

TRIMIT VarDim Validation

White Paper

This Document contains information about TRIMIT VarDim Validations in TRIMIT 2013

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TABLE OF CONTENTS

Introduction	3
Components	3
Setup	4
VarDim Positive/Negative List	4
Fields in the VarDim Positive/Negative List - Filters	6
Fields in the VarDim Positive/Negative List - Lines	7
Automatically created Positive Lists	8
VarDim combinations	12
Create and Maintain VarDim Combinations	12
Fields in the VarDim Combinations	13
Valid Combinations	15
VarDim Dimension Options	16
Create and Maintain the VarDim Dimension Options	16
Fields in the VarDim Dimensions	17
Process	19
The generation of the list of valid VarDim values	19
VarDim Order	19
VarDim Item	19
Blanking of VarDim values	20
The Use of Formulas in VarDim Order	21
Set up a Dialog	23
Match Search VarDim Order	27
Set up Configurable Sequential Master	27
Set up the VarDim Types on an Item to be used in a Match Search	28
Set up the VarDim Types on Items to be used as Substitutes	29
Choose a substitute Item	30

INTRODUCTION

The functionality described is the updated functionality since **TRIMIT 6.05**

A Master can have a lot of VarDim Types (like Color, Size, Width, Strength, Height, Material, Surface, etc.) connected. And there are several ways to make sure that based on a value from one VarDim Type you are limited in the values of another VarDim Type.

I.e. a Leather covered Chair is only available in Black, White and Brown. But a Fabric covered Chair is available in Black, Red, Blue, Green, White and Grey.

The Validation of the content of a Value for a VarDim Type in the VarDim Order (Table 6037105) and the VarDim Item (Table 6037106) helps the user to fill in valid information and hereby secure that related orders are created on a correct basis, the additional Unit Prices are calculated correctly etc.

The validation of the Values in the VarDim Order and the VarDim Item are based upon three elements:

- A VarDim Positive/Negative List.
- A VarDim Combination set up describing the Overall/Subordinated VarDim combinations.
- The **TRIMIT** Formula functionality.

The functionality described is the functionality in **TRIMIT 2013 W1**

The pictures in this White Paper are based on the Database for **TRIMIT 2013 W1** (based on Microsoft Dynamics NAV 2013) in the Demo Company **CRONUS TRIMIT 2013 W1** (based on CRONUS International Ltd. from Microsoft Dynamics NAV 2013).

COMPONENTS

TRIMIT VarDim Validation is handled via the following objects:

The tables	6036356	<i>Call Validation VarDim</i>
	6036468	<i>TRIMIT VarDim Option</i>
	6037102	<i>VarDim Variant Option</i>
	6037114	<i>Matrix Cell</i>
	6037115	<i>VarDim Combination</i>
	6037116	<i>VarDim Positive/Negative</i>
	6037117	<i>VarDim Dimension Option</i>
The pages	6036500	<i>VarDim Options</i>
	6037121	<i>VarDim Dimension Options</i>
	6037122	<i>VarDim Combinations</i>
	6037123	<i>VarDim Positive/Negative List</i>
The codeunits	6037140	<i>Validation VarDim</i>

