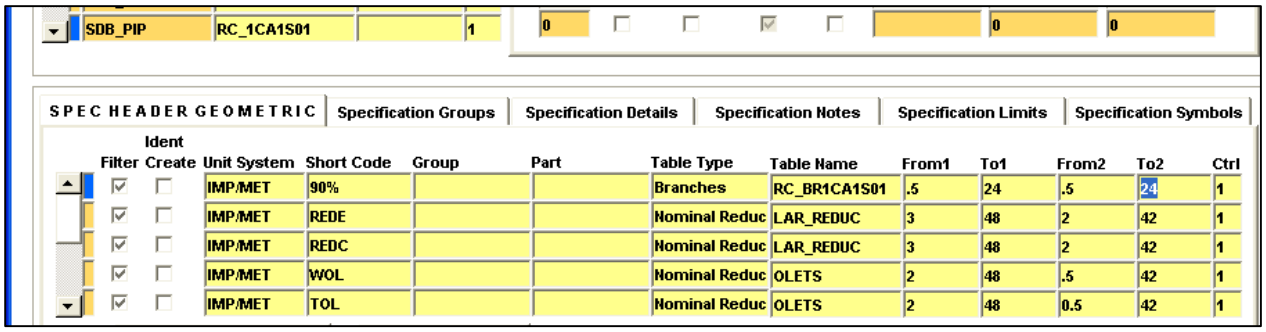
f. The system will prompt you with a message indicating that all the revisions will be renamed.



g. Click **Ok**.



h. In the **Spec Header Geometric** tab change the **Branches Table Name** to **<Init>_BR1CA1S01** and size range **.5 – 24, .5 – 24**. **Check** the **Filter** checkbox.

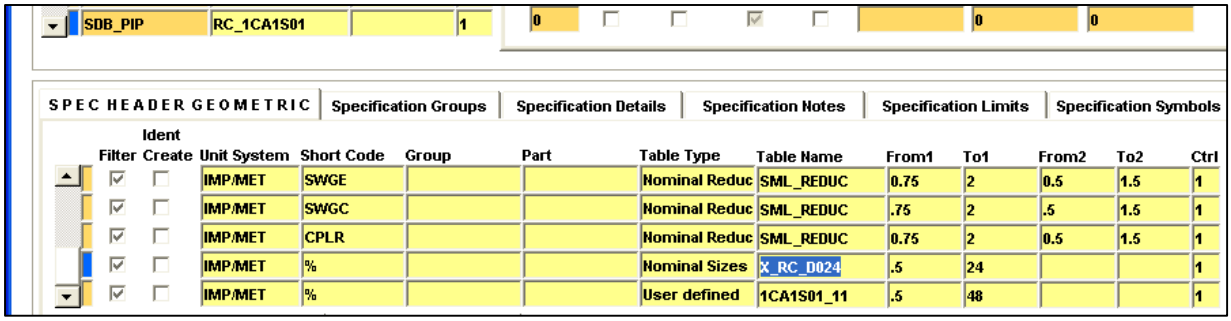


SDB_PIP | RC_1CA1S01 | 1 | 0 | 0 | 0

SPEC HEADER GEOMETRIC | Specification Groups | Specification Details | Specification Notes | Specification Limits | Specification Symbols

Ident Filter	Create	Unit System	Short Code	Group	Part	Table Type	Table Name	From1	To1	From2	To2	Ctrl
☑	☐	IMP/MET	90%			Branches	RC_BR1CA1S01	.5	24	.5	24	1
☑	☐	IMP/MET	REDE			Nominal Reduc	LAR_REDUC	3	48	2	42	1
☑	☐	IMP/MET	REDC			Nominal Reduc	LAR_REDUC	3	48	2	42	1
☑	☐	IMP/MET	WOL			Nominal Reduc	OLETS	2	48	.5	42	1
☑	☐	IMP/MET	TOL			Nominal Reduc	OLETS	2	48	0.5	42	1

i. Similarly change the nominal sizes table to **X_<Init>_D024** and size range **1 – 24**.

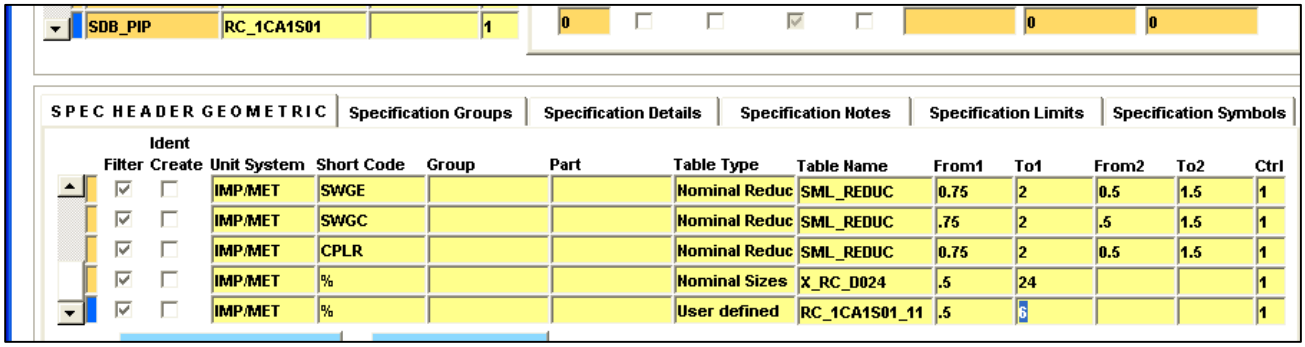


SDB_PIP | RC_1CA1S01 | 1 | 0 | 0 | 0

SPEC HEADER GEOMETRIC | Specification Groups | Specification Details | Specification Notes | Specification Limits | Specification Symbols

Ident Filter	Create	Unit System	Short Code	Group	Part	Table Type	Table Name	From1	To1	From2	To2	Ctrl
☑	☐	IMP/MET	SWGE			Nominal Reduc	SML_REDUC	0.75	2	0.5	1.5	1
☑	☐	IMP/MET	SWGC			Nominal Reduc	SML_REDUC	.75	2	.5	1.5	1
☑	☐	IMP/MET	CPLR			Nominal Reduc	SML_REDUC	0.75	2	0.5	1.5	1
☑	☐	IMP/MET	%			Nominal Sizes	X_RC_D024	.5	24			1
☑	☐	IMP/MET	%			User defined	1CA1S01_11	.5	48			1

j. Change the spec filter **1CA1S01_11** to limit the size schedule combinations for all components in the spec by changing the **Table Name** to **<Init>_1CA1S01_11** and size range to **.5 – 6**.



SDB_PIP | RC_1CA1S01 | 1 | 0 | 0 | 0

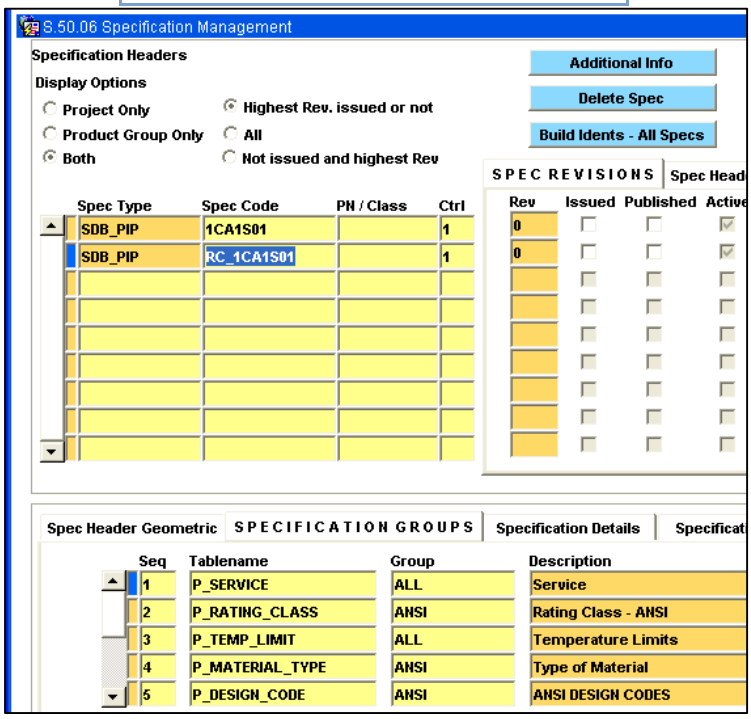
SPEC HEADER GEOMETRIC | Specification Groups | Specification Details | Specification Notes | Specification Limits | Specification Symbols

Ident Filter	Create	Unit System	Short Code	Group	Part	Table Type	Table Name	From1	To1	From2	To2	Ctrl
☑	☐	IMP/MET	SWGE			Nominal Reduc	SML_REDUC	0.75	2	0.5	1.5	1
☑	☐	IMP/MET	SWGC			Nominal Reduc	SML_REDUC	.75	2	.5	1.5	1
☑	☐	IMP/MET	CPLR			Nominal Reduc	SML_REDUC	0.75	2	0.5	1.5	1
☑	☐	IMP/MET	%			Nominal Sizes	X_RC_D024	.5	24			1
☑	☐	IMP/MET	%			User defined	RC_1CA1S01_11	.5	6			1

k. Save the changes

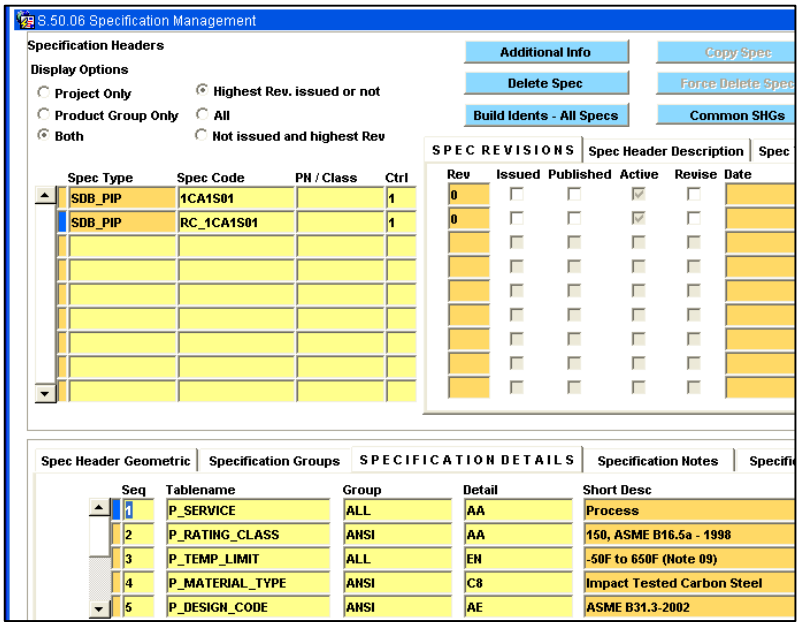
l. Click on the **Specification Groups** tab and verify the entries are as below

Seq	Table Name	Group
1	P_FLUID_CODE	ALL
2	P_RATING_CLASS	ANSI
3	P_TEMP_LIMIT	ALL
4	P_CORR_ALLOWANCE	ALL
5	P_MATERIAL_TYPE	ANSI
6	P_DESIGN_CODE	ANSI
7	P_STRESS_RELIEF	ANSI
8	P_EXAMINATION	ANSI



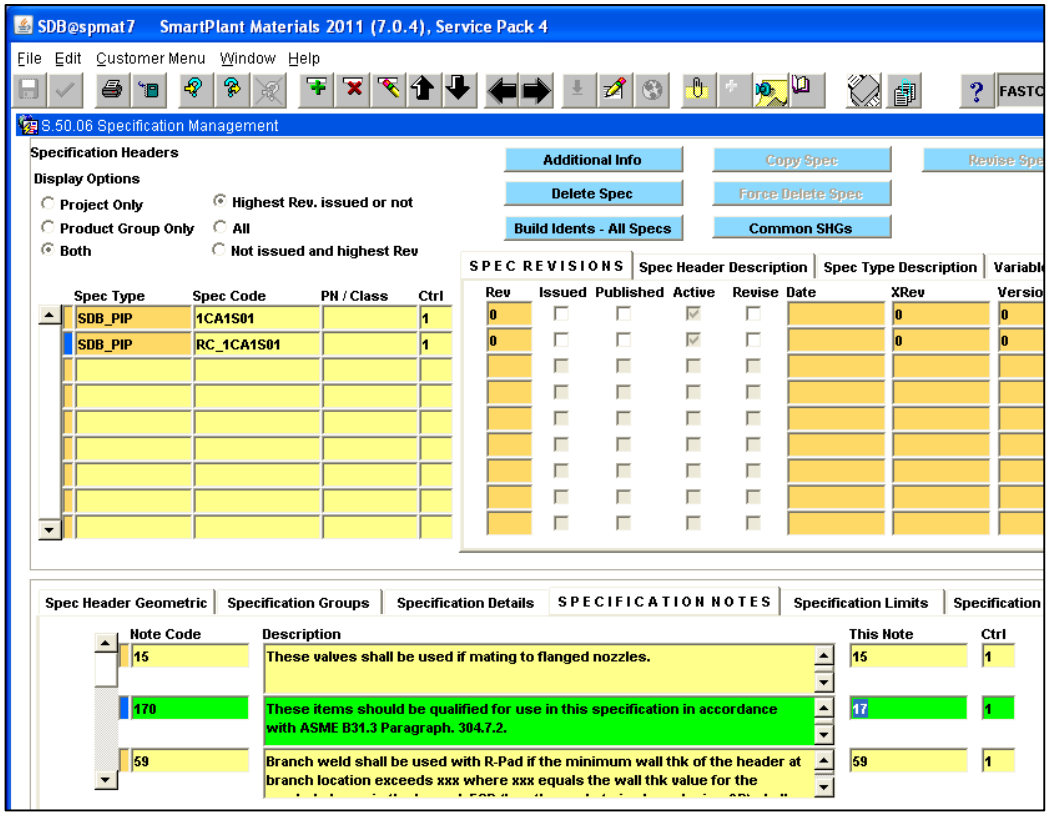
m. Click on the **Specification Details** tab and verify the entries are as below

Seq	Table Name	Group	Detail
1	P_FLUID_CODE	ALL	AA
2	P_RATING_CLASS	ANSI	AA
3	P_TEMP_LIMIT	ALL	EN
4	P_CORR_ALLOWANCE	ALL	AA
5	P_MATERIAL_TYPE	ANSI	C8
6	P_DESIGN_CODE	ANSI	AE
7	P_STRESS_RELIEF	ANSI	AB
8	P_EXAMINATION	ANSI	AA



n. Save the changes

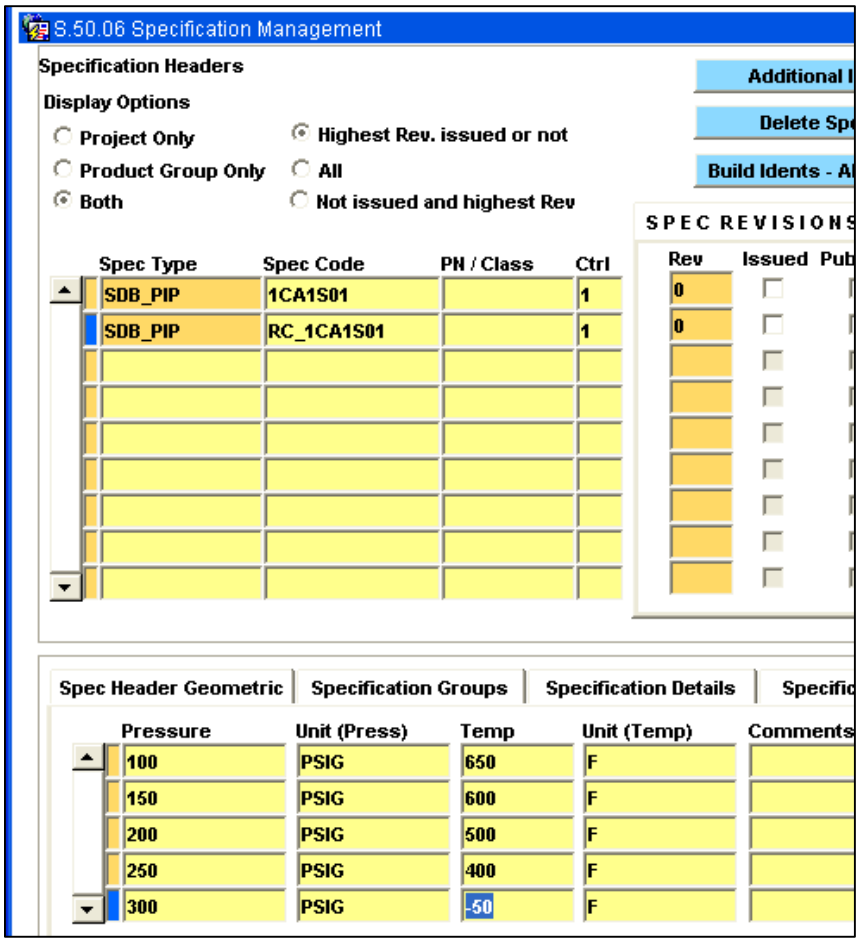
o. Click on the **Specification Notes** tab and add the predefined note **170** at the header level, using the **LOV**. **This Note** field represents the sequence in which the notes will be printed.



p. Save the changes

q. Click on the **Specification Limits** tab and specify the Pressure / Temperature details as follows

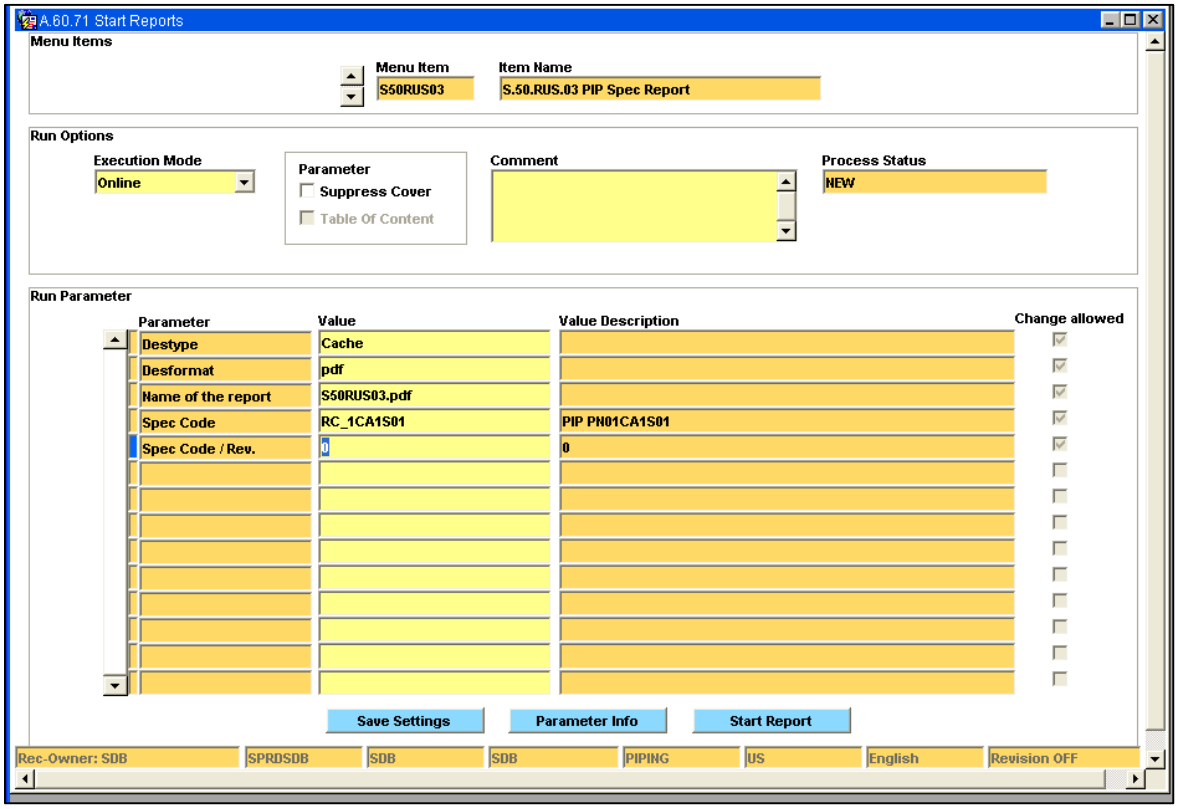
Pressure	Unit	Temperature	Unit
100	PSIG	650	F
150	PSIG	600	F
200	PSIG	500	F
250	PSIG	400	F
300	PSIG	-50	F



r. Save the changes

s. Click on the Report Icon and **Select the Report S.50.R.US.03 PIP Spec Report** (or any other Spec Report if the PIP Spec Report is not available).

t. From the **LOV** for **Spec Code** select your spec **<Init>_1CA1S01** and click on the **Start Report** button.



u. System should display a pdf file showing the Spec header details, Pressure / Temperature Ratings, Branch Table and Notes.

Date: Jan. 07, 2012

Piping Material Specification Line Class: **RC_1CA1S01**
Rev. No.: **0**

P_SERVICE:	Process	P_RATING_CLASS:	150, ASME B16.5a - 1998
P_TEMP_LIMIT:	-50F to 650F (Note 09)	P_MATERIAL_TYPE:	Impact Tested Carbon Steel
P_DESIGN_CODE:	ASME B31.3-2002	P_STRESS_RELIEF:	None Required
P_EXAMINATION:	Per ASME B31.3	P_CORR_ALLOWANCE:	0.063 in (0.05 in MIN)
P_PT_COMMENT:	For NPS 1/2 through NPS 40 (Pressure is limited by A352 GR LCB valve material.)	P_PT_COMMENT:	For NPS 42 through NPS 48 (Note 01)
GENERAL NOTES:	15, 17, 59, 81, R01, R03, R04, R05, R06, R0		

Pressure - Temperature Ratings

Temp.	-50 F	400 F	500 F	600 F	650 F
Press.	300 PSIG	250 PSIG	200 PSIG	150 PSIG	100 PSIG

90 Degree BRANCH CONNECTION
Legend and chart

NOTES:

Branchtable: RC BR1CA

BRANCH	HEADER 24	20	18	16	14	12	10	8	6	4	3	2	1
24	TEE												
20	RPA	TEE											
18	RPA	RPA	TEE										
16	RPA	RPA	RPA	TEE									
14	RPA	RPA	RWE	RWE	TEE								
12	RPA	RPA	RWE	RWE	RWE	TEE							
10	WEL	WEL	RWE	RWE	RWE	RWE	TEE						
8	WEL	WEL	RWE	RWE	RWE	RWE	RWE	TEE					
6	WEL	WEL	RWE	RWE	RWE	RWE	RWE	RWE	TEE				
4	WEL	WEL	RWE	RWE	RWE	RWE	RWE	RWE	RWE	TEE			
3	WEL	WEL	RWE	RWE	RWE	RWE	RWE	RWE	RWE	RWE	TEE		
2	WEL	WEL	RWE	RWE	RWE	RWE	RWE	RWE	RWE	RWE	RWE	TEE	
1	SOC	SOC	SOC	SOC	SOC	SOC	SOC	SOC	SOC	SOC	SOC	SOC	ETE

Legend:

WEL	Weldolet
RPA	Reinforcing Pad
ETE	Equal Tee
RWE	Reinforcing Weld
SOC	Sockolet
TEE	Equal Tee

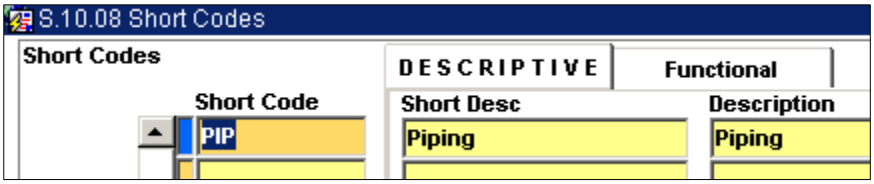
v. Close all the screens

Lab 20. Extending the SDB - Add new Group / Part to Short Code

a. Launch **"S.10.08 Short Codes"** to view the Short Codes

b. Ensure you are in the **query** mode

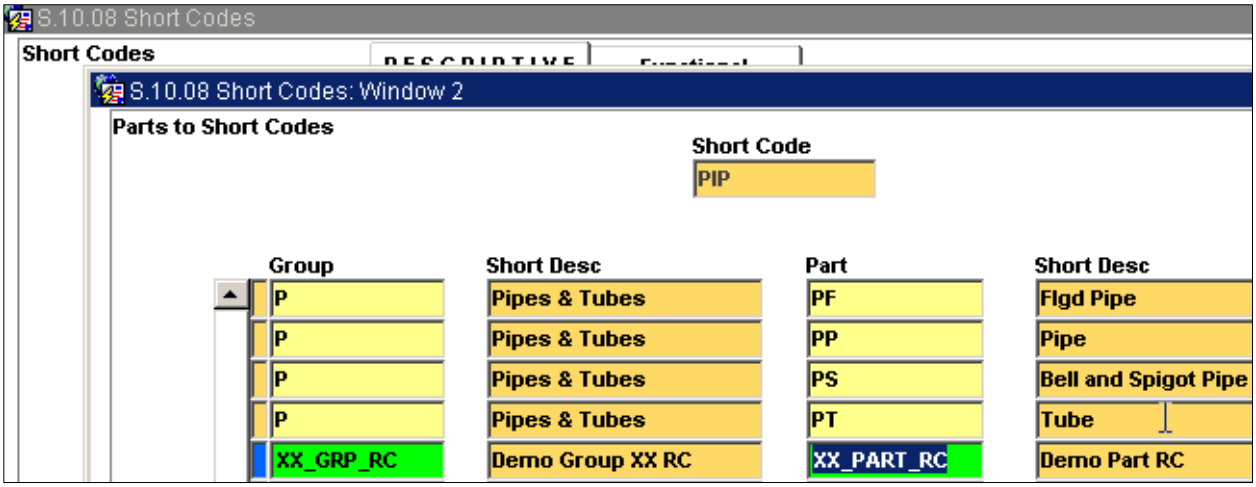
c. Search for the **Short Code PIP** and **Run the query**



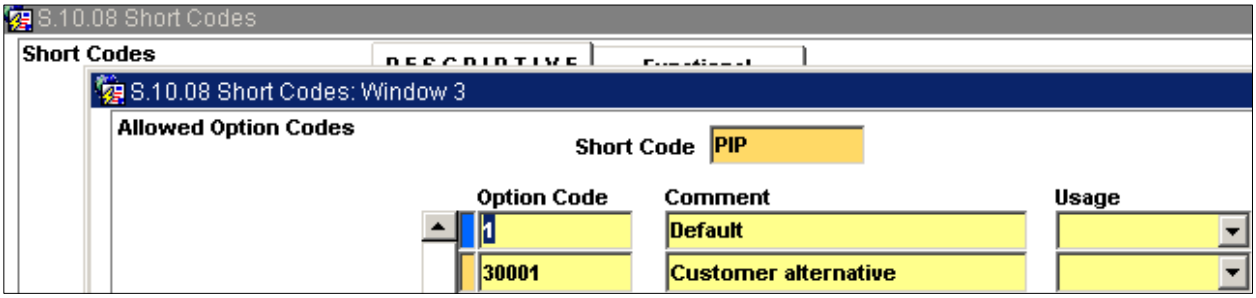
d. Click on the **Go To Next Block** Icon to view **"S. 10.08 Short Codes Window 2"**

e. Add a new row with **Group XX_GRP_<Init>** and **Part XX_PART_<Init>**

f. Save the changes



g. Click on the **Go To Next Block** Icon to view **"S. 10.08 Short Codes Window 3"**, which shows the list of allowed option codes for the short code PIP.

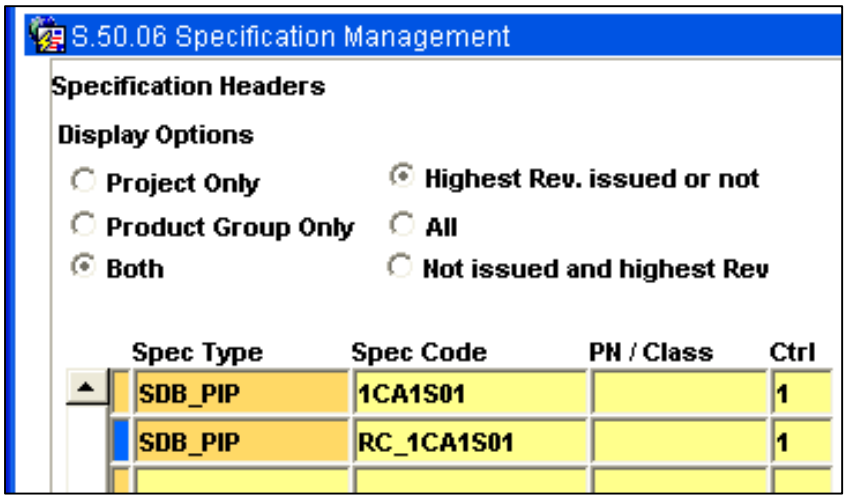


h. Close all the screens

Lab 21. Add items to the Spec

a. Launch **"S.50.06 Specification Management"** and **enter the query** mode

b. Search for the spec you created by typing in **<Init>_1CA1S01** in the Spec Code and **Running the query**

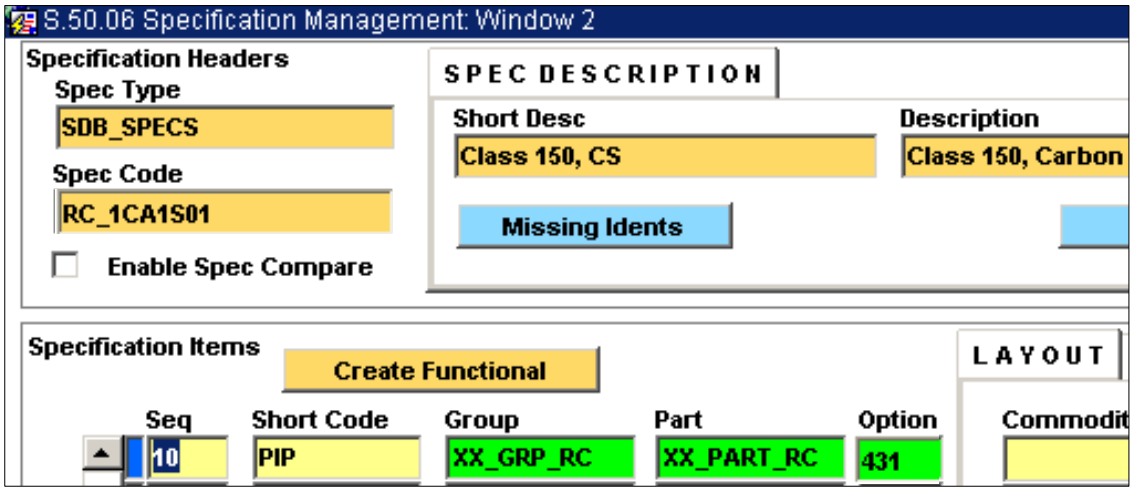


c. Double Click on the **Spec Code** to add the Items

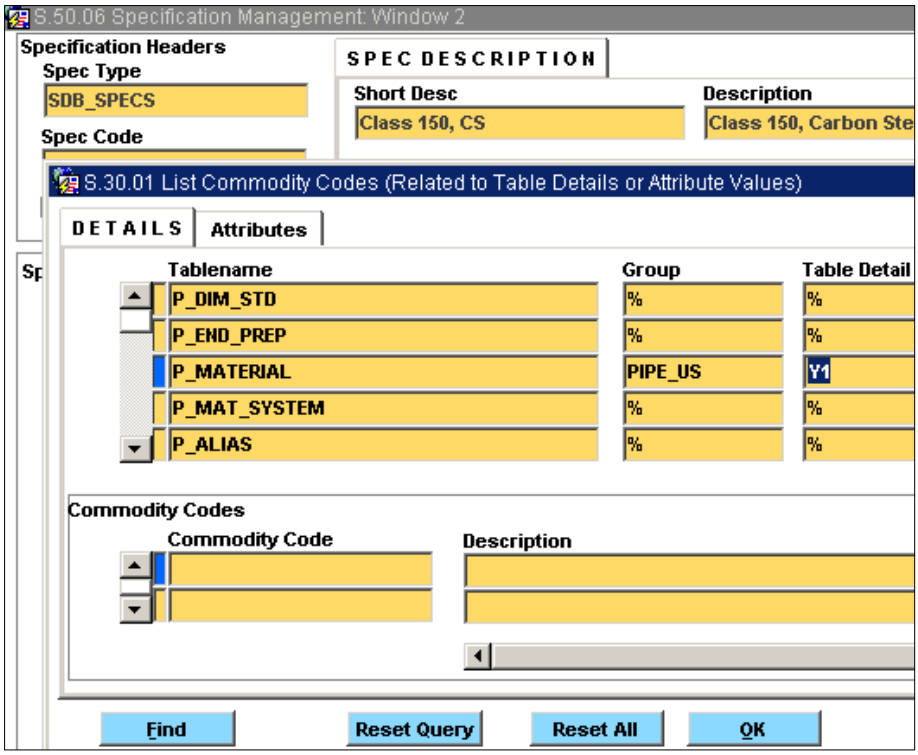
   i. FYI: Spec Items consists of a combination of **Short Code**, **Group**, **Part** and **Commodity Code**. Specify a valid **Option Code** if you want to use different commodity codes for the same Short Code / Size combination.

   ii. FYI: It is a good idea to add items with **Seq** in multiples of **10**, to allow addition of items in the future.

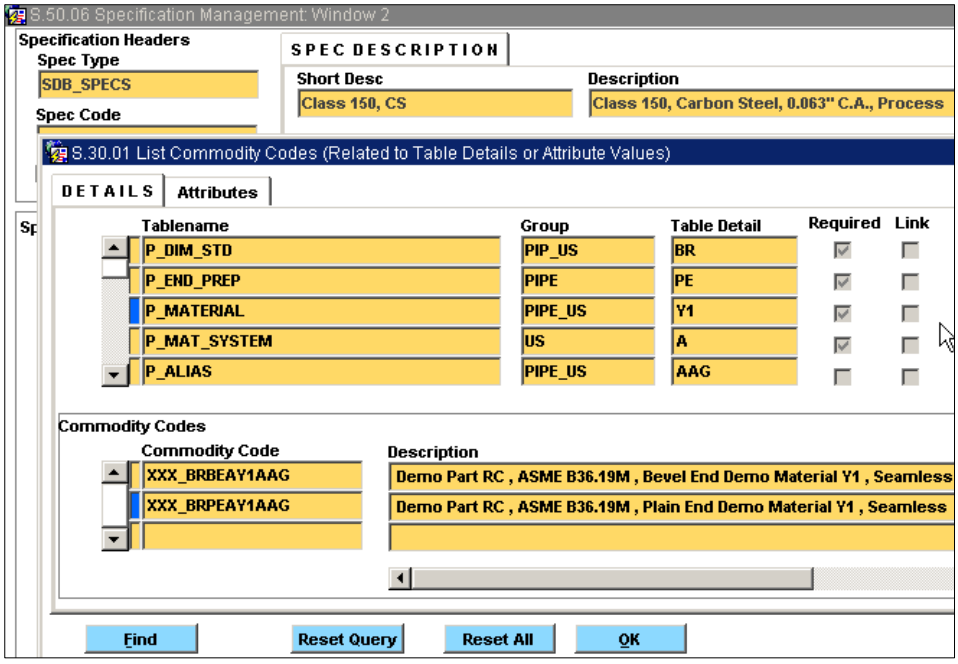
d. **Click** on the **New Record** in the **Specification Items** section and add an item to the spec with **Seq** = **1**, **Short Code** = **PIP**, **Group** = **XX_GRP_<Init>** and **Part** = **XX_PART_<Init>**



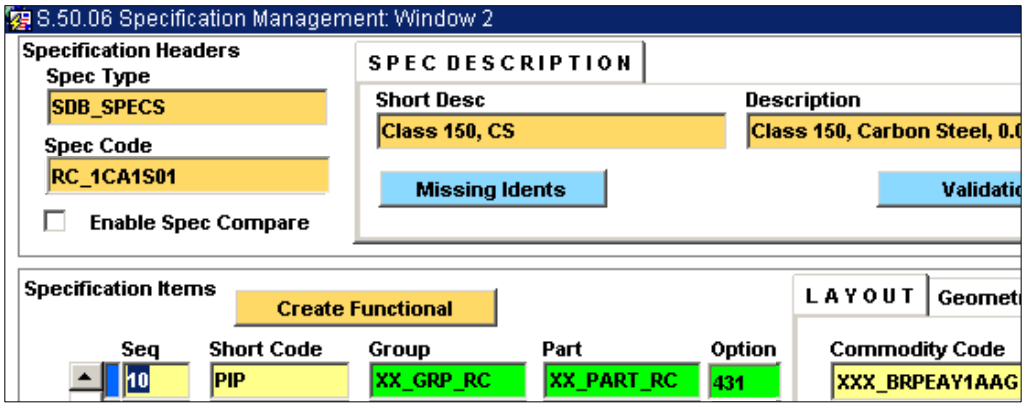
e. In the **Layout** tab, click on the **Commodity cod**e field and press **F9** to open the **LOV.** Search for the pipe you created earlier by **clicking** in the **Group** field of the **P_MATERIAL** table and setting the **Group** = **PIPE_US** and **Table Detail = Y<ID>**



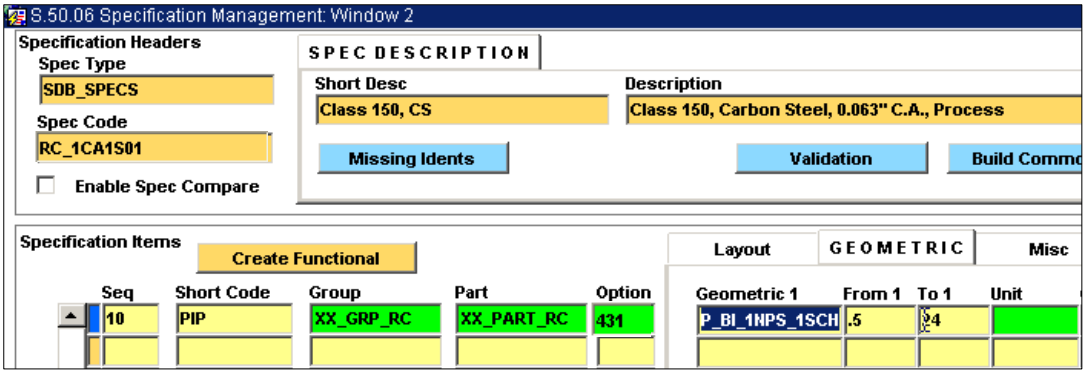
f. **Click** the **Find** button to search for matching commodity codes. System should display the two commodities you created in the previous labs.



g. Select the **Plain End** pipe and click the **OK** button to add it to the spec.

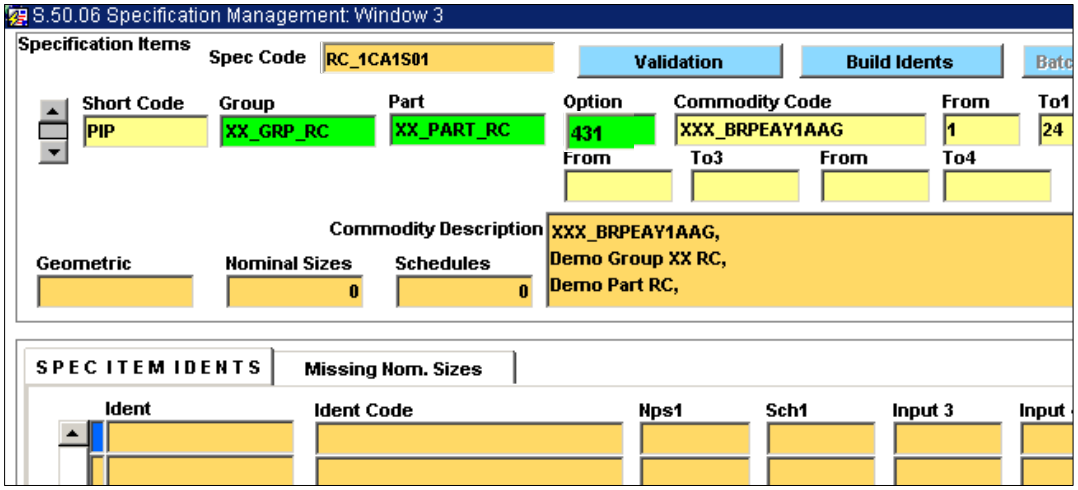


h. Click on the **Geometric** tab and note that the system assigned the **Geometric P_BI_1NPS_1SCH** to the item and a size range of **.5"** to **24**", because of the **Commodity Geometric Relationships** we defined earlier.

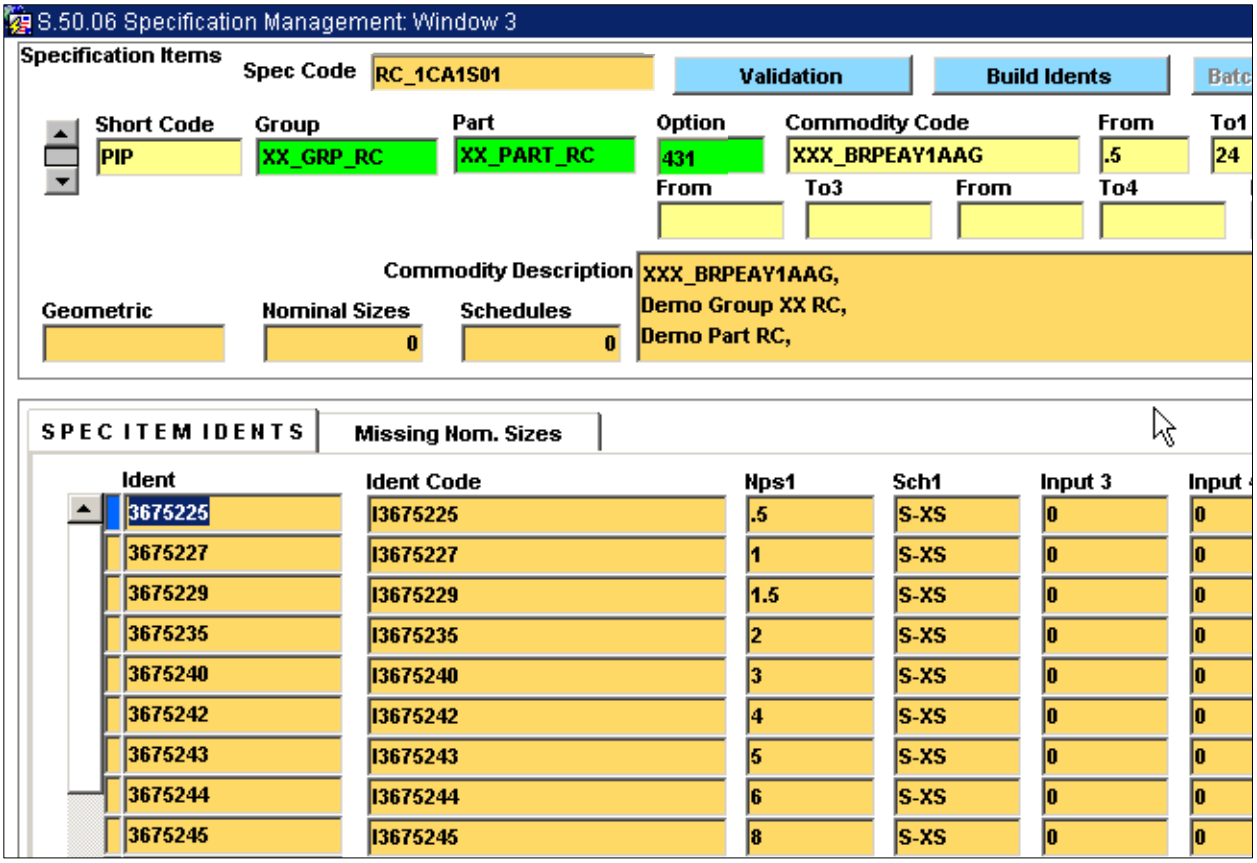


i. Save the changes

j. Click on the **Go To Next Block** Icon to open **"S.50.06 Specification Management Window 3"** screen to view the idents associated with the Spec for the pipe.

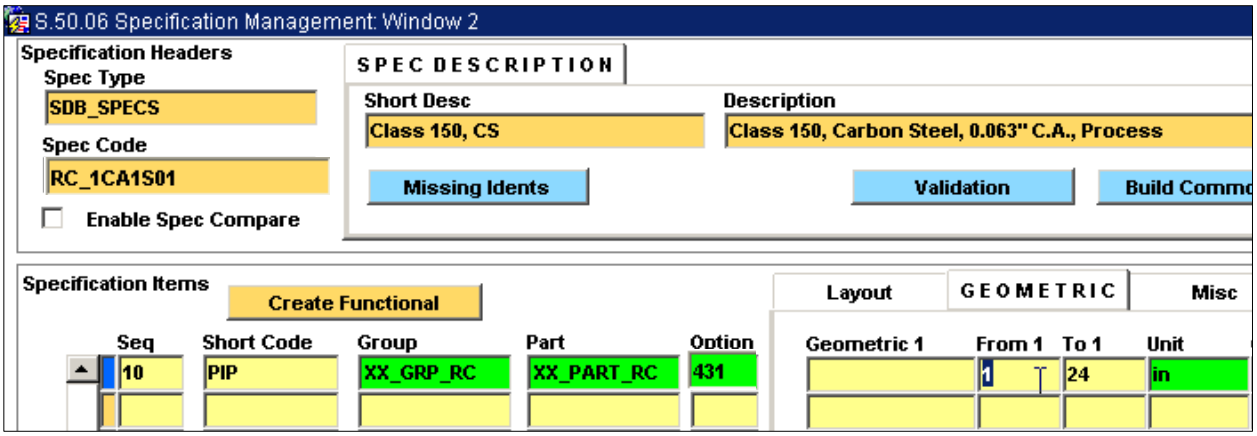


k. Press **F8** to retrieve the Idents. System will display the Idents based on the **Geometrics** table **P_BI_1NPS_1SCH** and size range **.5”** to **24”**.



l. Close the **“S.50.06 Specification Management Window 3”** to return to the **“S.50.06 Specification Management Window 2”** Spec Item screen

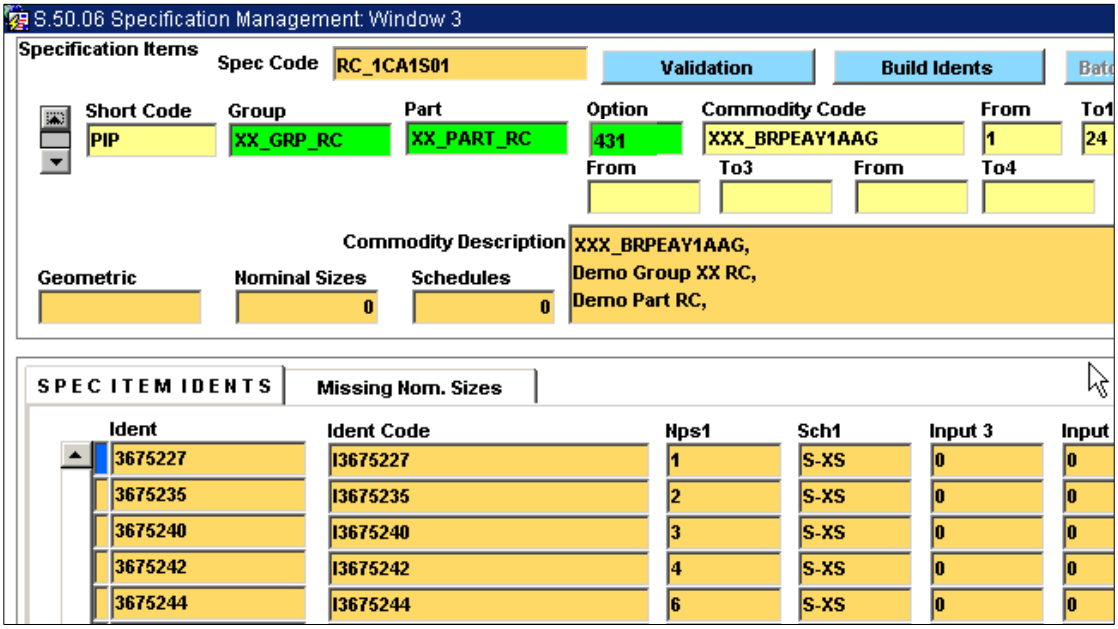
m. In the **Geometric** tab **erase** the entry in the **Geometric 1** field and set the size range to **1”** to **24”**.



n. Save the changes.

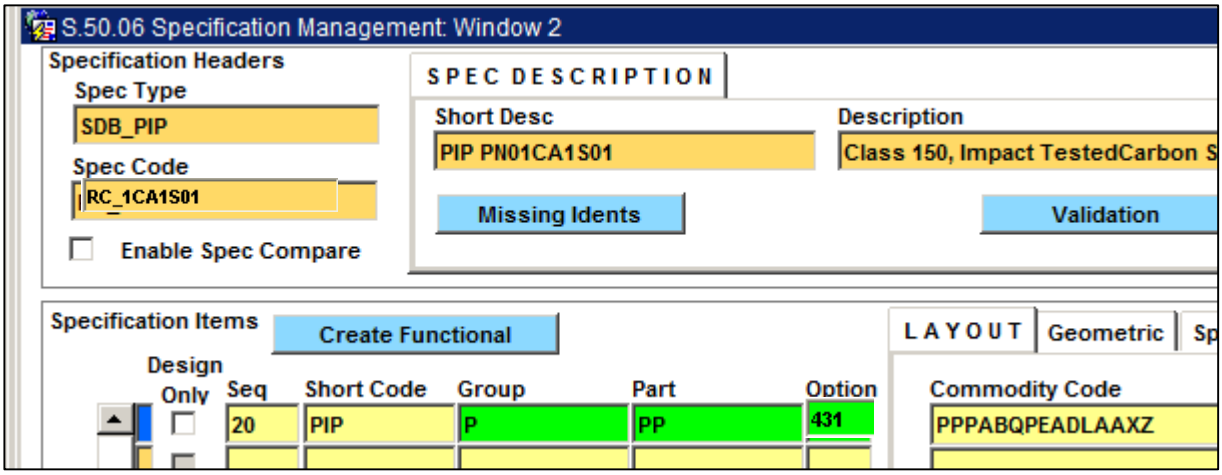
o. Click on the **Go To Next Block** Icon to open the **"S.50.06 Specification Management Window 3"** screen to view the idents associated with the Spec.

p. System will display the idents stored in its memory from the previous query. Press **F8** to refresh the Ident list. Now the system will display only those Idents that are valid for the Spec Filter **X_<Init>_BI_1NPS_1SCH** specified in the **Spec Header Geometrics** tab.



q. Close the **"S.50.06 Specification Management Window 3"** to return to the **"S.50.06 Specification Management Window 2"** Spec Item screen.

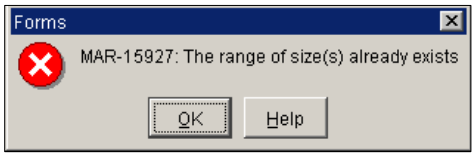
r. In the **Specification Items** section, **click** on the first blank row to add a new item with **Seq** = **20, Short Code** = **PIP, Group** = **P, Part** = **PP, Option** = **1** and **Commodity Code** = **PPPABQPEADLAAXZ**.



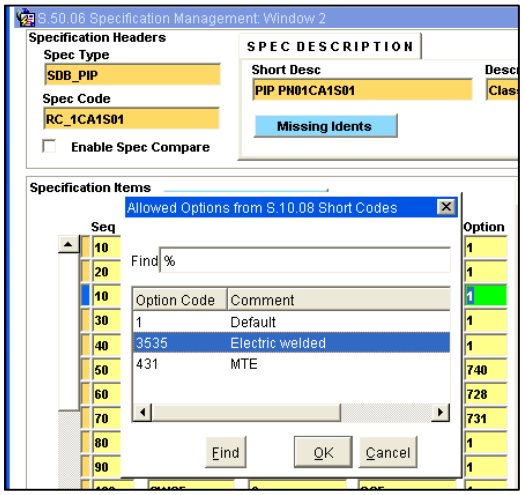
s. Try to save the changes.

t. The system will display an error message to the effect that **the range of size(s) already exists**. This is because when we added the second pipe to the spec the system did not limit it to a specific size range, which means all sizes are valid.

   i. FYI: A spec cannot have two items with the same short code with overlapping size range with the same **Option** code. So we need to set the correct size range and / or the option code.

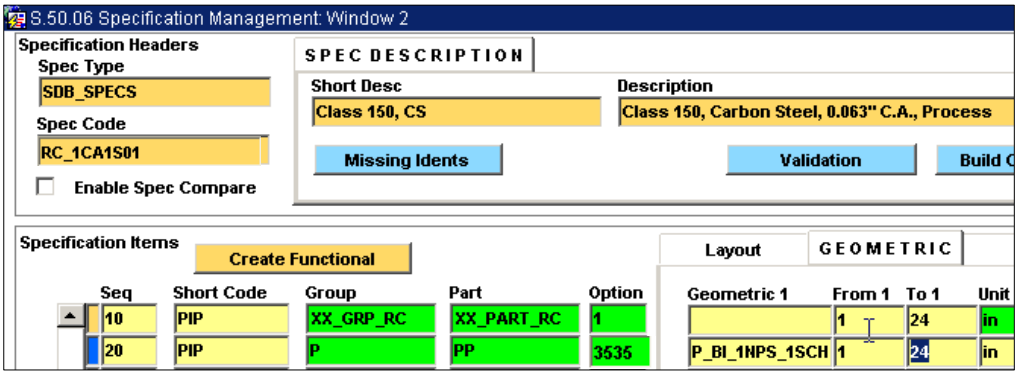


u. **Click** on the **Option** field and press **F9** to display a **LOV**. Select the **Option Code 3535** from the **LOV**

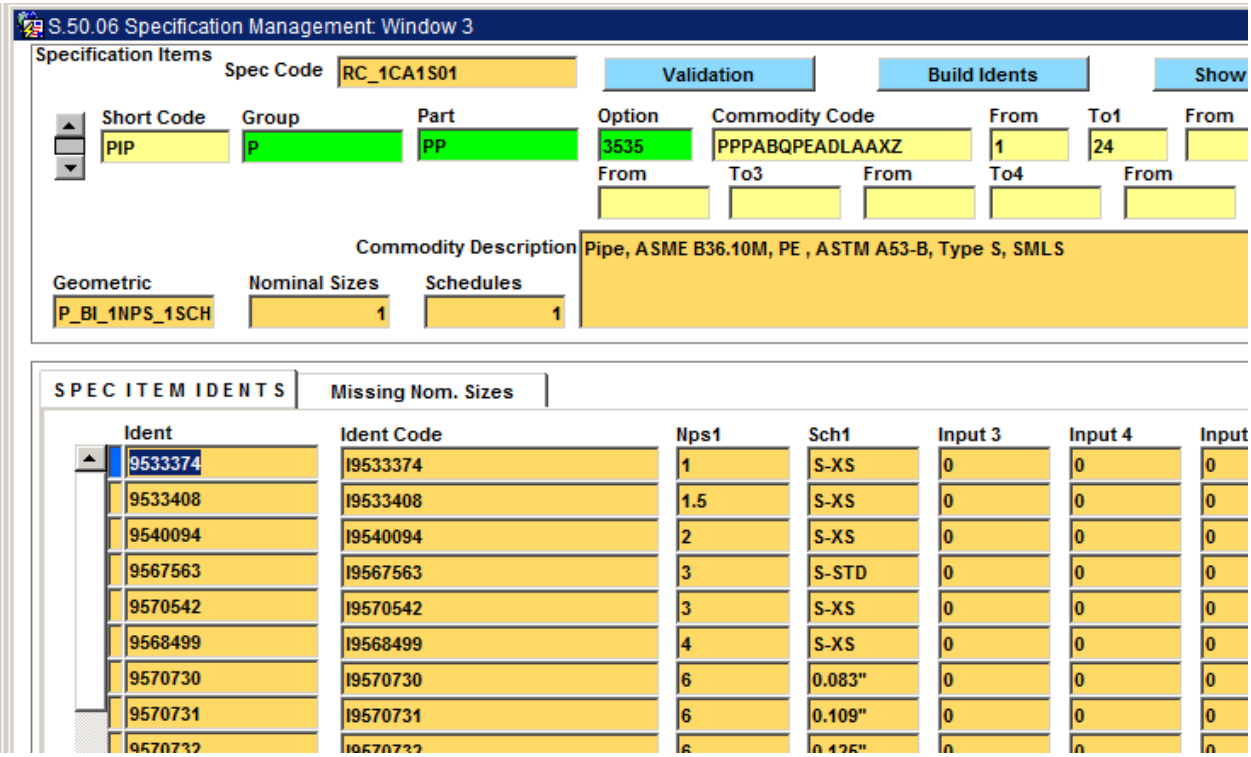


v. The **Option** field will be set to **3535**

w. Set the size range to **1”** to **24”** and save the changes. The system should not report any errors

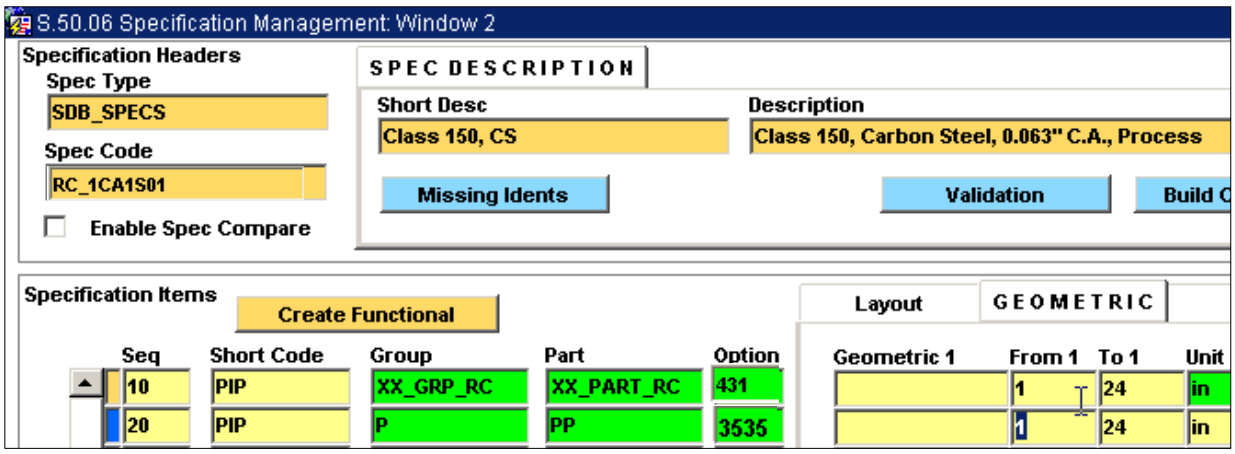


x. **Click** on the **Go To Next Block** icon to view the idents associated with the flange. Press **F8** to retrieve all the idents. System will display only those Idents whose size / schedules match the entries in **Geometric** table **P_BI_1NPS_1SCH** in the size range **1”** to **24”**.



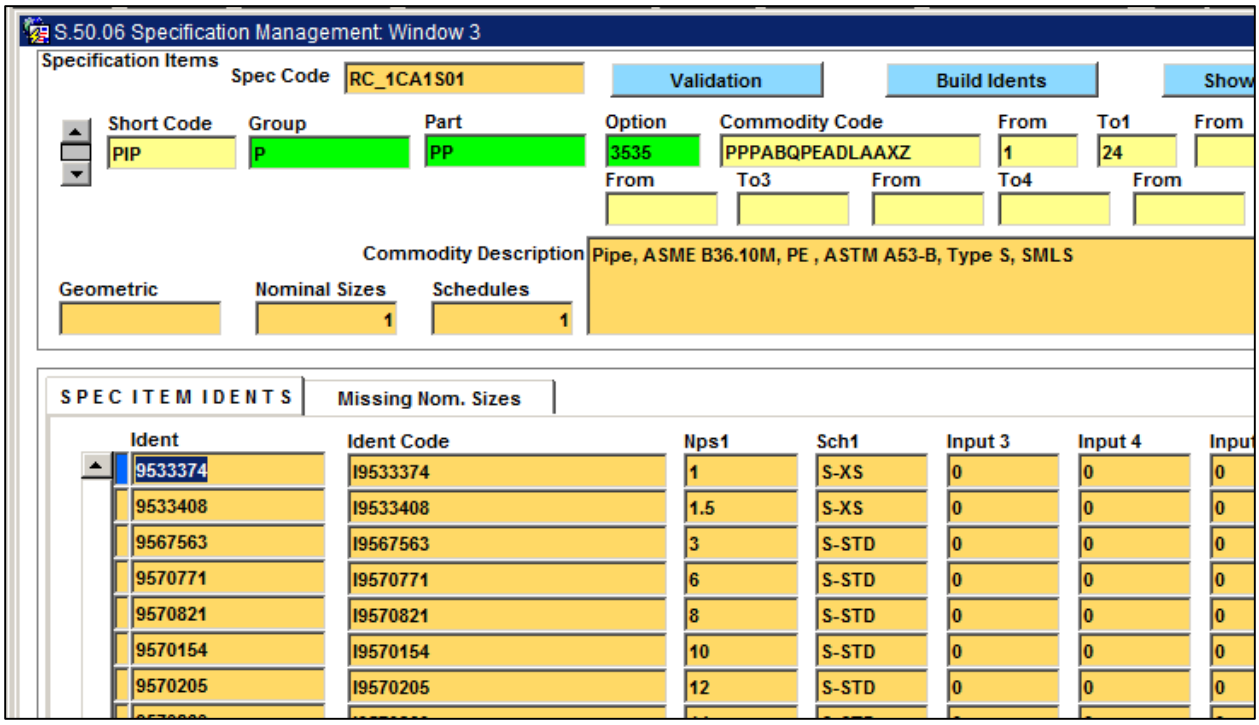
y. Close the **“S.50.06 Specification Management: Window 3”** to return back to the Item screen.

z. In the **Geometric** tab erase the entry in the **Geometric 1** field and Save the changes.



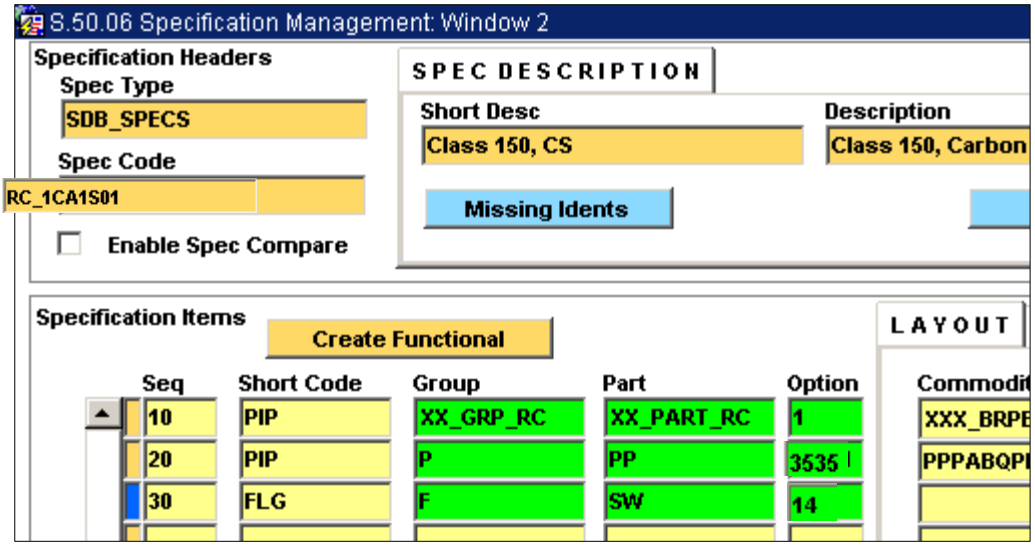
aa. Click on the **Go To Next Block** icon to view the idents associated with the second pipe. Press **F8** to retrieve all the idents. Now the system will display only those

Idents that are valid for the Spec based on the filter **X_<Init>_BI_1NPS_1SCH** specified in the **Spec Header Geometrics** tab.



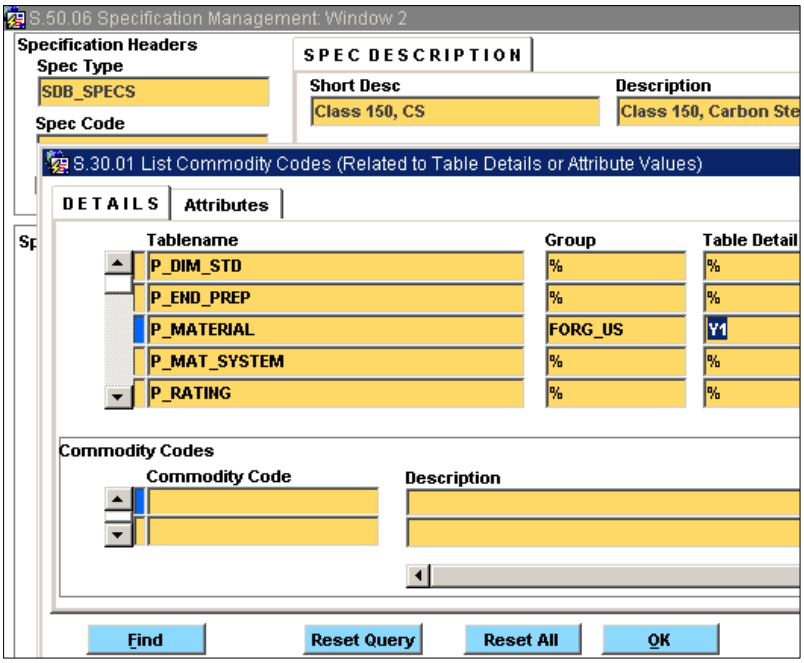
bb. Close the **"S.50.06 Specification Management: Window 3"** to return back to the Item screen.

cc. **Click** on the blank row and add a flange as **Spec Item 30** by setting the **Short Code** to **FLG**, **Group** to **F** and **Part** to **SW**.

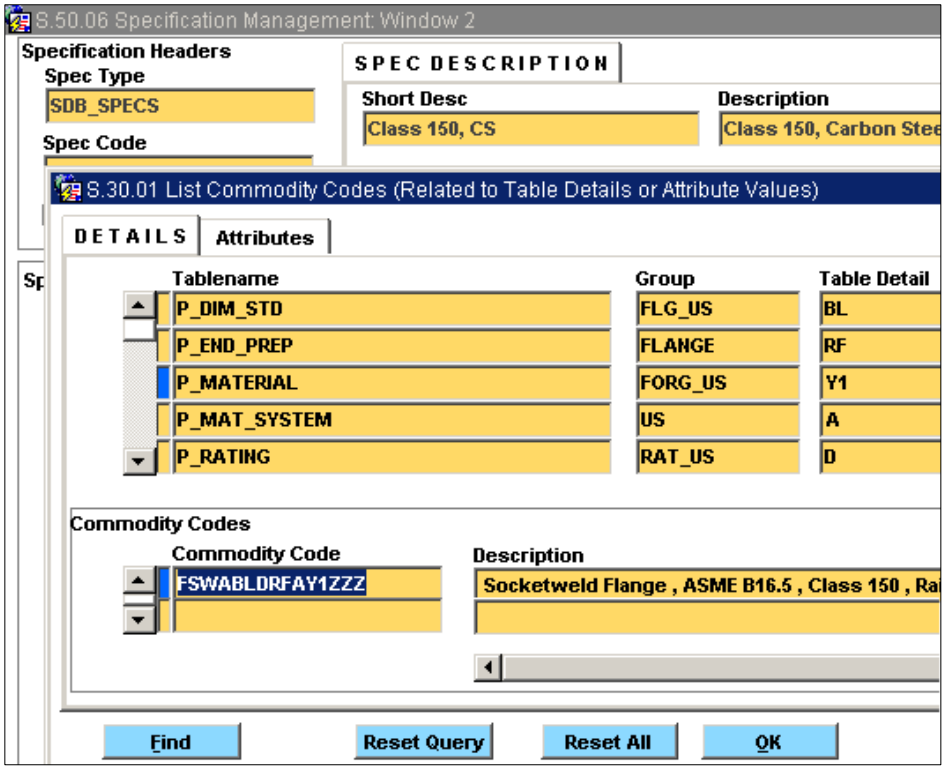


dd. In the layout tab click on the **Commodity Code** and press **F9** to select a from **LOV**

ee. **Click** on the **Group** field of the **Tablename P_MATERIAL** and select **FORG_US** from the **LOV**. Then **select** the **table detail Y1** from the second **LOV**. **Click** on the **Find** button to search for the flange we created earlier.

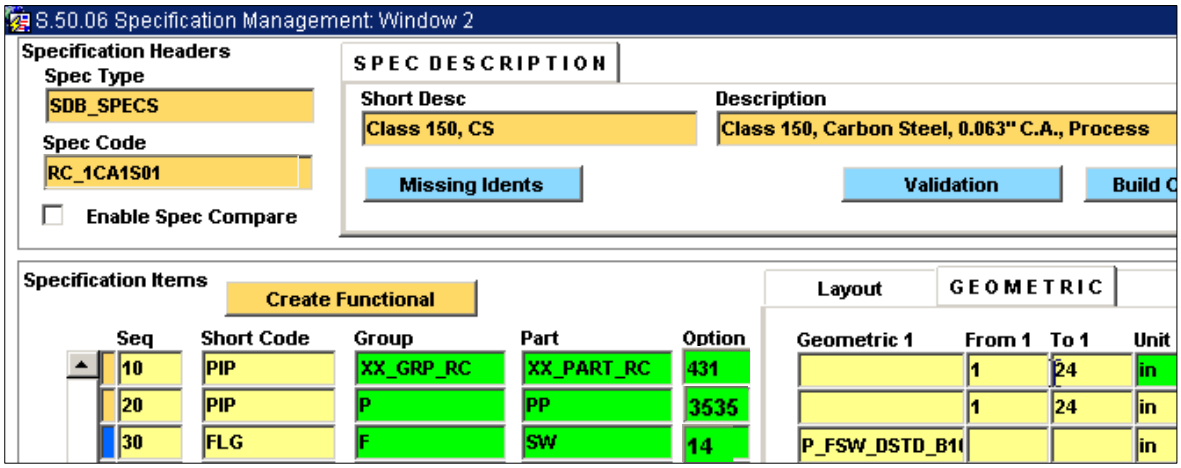


ff. Select the first flange and **click** the **OK** button.

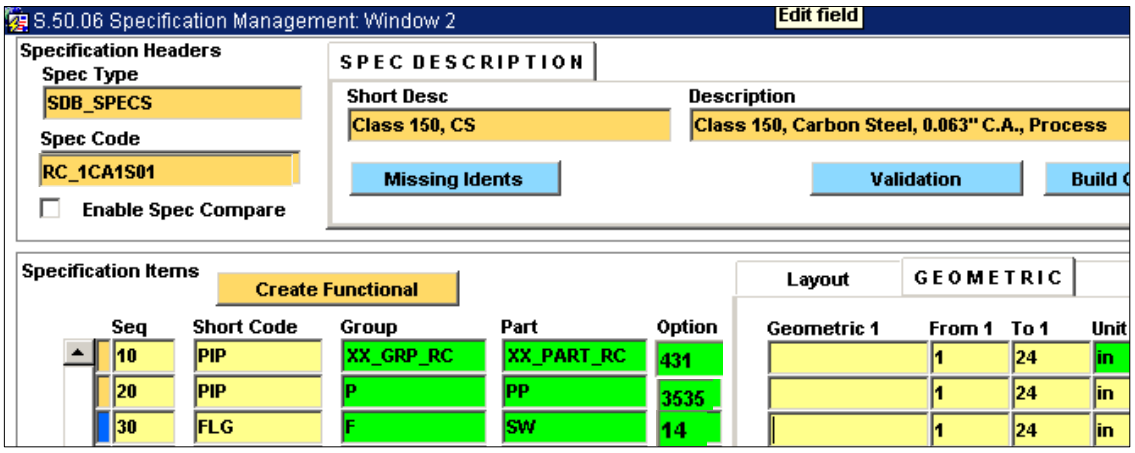


gg. System will assign the selected **Commodity Code** to spec item **30**.

hh. Click on the **Geometric** tab to see that the system assigned a geometric **P_FSW_DSTD_B10.19** and did not set the size range.

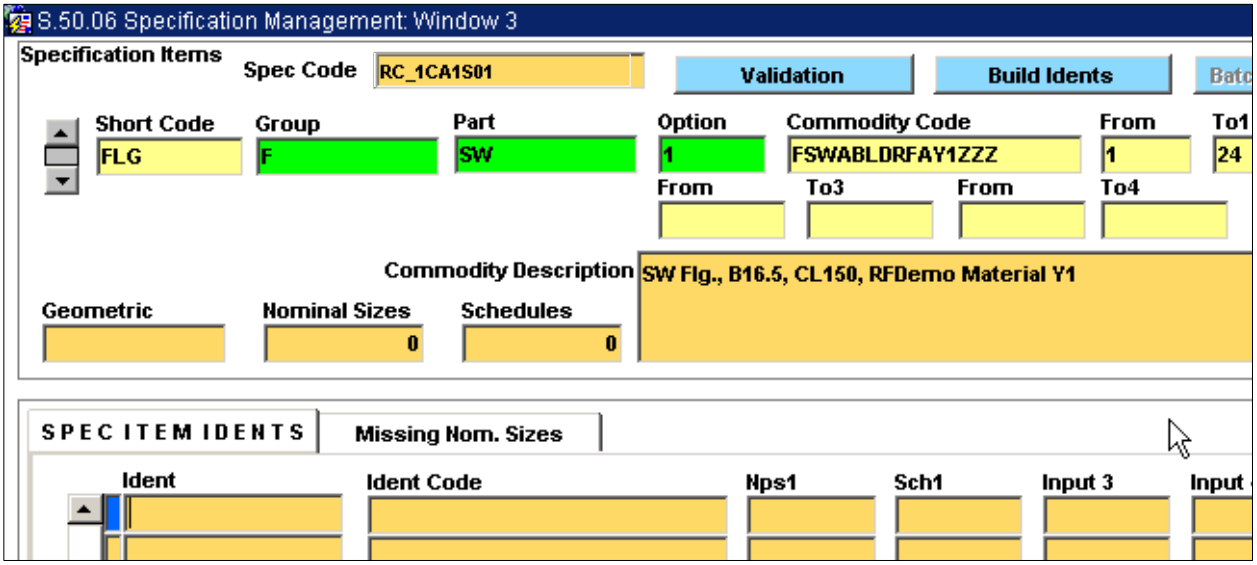


ii. We do not want to control the valid size / schedule combination for the flange at the item level, hence erase the entry in the **Geometric 1** field and change the size range to **1** to **24** in.

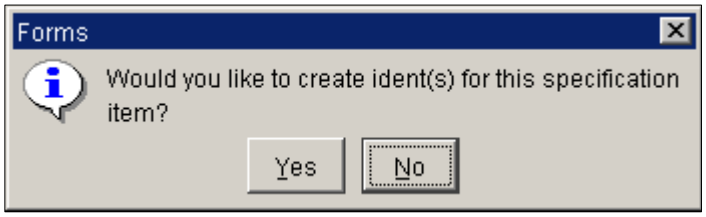


jj. Save the changes

kk. Click on the **Go To Next Block** icon to view the idents associated with the flange. Press **F8** to retrieve all the idents. Since no idents have been built for this commodity, there are no entries in the **Spec Item Idents** tab.

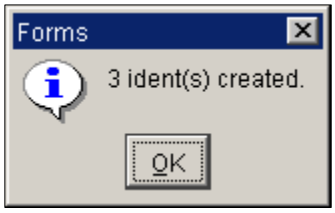


ll. **Click** on the **Build Idents** button and **Click** the **Yes** button when the system asks for a confirmation to generate idents.

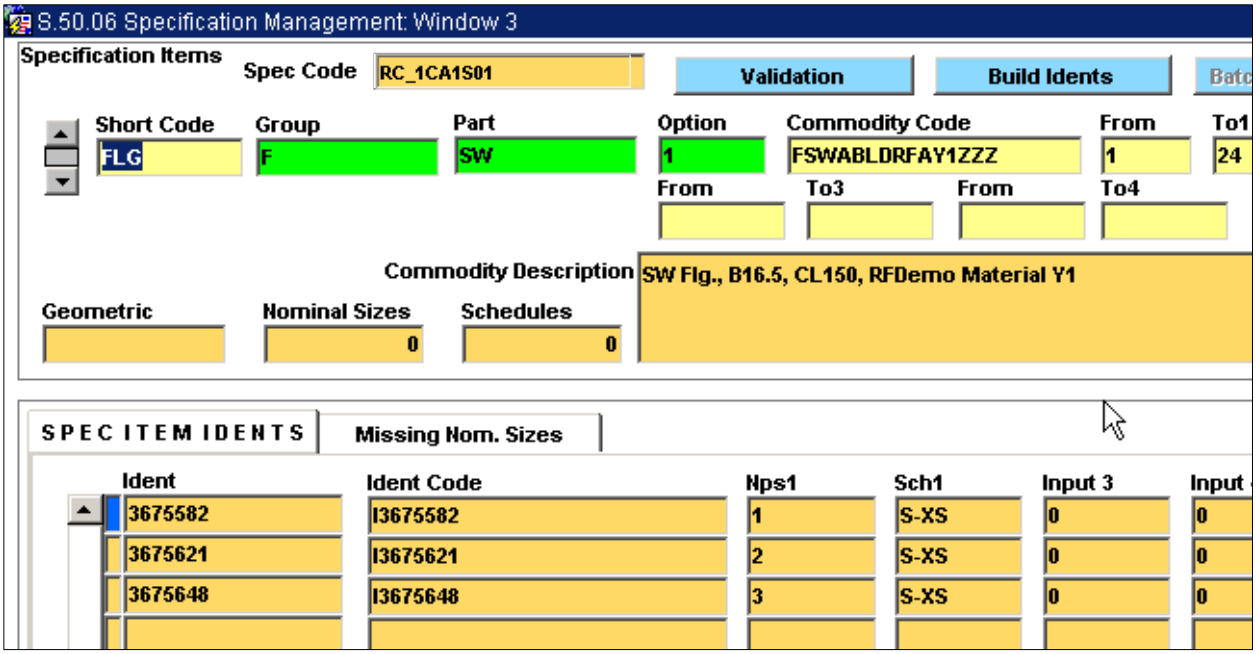


mm. System will display a message indicating the number of idents created. **Click** the **OK** button.

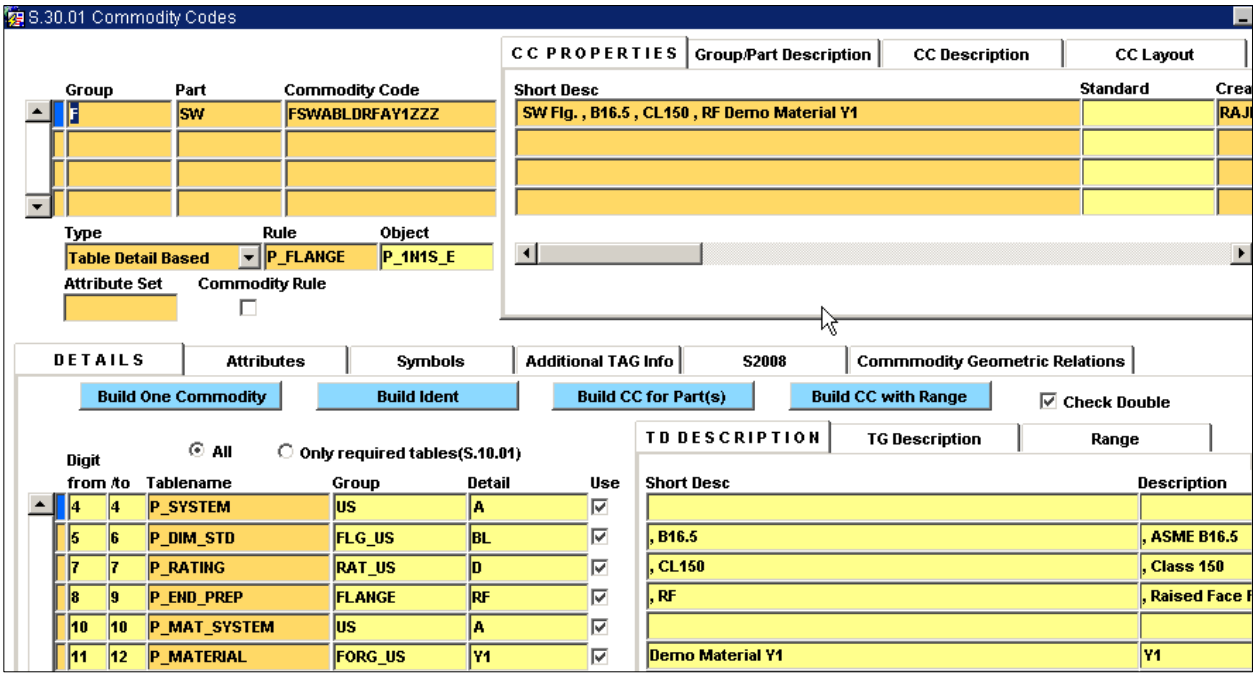
Note: You may get a different count depending on the Commodity Code and previous actions performed for it.



nn. System will display the generated idents. Note that only 3 idents were generated (sizes **1”, 2”** and **3”**).



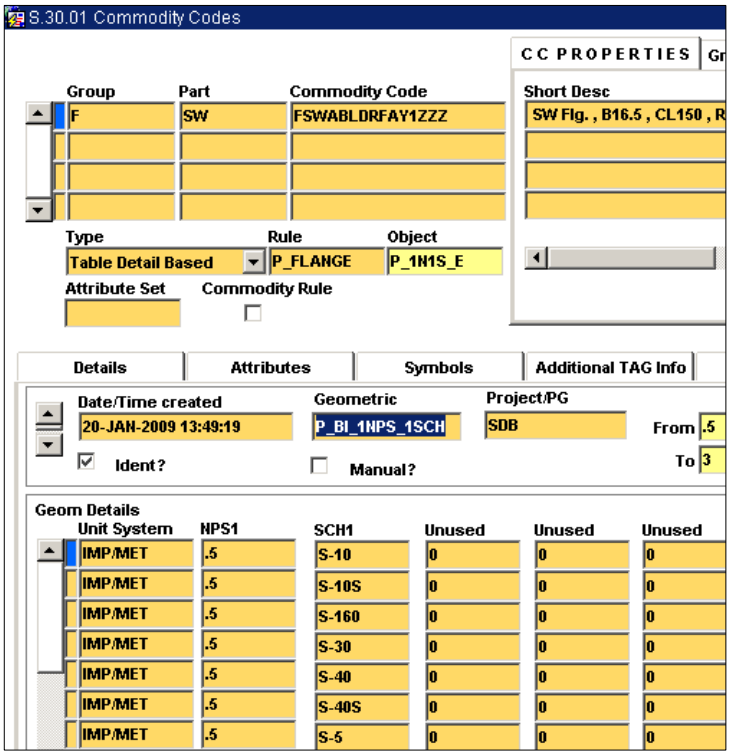
oo. To understand why it did so, **Double Click** on the **Commodity Code** to view the details of the Flange.



pp. Click on the **Commodity Geometric Relations** tab to view geometric table and size limitations for ident creation.

i. Note that the geometric table **P_BI_1NPS_1SCH** was used to build idents for size ranging from **.5”** to **3”**. This explains why sizes greater than **3”** were not built.

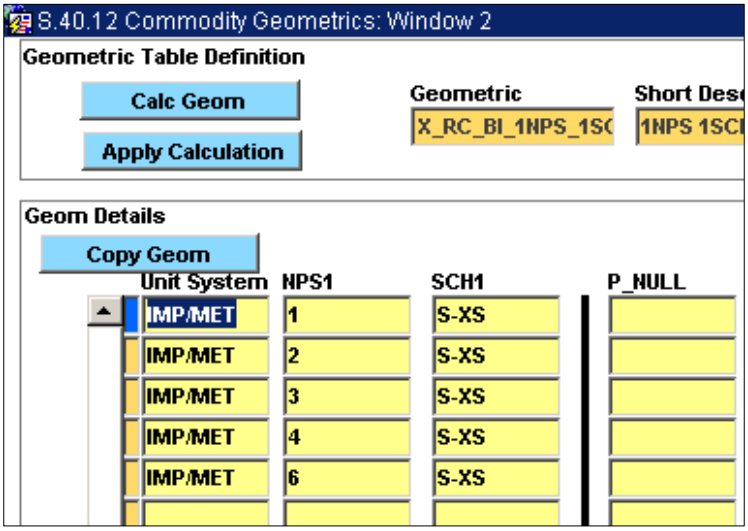
ii. However the table **P_BI_1NPS_1SCH** has other size / schedule combinations such as **.5”, 1”, 1.5”, 2”** for which idents were not created.



qq. To understand why idents were not created for all the size /schedule combinations we need to review the spec filter.

rr. Close the Commodity Code and Item screens and return back to the **“S.50.06 Specification Management”** screen.

ss. In the **Spec Header Geometric** tab, **Double Click** on the Spec Filter **X_<Init>_BI_1NPS_1SCH** to view the Size / Schedule combinations valid for this spec. As you can see from the screen below only the sizes **1”, 2”, 3”, 4”, 5”** and **6”** with a schedule **S-XS** are allowed. Hence only three idents were created for the flange, one each for **1”, 2”** and **3”** with schedule **S-XS**.



tt. Click on the **Report** Icon and print the Spec using the **S.50.R.US.03 PIP Spec Report** (or any other Spec Report if the PIP Spec Report is not available). From **LOV** select your spec name and click on the **Start Report** button. System should display a pdf file showing the Spec header details, Pressure / Temperature Ratings, Branch Table, Notes and the Items.

Date: Jan. 07, 2012

Piping Material Specification Line Class: **RC_1CA1S01**
Rev. No.: **0**

P_SERVICE:	Process	P_RATING_CLASS:	150, ASME B16.5a - 1998
P_TEMP_LIMIT:	-50F to 650F (Note 09)	P_MATERIAL_TYPE:	Impact Tested Carbon Steel
P_DESIGN_CODE:	ASME B31.3-2002	P_STRESS_RELIEF:	None Required
P_EXAMINATION:	Per ASME B31.3	P_CORR_ALLOWANCE:	0.063 in (0.05 in MIN)
P_PT_COMMENT:	For NPS 1/2 through NPS 40 (Pressure is limited by A352 GR LCB valve material.)	P_PT_COMMENT:	For NPS 42 through NPS 48 (Note 01)
GENERAL NOTES:	15, 17, 59, 81, R01, R03, R04, R05, R06, R0		

Pressure - Temperature Ratings

Temp.	-50 F	400 F	500 F	600 F	650 F
Press.	300 PSIG	250 PSIG	200 PSIG	150 PSIG	100 PSIG

ITEM	Rev.	Notes	NPS1	NPS2	Comm.Code	Description
Forged Fittings			.5 - .5	-	ONIPABQPGAD4ABBZ	Nipple, B36.10M, PE ASTM A333-6, 6" Long , SMLS , Ej=1.00
			.5 - 1.5	-	ONIPABQPGAD4ABAZ	Nipple, B36.10M, PE ASTM A333-6, 4" Long , SMLS , Ej=1.00
			.5 - 2	-	ONIPABQPMAD4ABAZ	Nipple, B36.10M, PE x MTE ASTM A333-6, 4" Long , SMLS , Ej=1.00
			.5 - .5	-	ONIPABQPGAD4AAZZ	Nipple, B36.10M, PE ASTM A333-6, 3" Long , SMLS , Ej=1.00
			.75 - 1.5	.5 - 1	OSGCAM8PEAYUAANZ	Con. Swage, MSS SP-95, PBE , ASTM A420 Grade WPL6, Type S
			.75 - 1.5	.5 - 1	OSGEAM8PEAYUAANZ	Ecc. Swage, MSS SP-95, PBE , ASTM A420 Grade WPL6, Type S
			2 - 48	.5 - 1.5	OSOCAM9SSWACRZZZ	Sockolet, MSS SP-97, CL 3000, SWE , ASTM A350 Grade LF2

uu. Close all the screens

Lab 22. Create a new Spec

a. Launch **"S.50.06 Specification Management"**

b. Add the Header
   i. Ensure you are in the **Data Entry (Green Background) Mode**
   ii. **Click** on the first blank row.
   iii. Select the Spec Type **SDB_PIP** and add a new spec **<Init>_2CS150**
   iv. Save the changes

c. Add Header Geometrics
   i. In the **Spec Header Geometric** tab add the branch details by, entering a **Short Code** of **90%**, **Table Type** of **Branch Filter** and **Table Name** of **BR1CA1S01** and size range **1 – 24, 1 – 24**. **Check** the **Filter** checkbox.
   ii. Similarly specify the nominal sizes by, entering a **Short Code** of **%**, **Table Type** of **Nominal Sizes** and **Table Name** of **1CA1S01** and specifying size range **1 – 24**. Do not check the **Filter** checkbox.
   iii. Specify the spec filter to limit the size schedule combinations for all components in the spec by, entering a **Short Code** of **%**, **Table Type** of **User Defined Filter** and **Table Name** of **P_BI_1NPS_1SCH** and size range **1 – 24**. Check the **Filter** checkbox.
   iv. Save the changes

d. Specify Spec Details
   i. Click on the **Specification Groups** tab and add following groups via **LOV**

Seq	Table Name	Group
1	P_FLUID_CODE	ALL
2	P_RATING_CLASS	ANSI
3	P_TEMP_LIMIT	ALL
4	P_CORR_ALLOWANCE	ALL
5	P_MATERIAL_TYPE	ANSI
6	P_DESIGN_CODE	ANSI
7	P_STRESS_RELIEF	ANSI
8	P_EXAMINATION	ANSI

   ii. Click on the **Specification Details** tab and add following details via **LOV**

Seq	Table Name	Group	Detail
1	P_FLUID_CODE	ALL	AA
2	P_RATING_CLASS	ANSI	AA
3	P_TEMP_LIMIT	ALL	EN
4	P_CORR_ALLOWANCE	ALL	AA
5	P_MATERIAL_TYPE	ANSI	C8
6	P_DESIGN_CODE	ANSI	AE
7	P_STRESS_RELIEF	ANSI	AB
8	P_EXAMINATION	ANSI	AA

iii. Save the changes

e. Add notes

i. Click on the **Specification Notes** tab and add the predefined note **15, 59 and 81** at the header level, using the **LOV**. **This Note** field represents the sequence in which the notes will be printed.

ii. Save the changes

f. Specify P/T limits

i. Click on the **Specification Limits** tab and enter the Pressure / Temperature details as follows

Pressure	Unit	Temperature	Unit
125	PSIG	650	F
140	PSIG	600	F
170	PSIG	500	F
200	PSIG	400	F
230	PSIG	300	F

ii. Save the changes

g. Print the Spec

i. Click on the Report Icon and **Select the Report S.50.R.US.03 PIP Spec Report** (or any other Spec Report if the PIP Spec Report is not available).

ii. Print a copy of the Spec using the From **LOV** select your spec name and click on the **Start Report** button.

iii. System should display a pdf file showing the Spec header details, Pressure / Temperature Ratings, Branch Table and Notes. Note that no items are printed.

h. Close all the screens

Lab 23. Add Pipes to the Spec

a. Launch **"S.50.06 Specification Management"** and **enter the query** mode

b. Search for the spec you created by typing in **<Init>_2CS150** in the Spec Code and **Running the query**

c. Double Click on your **Spec Code** to add the following Items

Note: If the below listed Commodity Code don't exists, use other commodity codes.

Seq	Short Code	Group	Part	Option	Commodity Code	Geometric	From1	To1	Unit	From 2	To2	Unit
10	PIP	P	PP	1	PPPABQPEAD4AAVZ		.5	1.5	in			
20	PIP	P	PP	1	PPPABQBEAD4AAVZ		4	24	in			
30	PIP	P	PP	1	PPPABQBEADSAAPZ		26	30	in			
40	PIP	P	PP	1	PPPABQBEADSAAPZ		36	48	in			

d. **Click** on the **Go To Next Block** Icon to view **"S.50.06 Specification Management Window 3"** to view the list of associated idents with each item and generate any missing idents.

e. **Click** on the **Report** Icon and print the Spec using the **S.50.R.US.03 PIP Spec Report** (or any other Spec Report if the PIP Spec Report is not available). From **LOV** select your spec and click on the **Start Report** button. System should display a pdf file showing the Spec header details, Pressure / Temperature Ratings, Notes and the Items.

f. Close all the screens

Lab 24. Add Flanges to the Spec

a. Launch **"S.50.06 Specification Management"** and **enter the query** mode

b. Search for the spec you created by typing in **<Init>_2CS150** in the Spec Code and **Running the query**

c. Double Click on your **Spec Code** to add the following Items to the spec

Seq	Short Code	Group	Part	Option	Commodity Code	Geometric	From1	To1	Unit	From 2	To2	Unit
50	FLG	F	SW	1	FSWABLDRFACRZZZ		.5	1.5	in			
60	FLG	F	SW	211	FSWABLDFFACRZZZ		.5	1.5	in			
70	FLG	F	SW	773	FSWABLIRFACRZZZ		.5	1.5	in			
80	FLG	F	BL	1	FBLABLDRFACRZZZ		.5	24	in			
90	FLG	F	BL	773	FBLABLIRFACRZZZ		.5	24	in			
100	FLG	F	BL	1	FBLABJDRFACRZZZ		26	48	in			
120	FLG	F	WN	1	FWNABLDRFACRZZZ		2	24	in			
130	FLG	F	WN	1	FWNABJDRFACRZZZ		26	48	in			

d. **Click** on the **Go To Next Block** Icon to view **"S.50.06 Specification Management Window 3"** to view the list of associated idents and generate any missing idents.

e. **Click** on the **Report** Icon and print the Spec using the **S.50.R.US.03 PIP Spec Report** (or any other Spec Report if the PIP Spec Report is not available). From **LOV** select your spec and click on the **Start Report** button. System should display a pdf file showing the new items.

f. Close all the screens

Lab 25. Add Gaskets to the Spec

a. Launch **"S.50.06 Specification Management"** and **enter the query** mode
b. Search for the spec you created by typing in **<Init>_2CS150** in the Spec Code and **Running the query**
c. Double Click on your **Spec Code** to add the following Items to the spec

Seq	Short Code	Group	Part	Option	Commodity Code	Geometric	From1	To1	Unit	From 2	To2	Unit
140	GSK	G	NM	1	GNMAB7DRFAZQA1J	P_BI_GSK_1.6_MM	.5	24	in			
150	GSK	G	SW	1	GSWAB8DRFAZHZZZZ	P_GSW_DSTD_B16_20_ESTD_B16.47B_CL150	26	48	in			
160	GSK	G	NM	773	GNMAB7IRFAZQA1J	P_BI_GSK_1.6_MM	.5	24	in			

d. Click on the **Go To Next Block** Icon to view **"S.50.06 Specification Management Window 3"** to view the list of associated idents and generate any missing idents.
e. Click on the **Report** Icon and print the Spec using the **S.50.R.US.03 PIP Spec Report** (or any other Spec Report if the PIP Spec Report is not available). From **LOV** select your spec name and click on the **Start Report** button. System should display a pdf file showing the new items.
f. Close all the screens

Lab 26. Add Gate Valves to the Spec

a. Launch **"S.50.06 Specification Management"** and **enter the query** mode
b. Search for the spec you created by typing in **<Init>_2CS150** in the Spec Code and **Running the query**
c. Double Click on your **Spec Code** to add the following Items to the spec

Seq	Short Code	Group	Part	Option	Commodity Code	Geometric	From1	To1	Unit	From 2	To2	Unit
180	VGAT	VG	R	1	VGRAAXMSWZFADQA1BZZZZ		.5	2	in			
190	VGAT	VG	R	221	VGRAAXDRFZFADQA1BZZZZ		.5	2	in			
200	VGAT	VG	R	1	VGRAAXDRFHFACFA1BZZZZ		3	24	in			
210	VGAT	VG	R	1	VGRAAXDRFHFACFA1BZZZZ		26	48	in			

g. Click on the **Go To Next Block** Icon to view **"S.50.06 Specification Management Window 3"** to view the list of associated idents and generate any missing idents.
d. Click on the **Report** Icon and print the Spec using the **S.50.R.US.03 PIP Spec Report** (or any other Spec Report if the PIP Spec Report is not available). From **LOV** select your spec name and click on the **Start Report** button. System should display a pdf file showing the new items.
e. Close all the screens

Lab 27. Add Globe Valves to the Spec

a. Launch **"S.50.06 Specification Management"** and **enter the query** mode

b. Search for the spec you created by typing in **<Init>_2CS150** in the Spec Code and **Running the query**

c. Double Click on your **Spec Code** to add the following Items to the spec

Seq	Short Code	Group	Part	Option	Commodity Code	Geometric	From1	To1	Unit	From 2	To2	Unit
230	VGLB	VL	R	1	VLRAAXMSWZFACFA1BZZZZ		.5	2	in			
240	VGLB	VL	R	1	VLRAAXDRFZFACFA1BZZZZ		3	12	in			

d. Click on the **Go To Next Block** Icon to view **"S.50.06 Specification Management Window 3"** to view the list of associated idents and generate any missing idents.

e. Click on the **Report** Icon and print the Spec using the **S.50.R.US.03 PIP Spec Report** (or any other Spec Report if the PIP Spec Report is not available). From **LOV** select your spec name and click on the **Start Report** button. System should display a pdf file showing the new items.

f. Close all the screens

Lab 28. Add Check Valves to the Spec

a. Launch **"S.50.06 Specification Management"** and **enter the query** mode

b. Search for the spec you created by typing in **<Init>_2CS150** in the Spec Code and **Running the query**

c. Double Click on your **Spec Code** to add the following Items to the spec

Seq	Short Code	Group	Part	Option	Commodity Code	Geometric	From1	To1	Unit	From 2	To2	Unit
250	VCHK	VC	WF	33	VCWFAAXDRFZACF1DTZZZZ		3	24	in			
260	VCHK	VC	WF	33	VCWFAAXDRFZACF1DTZZZZ		26	48	in			
270	VCHK	VC	SC	1	VCSCAAXDRFZACF1A2ZZZZ		3	24	in			
280	VCHK	VC	SC	1	VCSCAAXDRFZACF1A2ZZZZ		26	48	in			

d. Click on the **Go To Next Block** Icon to view **"S.50.06 Specification Management Window 3"** to view the list of associated idents and generate any missing idents.

e. Click on the **Report** Icon and print the Spec using the **S.50.R.US.03 PIP Spec Report** (or any other Spec Report if the PIP Spec Report is not available). From **LOV** select your spec name and click on the **Start Report** button. System should display a pdf file showing the new items.

f. Close all the screens

Lab 29. Add Ball Valves to the Spec

a. Launch **"S.50.06 Specification Management"** and **enter the query** mode

b. Search for the spec you created by typing in **<Init>_2CS150** in the Spec Code and **Running the query**

c. Double Click on your **Spec Code** to add the following Items to the spec

Seq	Short Code	Group	Part	Option	Commodity Code	Geometric	From1	To1	Unit	From 2	To2	Unit
300	VBAL	VB	B	1	VBBAAXISWXCADQA1AAAUZ		.5	2	in			
310	VBAL	VB	B	1	VBBAAXDRFXCADQA1AAAUZ		3	6	in			
320	VBAL	VB	B	24	VBBAAXDRFKCADQA1AAAUZ		3	6	in			
330	VBAL	VB	B	1	VBBAAXDRFXBADQA1AAAUZ		8	10	in			
340	VBAL	VB	B	1	VBBAAXDRFXBADQA1AAAUZ		12	24	in			
350	VBAL	VB	B	1	VBBAAXDRFXBADQA1AAAUZ		26	48	in			
360	VBAL	VB	B	24	VBBAAXDRFKBADQA1AAAUZ		8	10	in			

d. Click on the **Go To Next Block** Icon to view **"S.50.06 Specification Management Window 3"** to view the list of associated idents and generate any missing idents.

e. Click on the **Report** Icon and print the Spec using the **S.50.R.US.03 PIP Spec Report** (or any other Spec Report if the PIP Spec Report is not available). From **LOV** select your spec name and click on the **Start Report** button. System should display a pdf file showing the new items.

f. Close all the screens

Lab 30. Add 90 Deg Elbows to the Spec

a. Launch **"S.50.06 Specification Management"** and **enter the query** mode
b. Search for the spec you created by typing in **<Init>_2CS150** in the Spec Code and **Running the query**
c. In the **Spec Header Geometric** tab add the branch details by, entering a **Short Code** of **90%**, **Table Type** of **Branch Filter** and **Table Name** of **BR1CA1S01** and size range **0.75 – 24, .5 – 20**. Check the **Filter checkbox**.
d. Save the changes
e. Double Click on your **Spec Code** to add the following Items to the spec

Seq	Short Code	Group	Part	Option	Commodity Code	Geometric	From1	To1	Unit	From 2	To2	Unit
370	E90	O	E90	1	OE90AB2SSWACRZZZ		.5	1.5	in			

f. Click on the **Go To Next Block** Icon to view **"S.50.06 Specification Management Window 3"** to view the list of associated idents and generate any missing idents.
g. Click on the **Report** Icon and print the Spec using the **S.50.R.US.03 PIP Spec Report** (or any other Spec Report if the PIP Spec Report is not available). From **LOV** select your spec name and click on the **Start Report** button. System should display a pdf file showing the new items.
h. Close all the screens

Lab 31. Add 45 Deg Elbows to the Spec

a. Launch **"S.50.06 Specification Management"** and **enter the query** mode
b. Search for the spec you created by typing in **<Init>_2CS150** in the Spec Code and **Running the query**
c. Double Click on your **Spec Code** to add the following Items to the spec

Seq	Short Code	Group	Part	Option	Commodity Code	Geometric	From1	To1	Unit	From 2	To2	Unit
440	E45	O	E45	1	OE45AB2SSWACRZZZ		.5	1.5	in			

d. Click on the **Go To Next Block** Icon to view **"S.50.06 Specification Management Window 3"** to view the list of associated idents and generate any missing idents.
e. Click on the **Report** Icon and print the Spec using the **S.50.R.US.03 PIP Spec Report** (or any other Spec Report if the PIP Spec Report is not available). From **LOV** select your spec name and click on the **Start Report** button. System should display a pdf file showing the new items.
f. Close all the screens

Lab 32. Add Swages to the Spec

a. Launch **"S.50.06 Specification Management"** and **enter the query** mode

b. Search for the spec you created by typing in **<Init>_2CS150** in the Spec Code and **Running the query**

c. Double Click on your **Spec Code** to add the following Items to the spec

Seq	Short Code	Group	Part	Option	Commodity Code	Geometric	From1	To1	Unit	From 2	To2	Unit
380	SWGC	O	SGC	1	OSGCAM8PEAYUAANZ		.75	1.5	in	.5	1	in
390	SWGE	O	SGE	1	OSGEAM8PEAYUAANZ		.75	1.5	in	.5	1	in

d. Click on the **Go To Next Block** Icon to view **"S.50.06 Specification Management Window 3"** to view the list of associated idents and generate any missing idents.

e. Click on the **Report** Icon and print the Spec using the **S.50.R.US.03 PIP Spec Report** (or any other Spec Report if the PIP Spec Report is not available). From **LOV** select your spec name and click on the **Start Report** button. System should display a pdf file showing the new items.

f. Close all the screens

Lab 33. Add Olets to the Spec

a. Launch **"S.50.06 Specification Management"** and **enter the query** mode

b. Search for the spec you created by typing in **<Init>_2CS150** in the Spec Code and **Running the query**

c. Double Click on your **Spec Code** to add the following Items to the spec

Seq	Short Code	Group	Part	Option	Commodity Code	Geometric	From1	To1	Unit	From 2	To2	Unit
400	90SOL	O	SOC	1	OSOCAM9SSWACRZZZZ		2	48	in	.5	1.5	in
410	90TOL	O	THL	541	OTHLAM9STFACRZZZZ		2	48	in	.5	1.5	in
420	EBL	O	L45	1	OL45AP2SSWACRZZZZ		2	48	in	.5	1.5	in
430	EBL	O	L45	541	OL45AP2STFACRZZZZ		3	48	in	.5	1.5	in
450	45LOL	B	WEL	1	BWELAM9BEACRZZZ		20	48	In	2	10	In
460	45LOL	B	WEL	541	BWELAM9BEACRZZZ		3	18	in	2	16	In

d. Click on the **Go To Next Block** Icon to view **"S.50.06 Specification Management Window 3"** to view the list of associated idents and generate any missing idents.

e. Click on the **Report** Icon and print the Spec using the **S.50.R.US.03 PIP Spec Report** (or any other Spec Report if the PIP Spec Report is not available). From **LOV** select your spec name and click on the **Start Report** button. System should display a pdf file showing the new items.

f. Close all the screens

Lab 34. Spec Evaluation

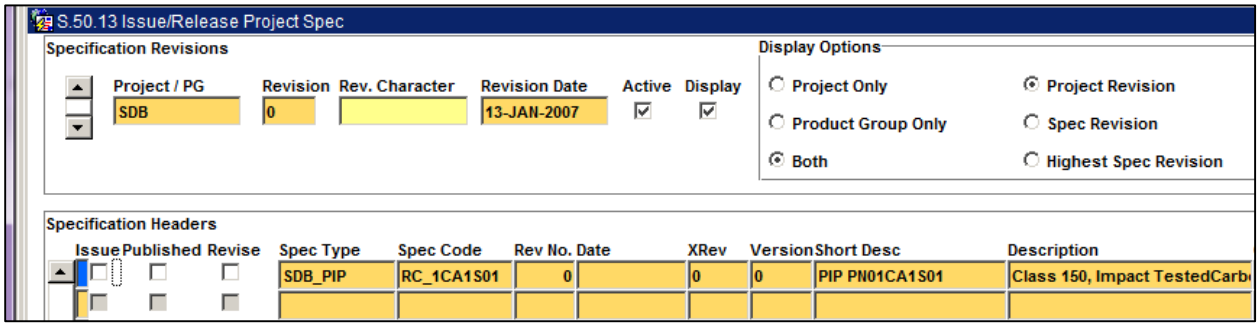
a. List all the things that are wrong with the above spec. Some of the things to consider are Size Ranges, Option Codes, Material, End Preparation, Standards, Facing Type etc.

Area / Information	Issue	Resolution
Spec Header		
Pressure / Temperature Limits		
Header Groups / Details		
Notes		
Pipes		
Flanges		
Ball Valves		
Gate Valves		
Check Valves		
Globe Valves		
Gaskets		
45 Deg Elbows		
90 Deg Elbows		
Swages		
Olets		
Bolts		

Lab 35. Issue / Revise / Publish Spec

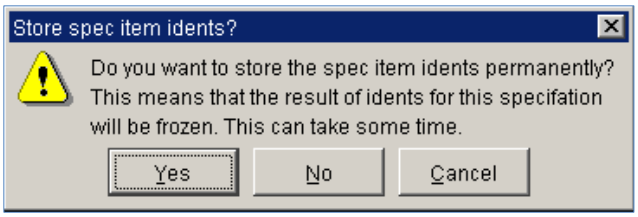
a. Launch the **"S.50.13 Issue / Release Project Spec"** screen

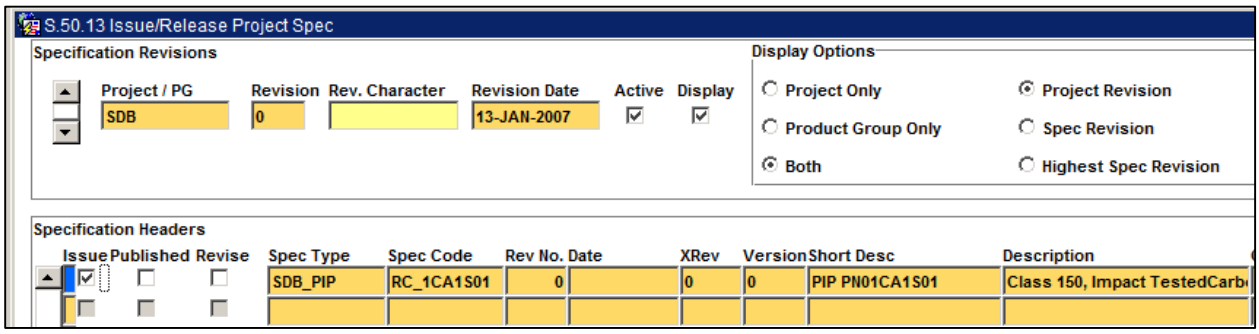
b. Find the spec **<Init>_1CA1S01** you created in previous Lab



c. Click the **Issued** checkbox and **Save** the changes to issue the spec

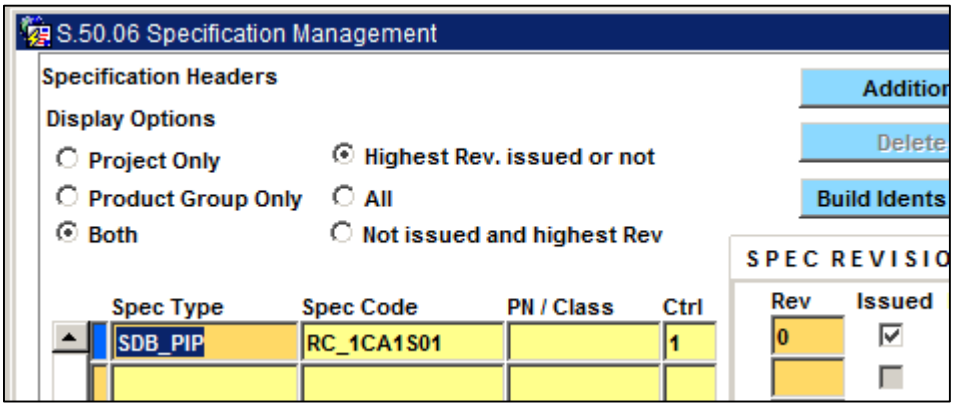
d. The system will prompt you for a confirmation and inform you that the spec will be frozen; additional changes would not be possible without revising the spec. **Click** the **Yes** button.



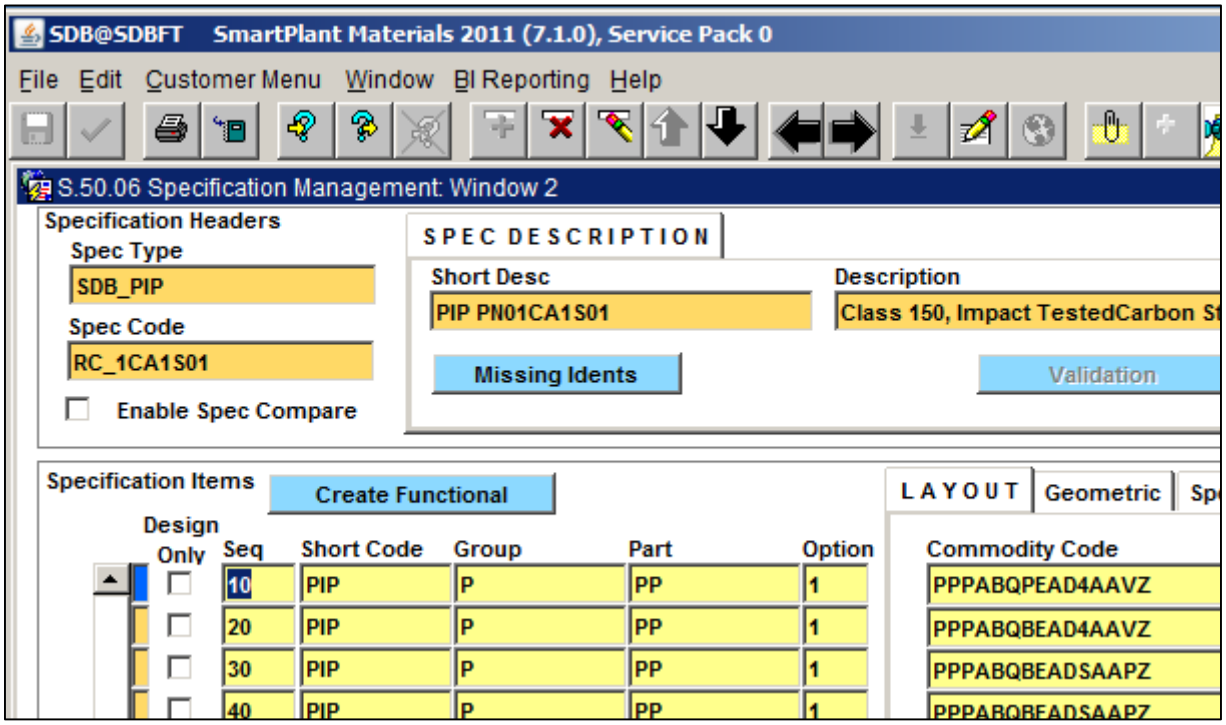


e. Close all screens

f. Open the **"S.50.06 Specification Management"** screen and navigate to your spec. Verify that the issued check box is turned on.



g. Double click on the spec to view the spec item. Note the Add / Delete icons are disabled and you cannot add, modify or delete items.



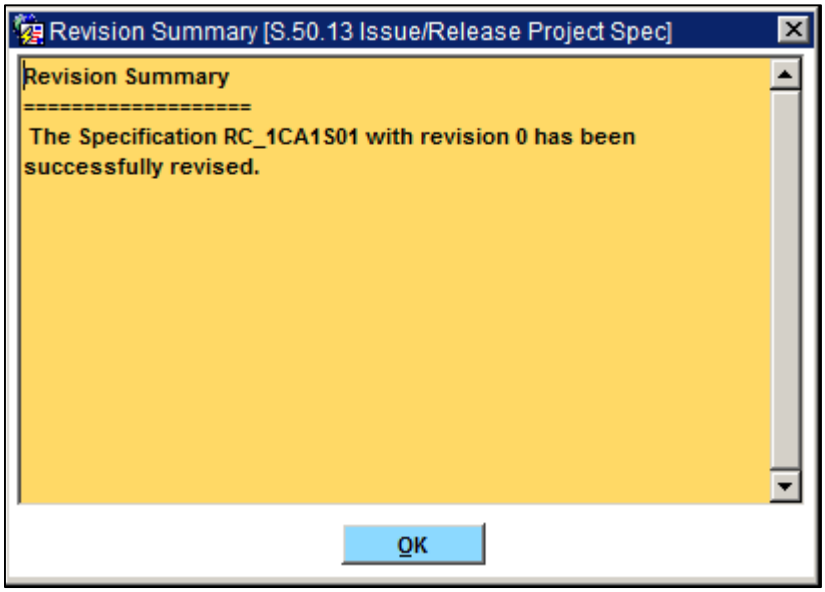
h. Close all screens

Lab 36. Revise a Spec

a. Open the **"S.50.13 Issue / Release Project Spec"** screen

b. Navigate to the spec **<Init>_1CA1S01** you issued above

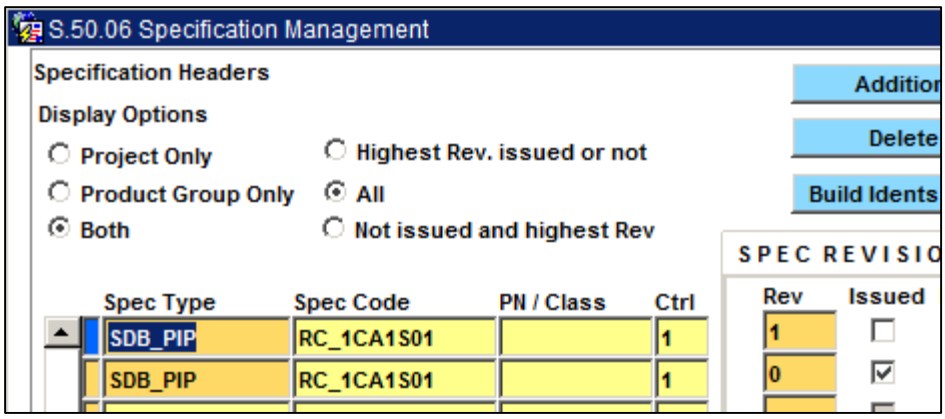
c. Select it and **click** on the **Revise Spec** button. The system will display a message, indicating that your spec has been successfully revised. **Click** the **OK** button.



d. Close all the screens

e. Open the **"S.50.06 Specification Management"** and press **F8** to retrieve all specs. Check the **Display All** radio button to show all the revs for the specs.

f. Search for your spec **<Init>_1CA1S01** and verify that the issued **check box** is checked only for rev 0 and not for rev 1.



g. **Double click** on the rev 1 of your Spec **<Init>_1CA1S01** to view the spec items. Note the Add / Delete icons are enabled.

h. Add following items to the spec

Seq	Short Code	Group	Part	Option	Commodity Code	Geometric	From1	To1	Unit	From 2	To2	Unit
490	90TEE	O	ETE	1	OETEAB2SSWACRZZZ		.5	1.5	in			
500	90TRE	O	RTE	1	ORTEAB2SSWACRZZZ		.75	2	in	.5	1.5	in

i. Change the size range for the item **40** from **42 - 48** to **48 - 48**

Seq	Short Code	Group	Part	Option	Commodity Code	Geometric	From1	To1	Unit	From 2	To2	Unit
40	PIP	P	PP	1	PPPABQBEADSAAPZ		2	24	in			

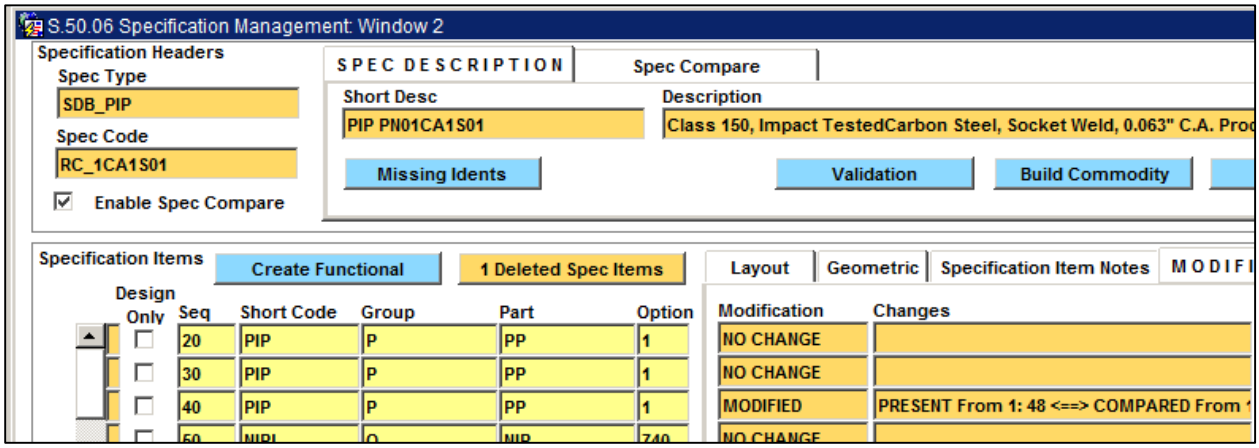
j. Delete the first item of the spec

k. Check the **Enable Spec Compare** and click on the **Modifications** tab

l. Click the **Compare All** button and review the comments in the **Changes** field

m. Click on the **Spec Compare** tab to specify the rev numbers to be compared. The **Compare Specification** field shows the current rev of the spec. In the **With Specification** field enter a lower rev no.

Note: Your screen may be different depending on the changes you made.



n. Close Window 2 to return to the **"S.50.06 Specification Management"**

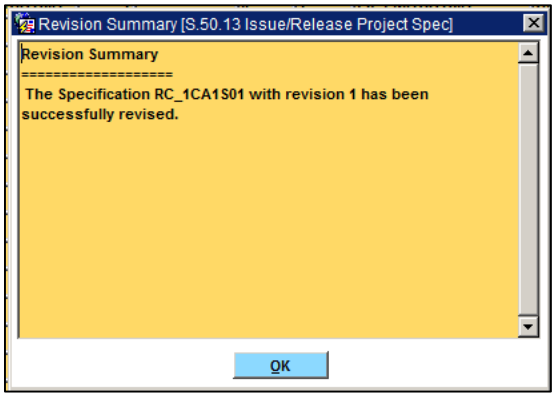
o. **Check** the **issued** checkbox of rev 1 and **save** the changes to issue it. The system will prompt you with a message the spec will be frozen. Click **Yes** to continue. Try to add items to the spec, the system will not let you add items or make any changes.

p. Close all screens

Lab 37. Delete a Spec Revision

a. Open the **"S.50.13 Issue / Release Project Spec"** screen.

b. Navigate to Rev 1 of the spec **<Init>_1CA1S01** and **click** on the **Revise Spec** button. The system will display a message, indicating that your spec has been successfully revised. **Click** the **OK** button.

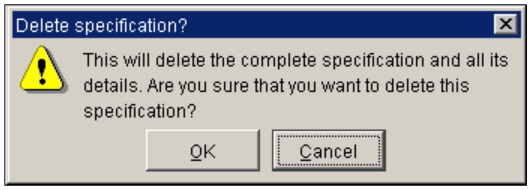


c. Close all the screens

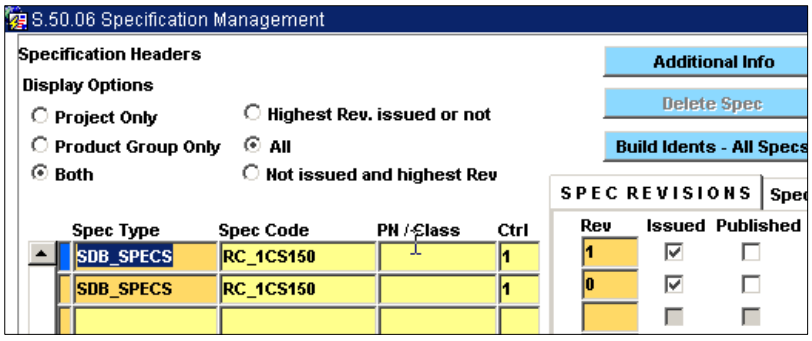
d. Open the **"S.50.06 Specification Management"** and press **F8** to retrieve all specs. Check the **Display All** radio button to show all the revs and search for your specs.

e. Navigate to Rev 2 of the spec **<Init>_1CA1S01** and **click** on the **Delete Spec** button to delete rev 2.

f. The system will ask for a confirmation to delete the spec. **Click** the **OK** button.



g. Search for your spec **<Init>_1CA1S01** to confirm that rev 0 and 1 of the spec exists and only rev 2 was deleted.



h. Close all the screens

Lab 38. Publish a Spec

a. Launch the **"S.50.13 Issue / Release Project Spec"** screen.
b. Check the **Published check** box for rev 1 of your spec **<Init>_1CA1S01**
c. Save the changes.
    i. FYI: Only Issued Specs should be published. Specs are published to keep track of distribution to external sources i.e. Client, PMT, Modeling, Fabrication etc.
    ii. FYI: **Unissue spec** functionality should be used very sparingly, only if the spec was issued incorrectly.
    iii. FYI: **Project Rev and Spec Rev no:** Spec Rev No are the revisions associated with a spec but the Project Rev No. are associated with the Project. A given Spec may be revised multiple times before a Project rev is bumped up. In most cases project rev no. is controlled by the client and may be based on the phase / progress of the project.
d. Close all the screens

Lab 39. Create a Project

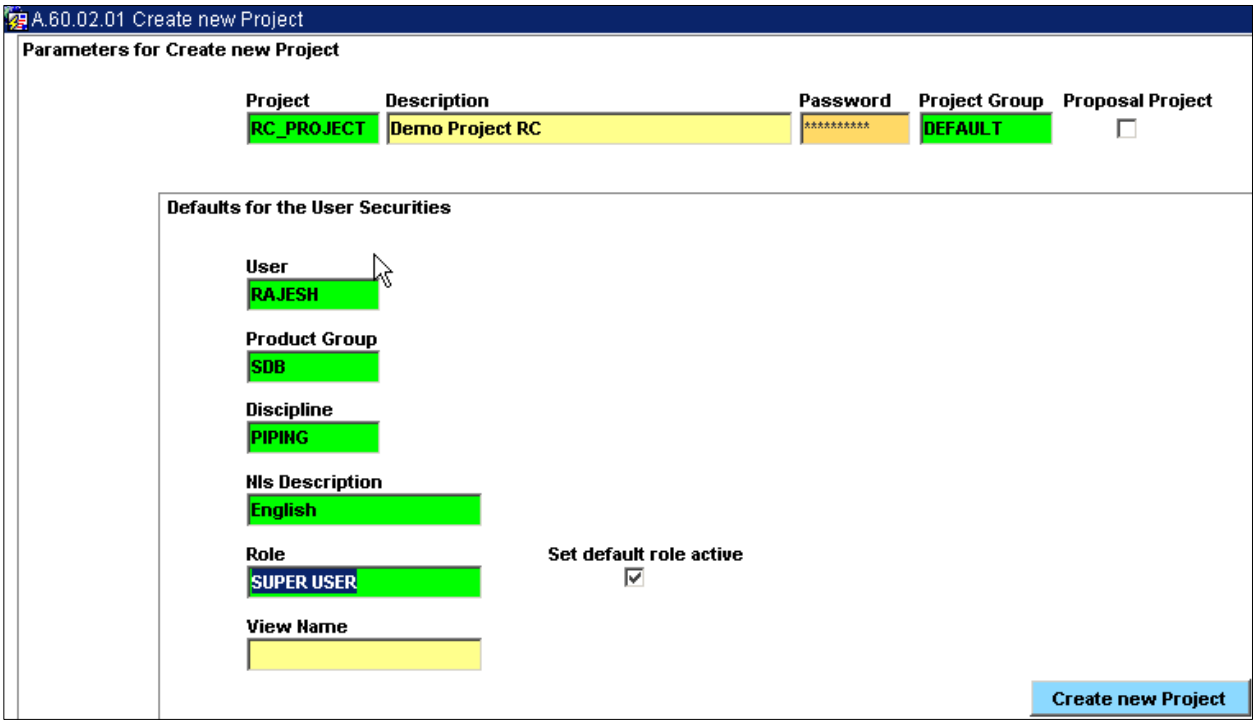
a. Open the **"A.60.02.01 Create New Project"** screen

b. Specify a Project Code **<Init>_PROJECT** & Title **Demo Project <Init>**.

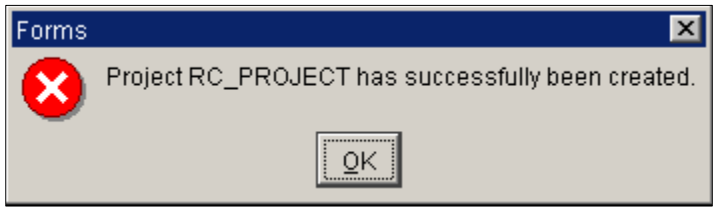
c. From the **LOV** select **DEFAULT** as the **Project Group**.

d. Enter your **user id** as the default **user**

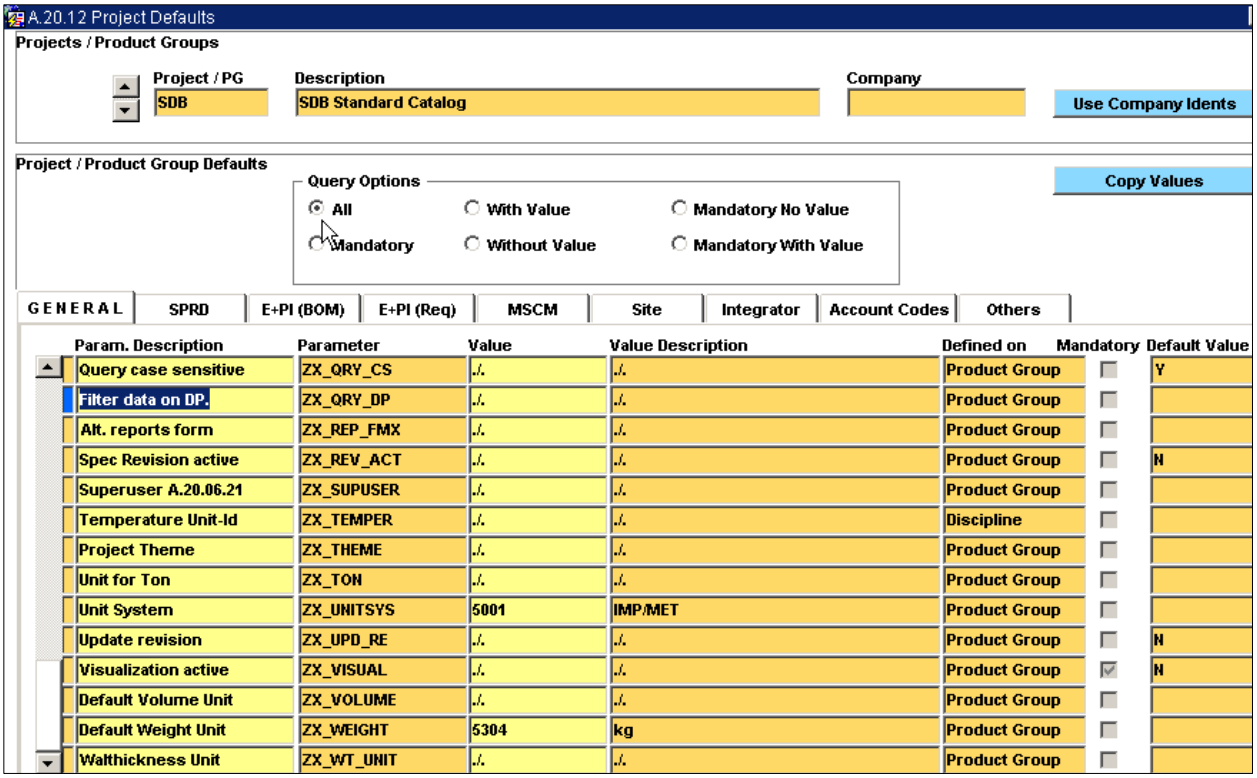
e. Select **Product Group** = **SDB, Discipline** = **PIPING, Nls Description** = **English, Role** = **SUPER USER** via **LOV**



f. Click on the **Create New Project** button to create the project. System will display a message indicating that the project was successfully created.



g. Open **"A20.12 Project Defaults"** and verify the **Unit System ZX_UNITSYS** default in the **General** tab is set to **IMP/MET**.

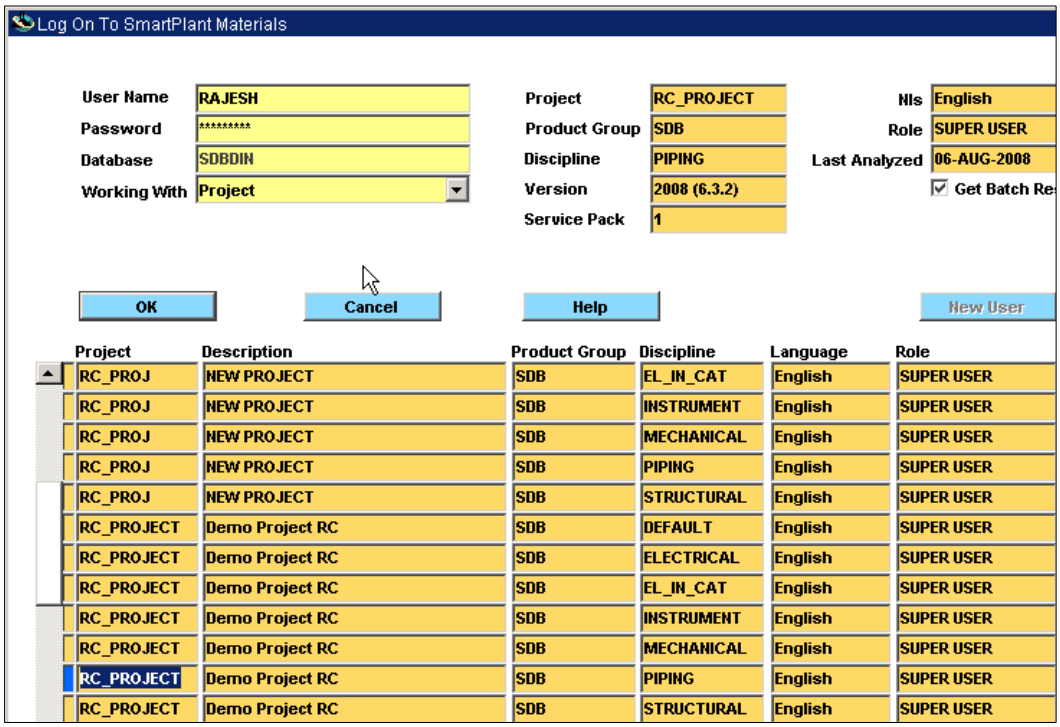


h. Close all screens

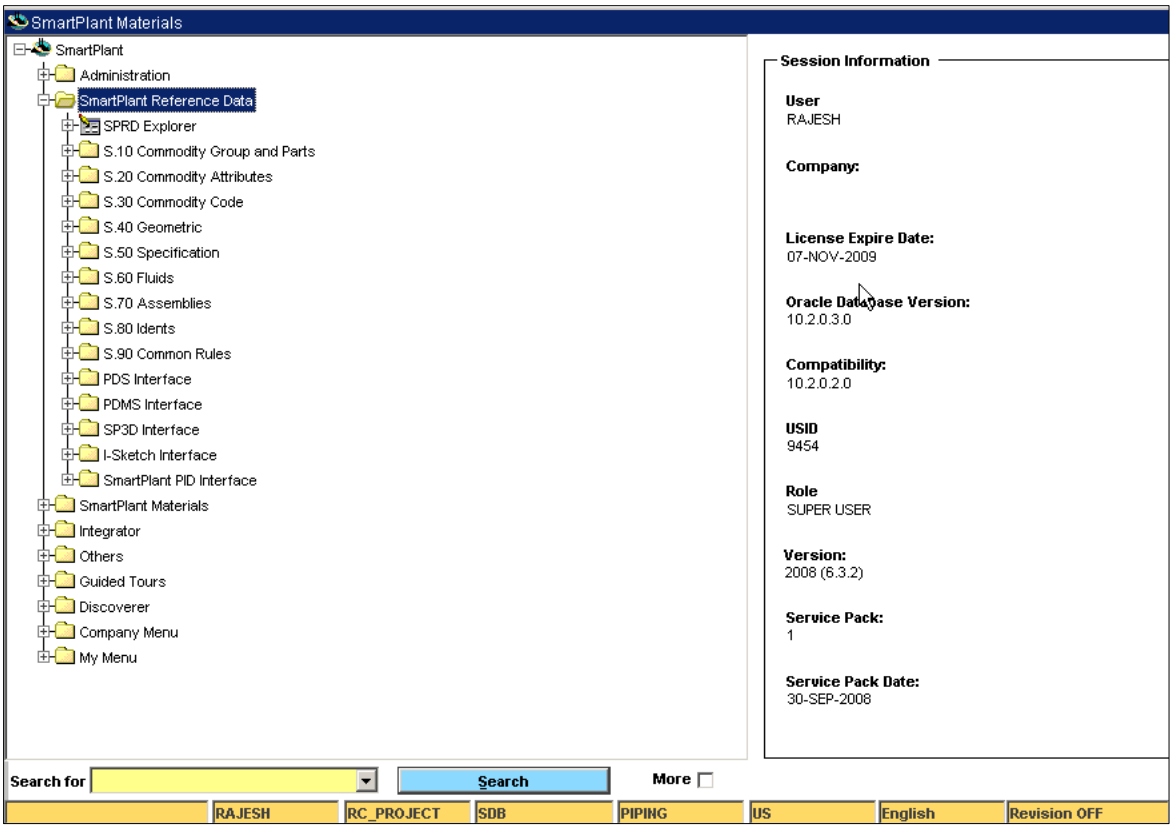
Lab 40. Login to a Project

a. Launch Internet Explorer and type in the url for your SPRD installation

b. In the Login window type in your **User Name**, **Password** and select **Working With Project**. System will display the available projects. Select the Project **<Init>_PROJECT** and **Piping** discipline.



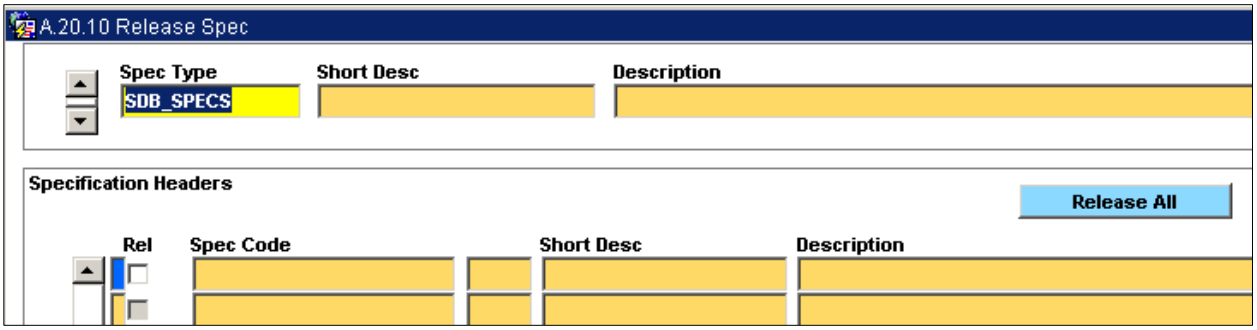
c. On successful login you will be presented with the SPRD / SP Materials Menu.



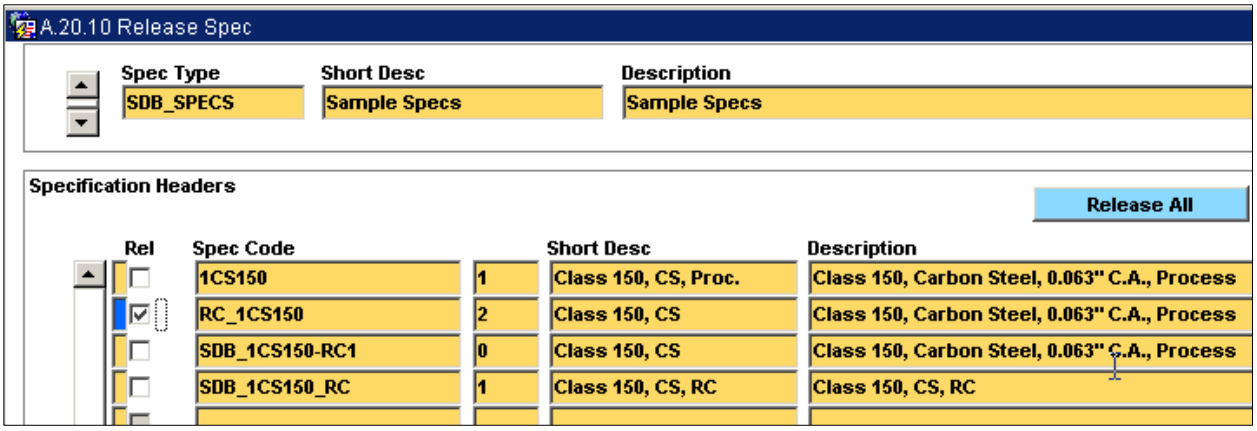
d. Do not log out from the project.

Lab 41. Release Spec to a Project

a. Ensure you are logged in to the project **<Init>_Project** and **Piping** discipline.
   i. FYI: You can **click** on the **Set Project/Discipline** button to change from Product Group to Project or from one Project to another or from one discipline to another.
b. Open the **"A.20.10 Open Release Spec"** screen
c. Ensure you are in the **Query** mode
d. Select the Spec Type **SDB_PIP** and **Run the Query**



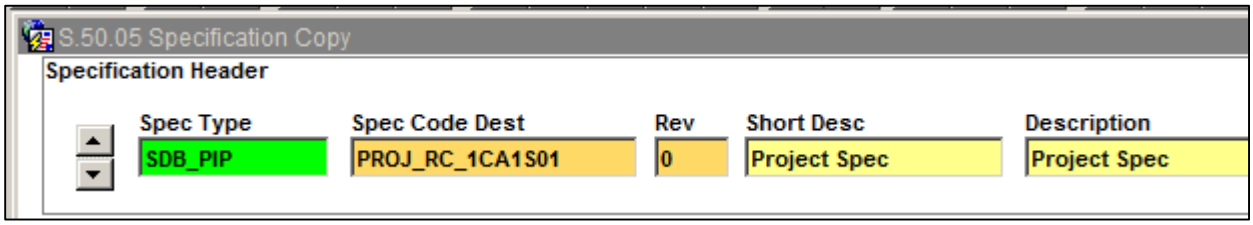
e. Navigate to Rev 2 of your spec **<Init>_1CA1S01** and check the **Rel** checkbox.
f. Save the changes to release the spec to your project



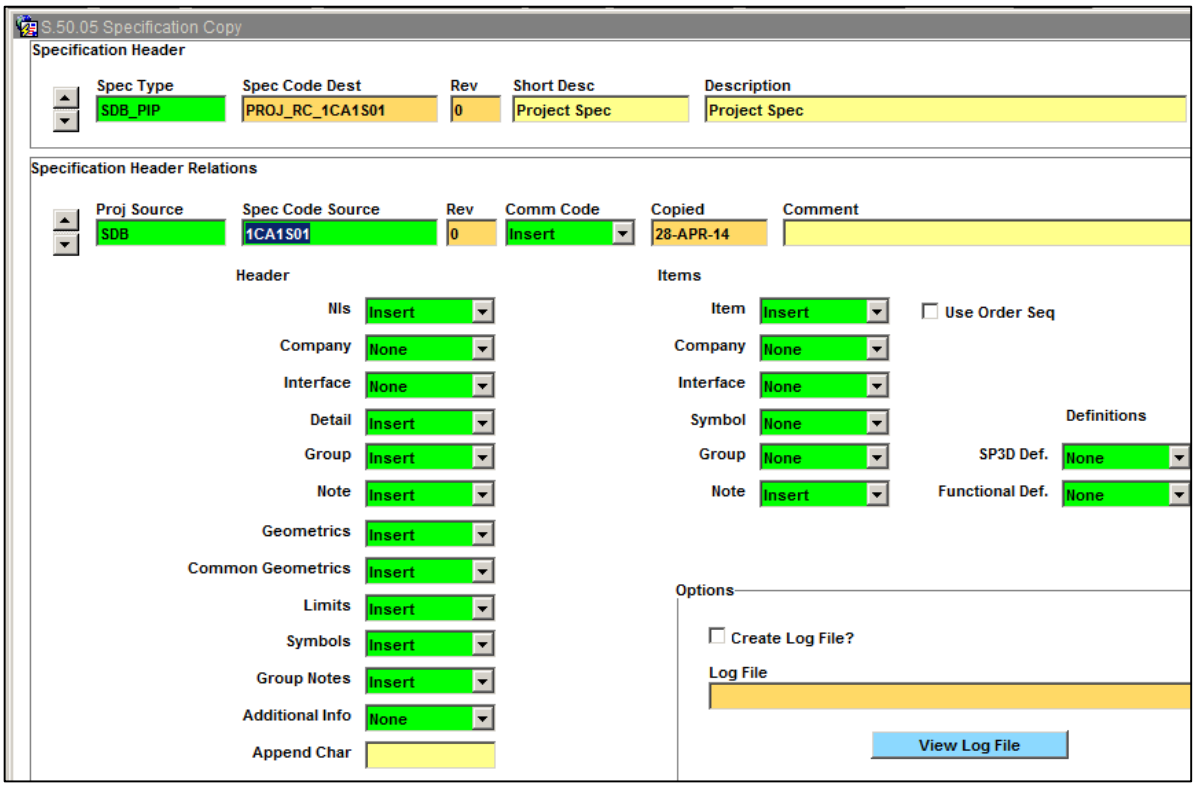
g. Close all screens

Lab 42. Copy Spec to a Project

a. Ensure you are logged in to the project **<Init>_Project** and **Piping** discipline.
   i. FYI: You can **click** on the **Set Project/Discipline** button to change from Product Group to Project or from one Project to another or from one discipline to another.
b. Open **"S.50.05 Specification Copy"** screen
c. Ensure you are in the **Data Entry (Green Background)** mode.
d. Select Spec Type of **SDB_PIP** and **Spec Code Dest** of **PROJ_<Init>_1CA1S01**. This is the name of the new spec for the project.
e. Enter the spec title of **Project Spec <Init>**
f. **Save** the changes

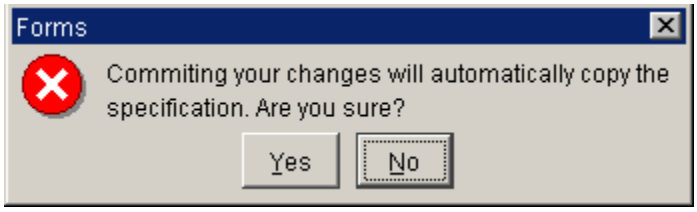


g. Select the Product Group **SDB** in the **Project Source** field
h. Select the spec **1CA1S01** to be copied in the **Spec Code Source** field
i. **Check** the **Create Log File?** Checkbox

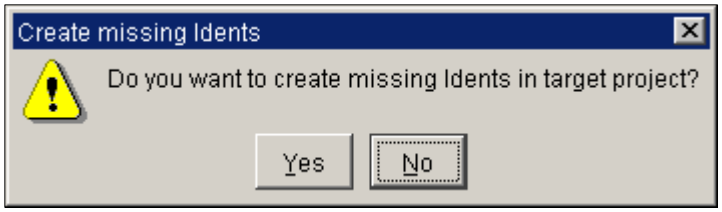


j. Save the changes to copy the spec **1CA1S01** into **PROJ_<Init>_CS150**.

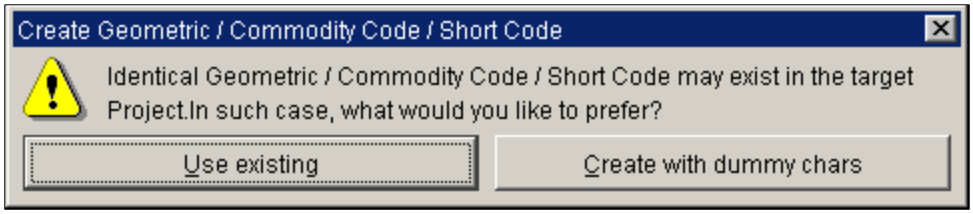
k. System will prompt you for a confirmation to copy the spec. **Click** the **Yes** button.



l. System will prompt you for a creation of missing idents in target project. **Click** the **No** button.



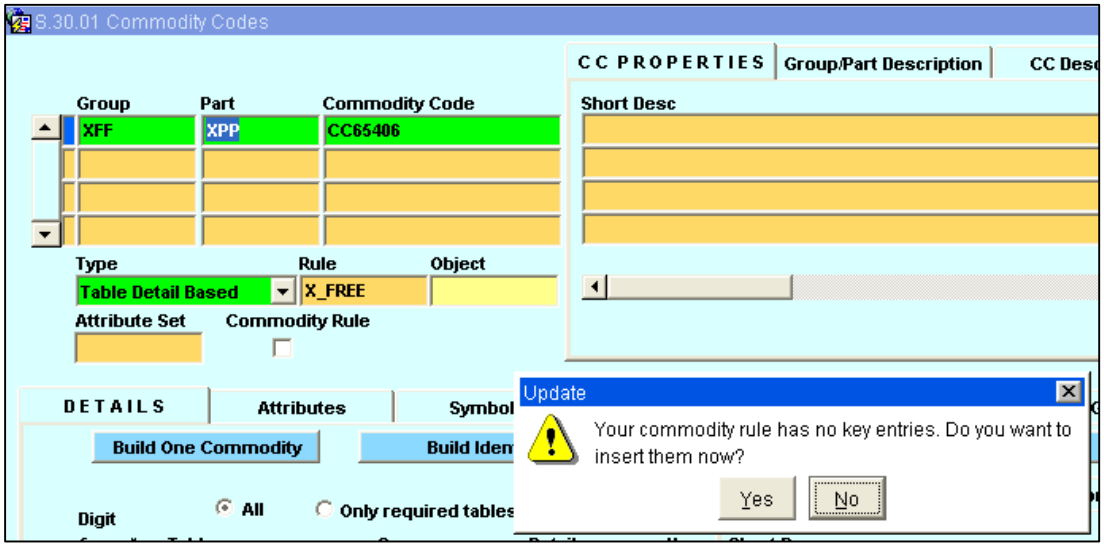
m. System will prompt you for creation or using existing Geometric, Commodity and Short Code. **Click** the **Use existing** button.



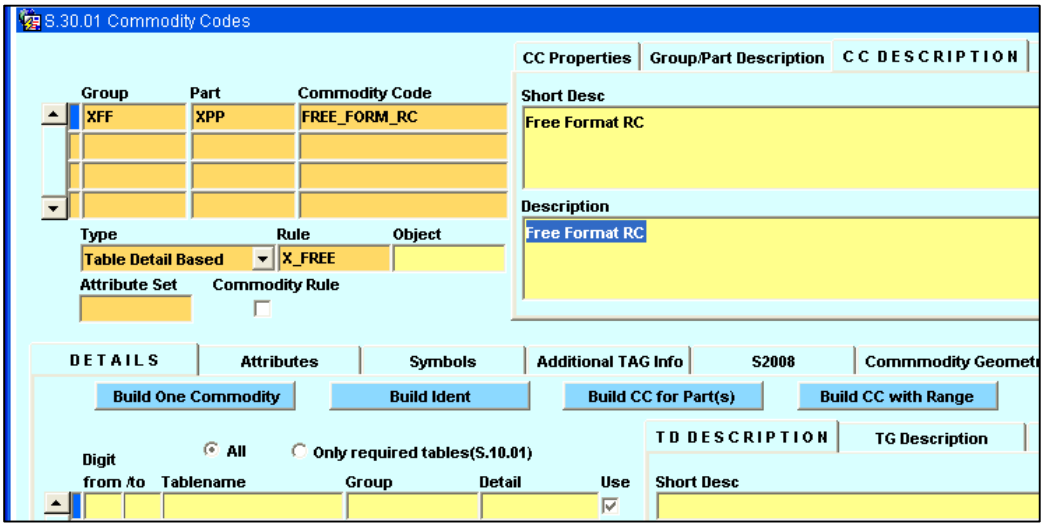
n. Close all screens

Lab 43. Build a Free Format Commodity Code (optional)

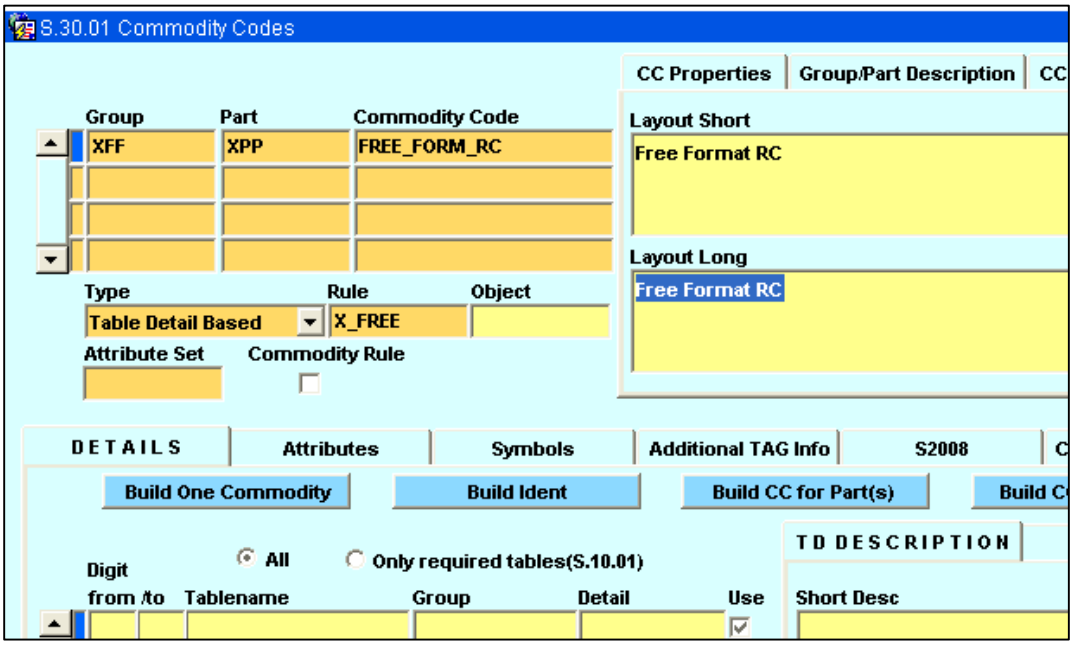
a. Launch **"S.30.01 Commodity Codes"**
b. Ensure you are in the **Data Entry (Green Background)** mode and not the **Query Mode**
c. Set the **Group** to **XFF** and **Part** to **XPP** from **LOV** (**F9**)
d. Save the changes
e. The system will assign a dummy commodity code **CC1234567**, **Rule X_FREE** and prompt you to add key entries into the Rule.
f. **Click** the **No** button.



g. **Click** on the **Commodity Code** field and type in **FREE_FORMAT_<INIT>** as the Commodity Code.
h. **Click** on the **CC Description** tab to add the **Short** and **Long Description** as **Free Format <Init>.**



i. **Click** on the **CC Layout** tab to add the **Short** and **Long Description** as **Free Format <Init>**



j. Save the changes

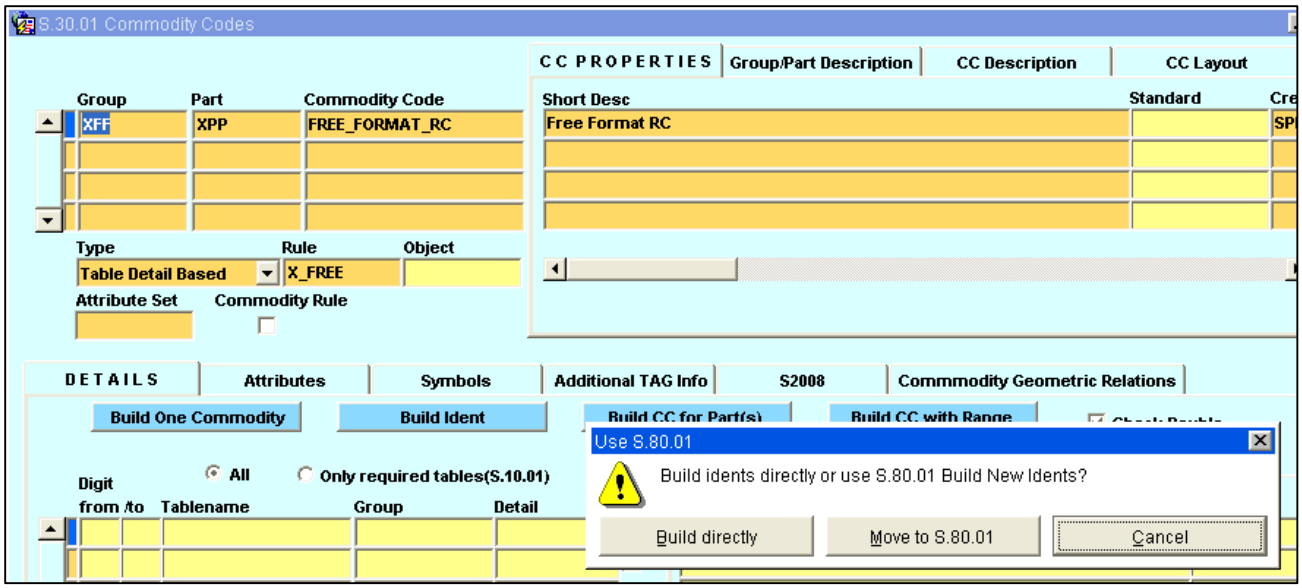
k. Do not close the screen

Lab 44. Build Idents for the Free Format CC (optional)

o. Launch **"S.30.01 Commodity Codes"** Screen

p. Ensure you are in the **Query Mode (F7)**

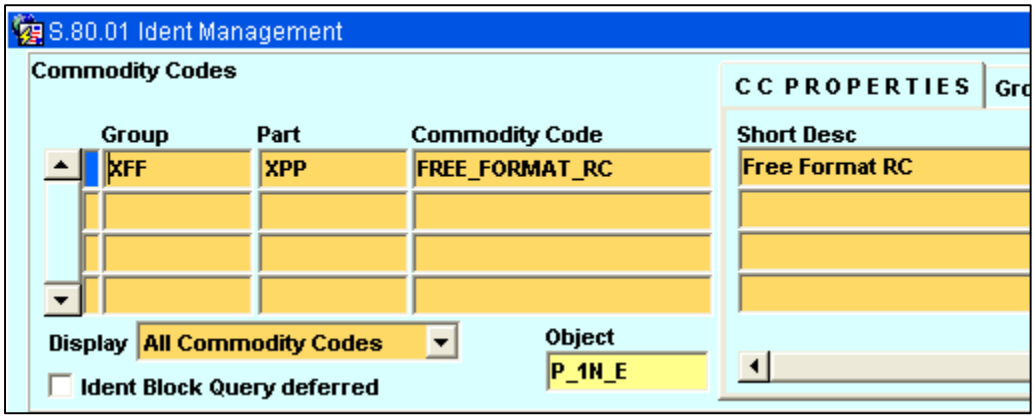
q. Search for commodity code **FREE_FORMAT_<ID>** and **click** the **Build Ident** button



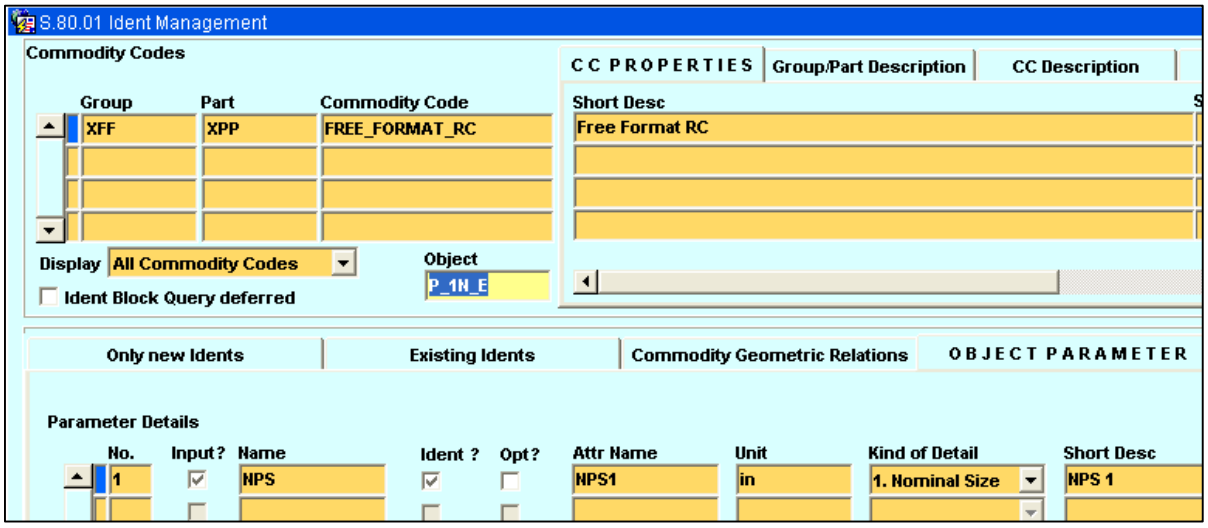
r. From the prompted dialog, click on the **Move to S.80.01** screen button.

i. FYI: Alternatively you could have launched **"S.80.01 Ident Management"** screen and searched for the Commodity Code **FREE_FORMAT_<ID>**.

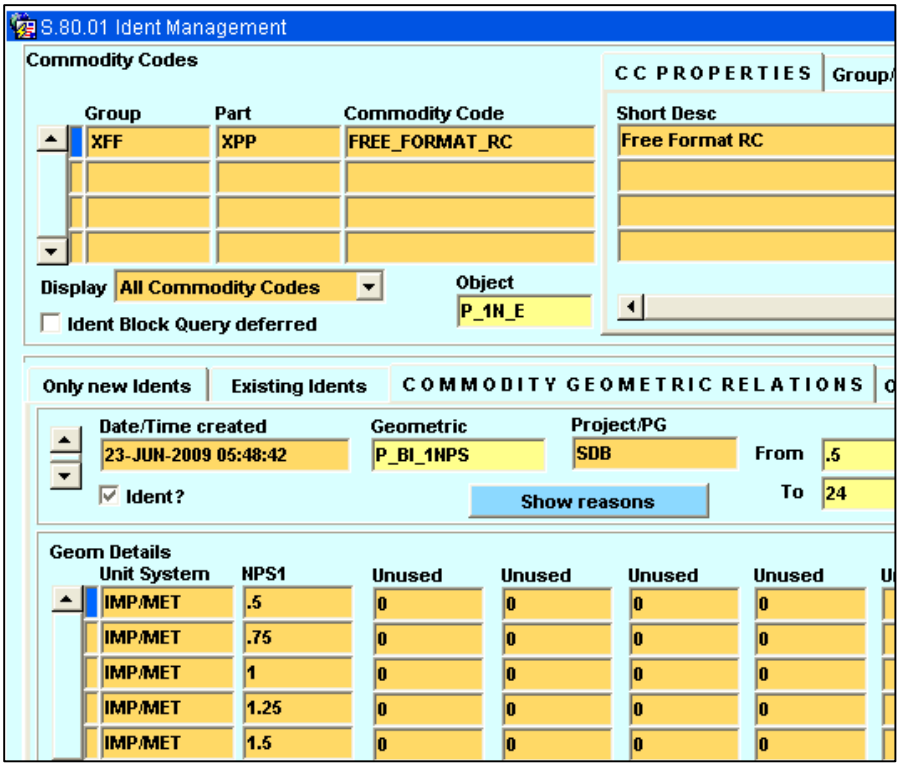
s. From the List of Values select **P_1N1S_E** for the **Object** field and save the changes



t. Click on the **Object Parameter** tab to view the attributes needed to fully qualify the CC to build Idents. These attributes are associated with the **Object P_1N_E**.



u. Click on the **Commodity Geometric Relations** tab
v. Add a new relation by selecting the **Geometric** table **P_BI_1NPS** (via **LOV**) with **From** and **To** range of **.5** to **24.** Also check the **Ident?** Checkbox.
w. Save the changes
x. System will display all the Sizes associated with the **Geometric P_BI_1NPS** in the **Geom Details** section of the **Only New Idents** tab.

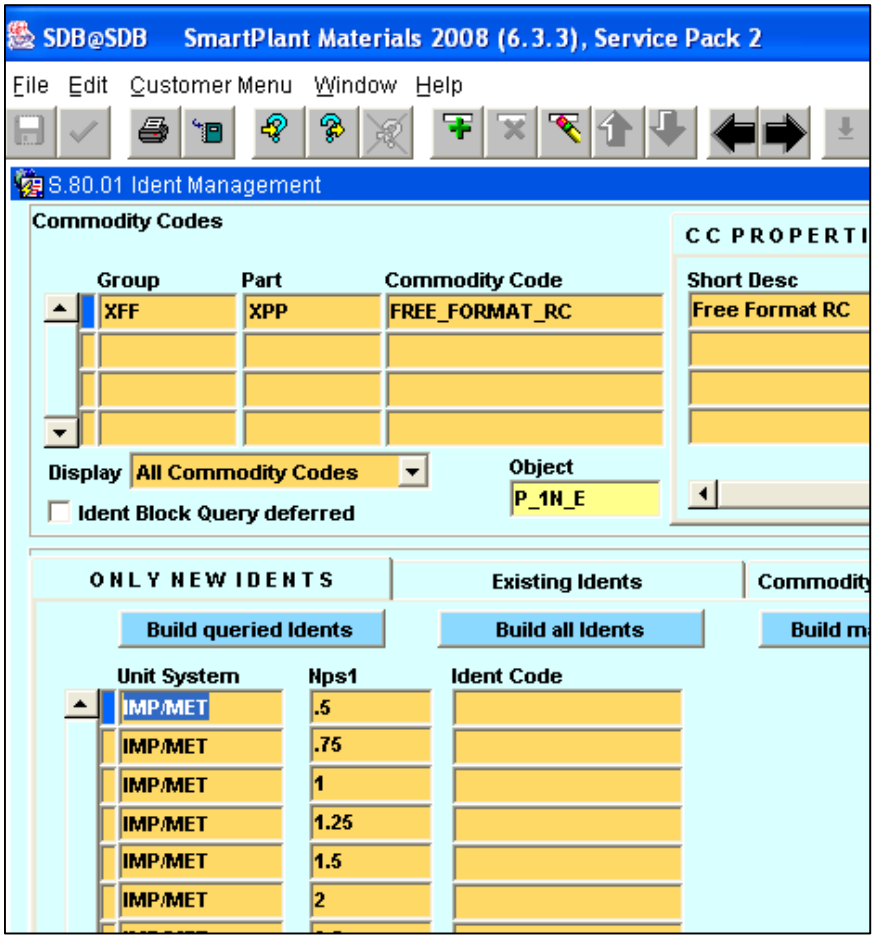


i. FYI: In the **Commodity Geometric Relations** tab, if the **Idents?** Is checked then the relationship will be used to build idents. Other relationships can be defined to specify unit weight, surface area and physical dimensions such as Face to Face, Face to Center etc. required by Designing and Modeling tools such as SP3D, PDS, PDMS. Do not check the **Idents?** for these relationships.

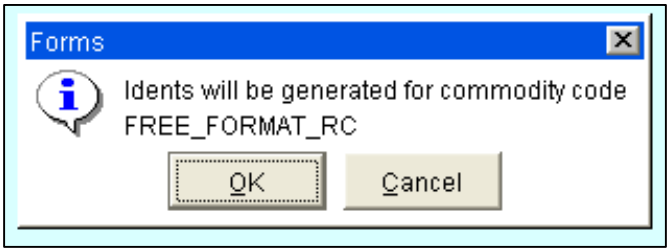
iii. FYI: There are the four types of Geometric Tables i.e. **Commodity Geometric**s (to build Idents), **Standard Geometrics** (dimensions as per Standards), **Other Geometrics** (Non Commodity or Standards related geometric i.e. Gasket thickness) and **Filter Geometrics** (to limit valid idents for Specs).

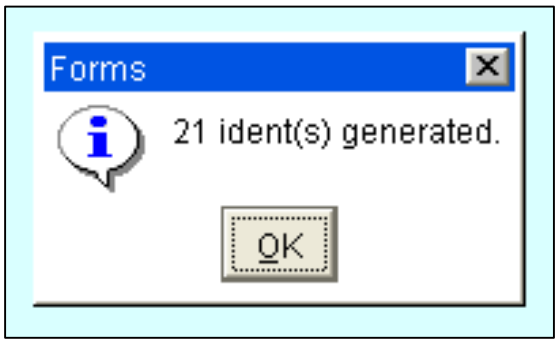
iv. FYI: Multiple relationships can be defined for the Commodity Group / Part by qualifying it with filters based on sizes and table details.

y. Click on the **Only New Idents** tabs to create new idents. Let us assume that for this Free Format CC all the sizes are valid.

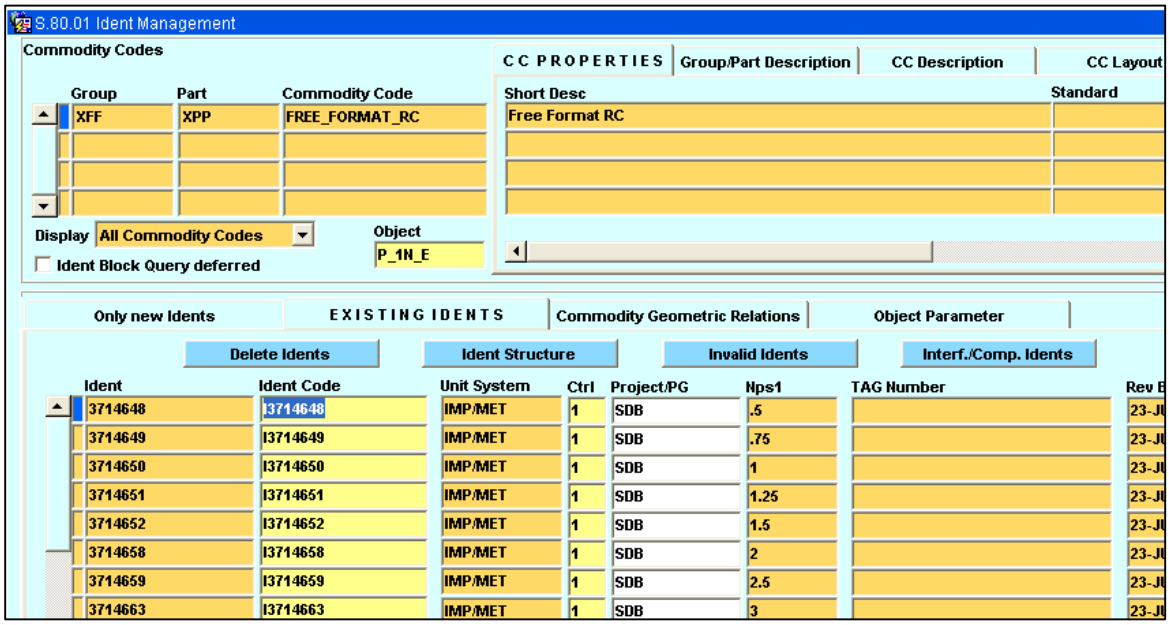


z. Click on the **Build all Idents** button to build idents. System will prompt for a confirmation to build idents. Click OK and the system will create all the idents and display the number of Idents created.

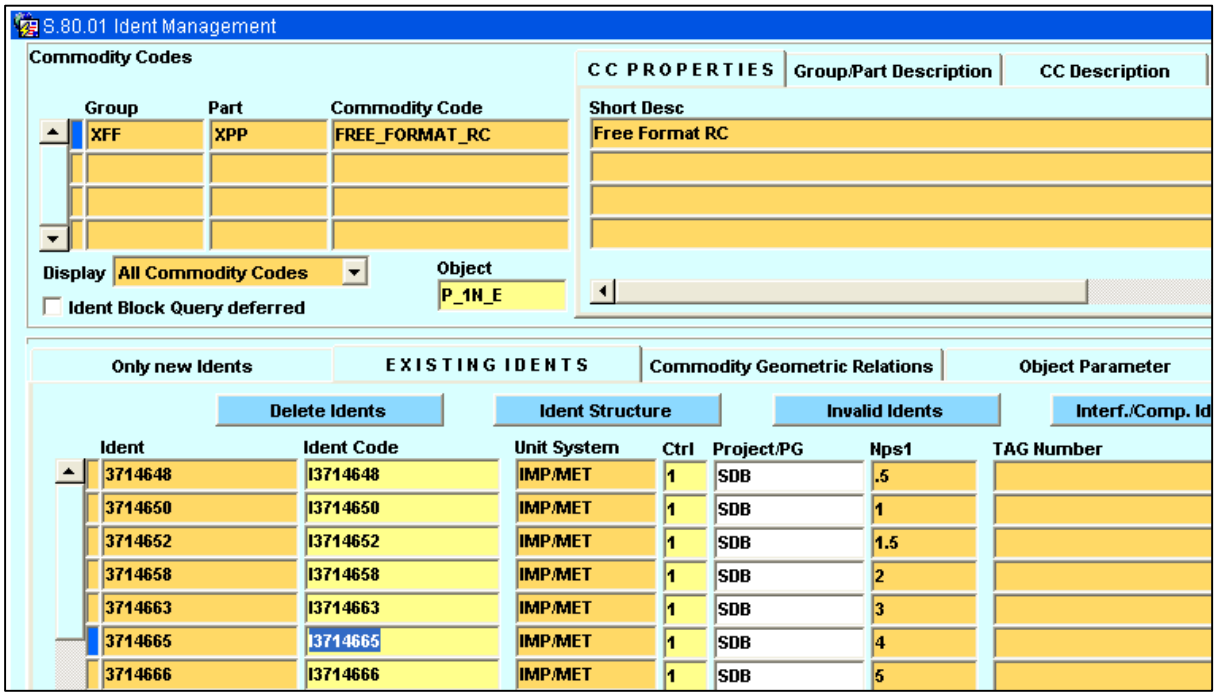




aa. Click on the **Existing Idents** tab to review the idents that have been created.



bb. Let us assume that the sizes .75”, 1.25”, 2.5” and 3.5” are not valid for this Commodity Code. **Click** on any field in these rows and press the **Delete** icon to delete the idents associated with sizes **.75**, **1.25**, **2.5** and **3.5**



i. FYI: Every **Ident** is assigned a unique no. (**Ident** field). Additionally the system assigns an **Ident Code** (default is **Ident no** with a prefix of **I**). Rules can be defined to build ident codes as per user requirement.

ii. FYI: You can change the Ident Code by typing in a relevant value in the Ident Code screen.

cc. Close all the screens