SETUP

VARDIM POSITIVE/NEGATIVE LIST

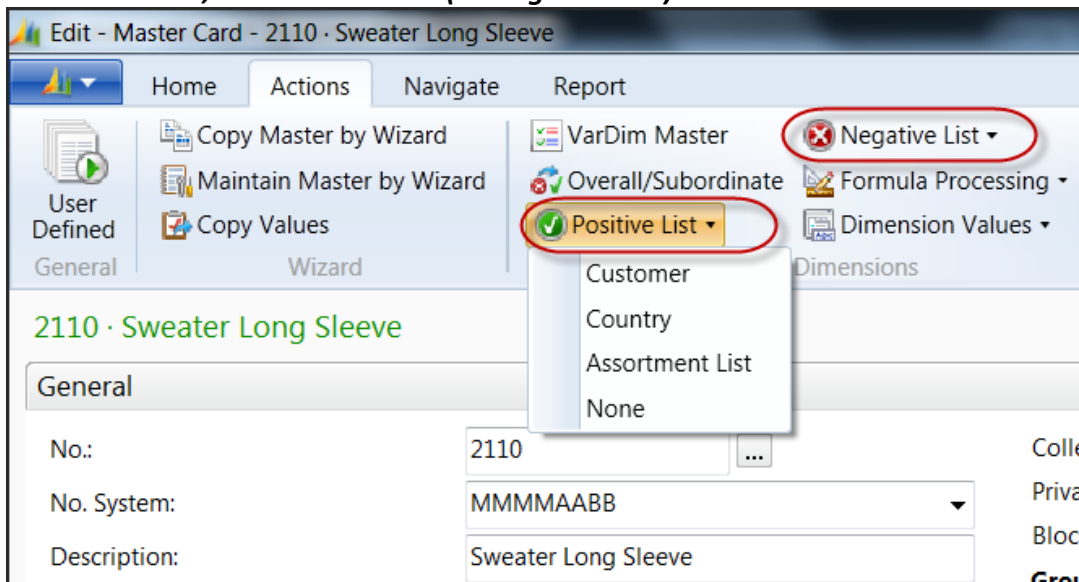
In the **VarDim Positive/Negative List** (Table **6037116 VarDim Positive/Negative**) it is possible to describe which VarDim Type Values can be used in combination with a specific Item/Master and/or Customer/Country-Region.

The TRIMIT VarDim Validation will start by looking for a VarDim Positive List. If a VarDim Positive List is found, the values will be included in the List of Valid Combinations. If a VarDim Positive List does not exist, the TRIMIT VarDim Validation will look for a VarDim Negative List. If a VarDim Negative List is found, the values will be excluded from the List of Valid Combinations.

For the TRIMIT VarDim Validation, a VarDim Positive/Negative List relates to an Item, a Master or a VarDim Type.

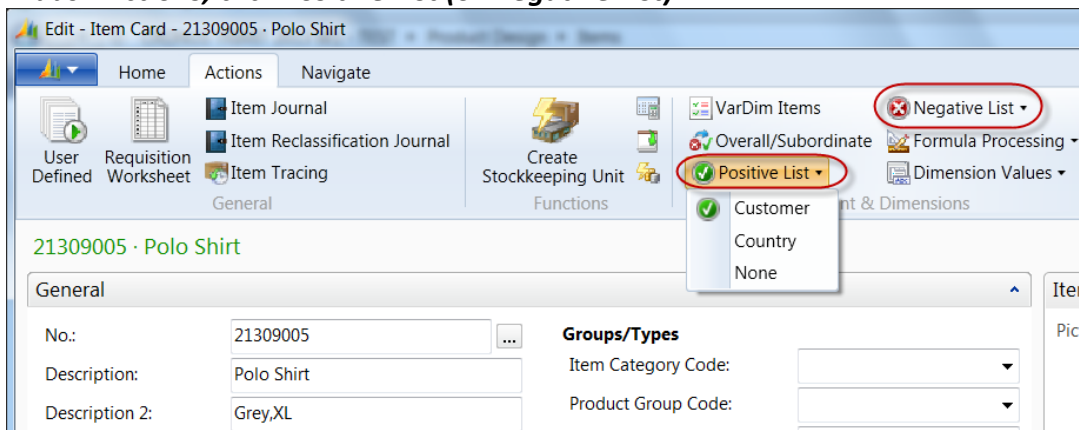
The page to create and maintain the VarDim Positive/Negative List via a Master List or Card:

Ribbon **Actions**, click **Positive List (or Negative List)**

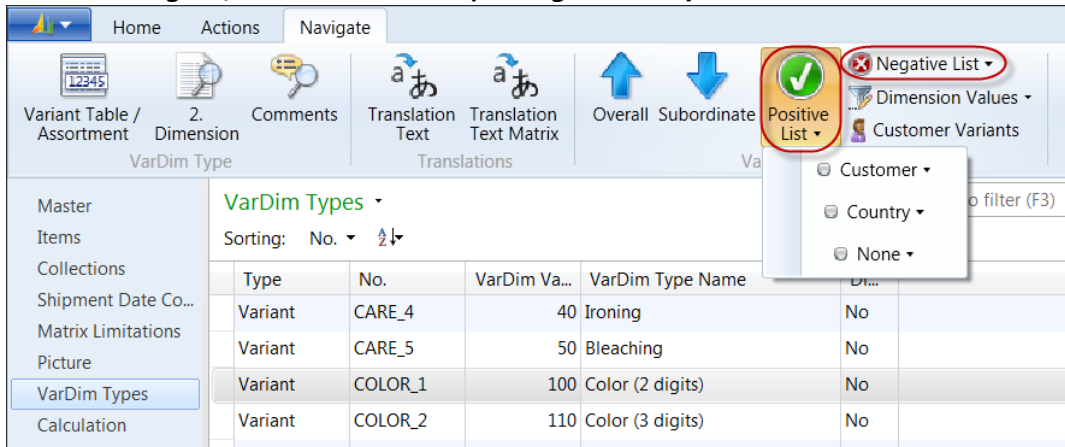


The page to create and maintain VarDim Positive/Negative List via an Item List or Card:

Ribbon **Actions**, click **Positive List (or Negative List)**

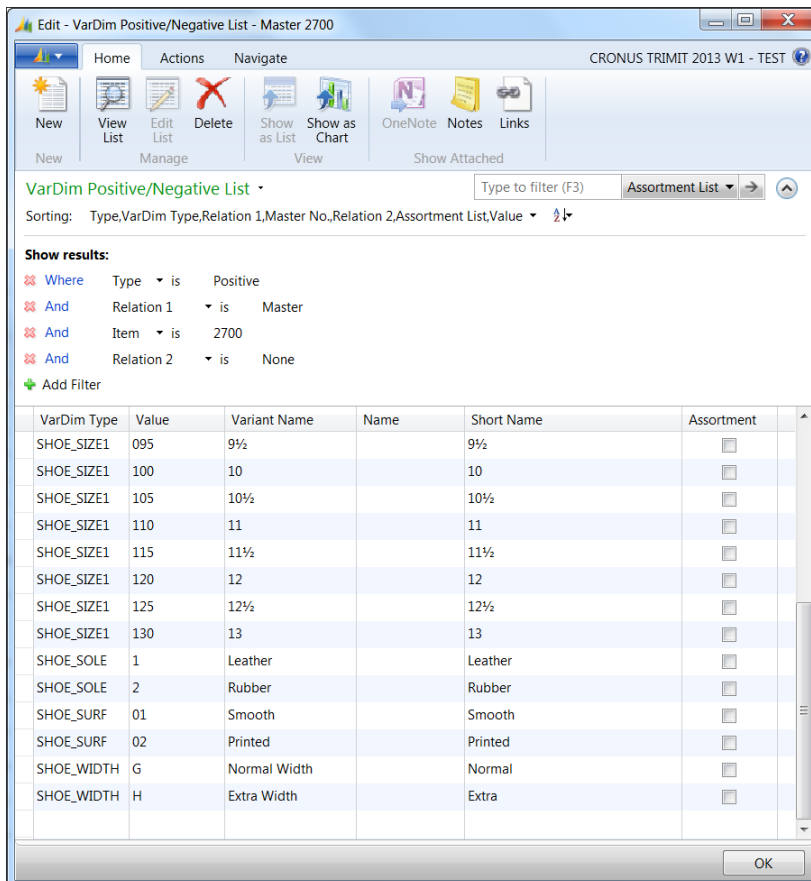


The page to create and maintain VarDim Positive/Negative List via a VarDim Type List or Card:
Ribbon **Navigate**, click **Positive List (or Negative List)**



You can choose the following three or four options:

Customer	By setting Customer No. the Positive / Negative list is only used for the specific customer
Country	By setting Country code the Positive / Negative list is only used for the specific country
Assortment List	Only used by the program in connection with creation of assortments and via the Master List or Card (Do not insert values manually!)
None	The Positive/ Negative List is used globally



Fields in the VarDim Positive/Negative List - Filters

The 'filter-fields' of VarDim Positive/Negative List will be filled automatically based on the data from which you create the VarDim Positive/Negative List.

I.e. via a Master Card, Collection, VarDim Type, Shipment Date Code.

Type

This field is an option and is normally filled in by the program and shows whether the record is related to a positive or a negative list.

Relation 1

This field is an Option field and normally filled in by the program depending on the record from which the VarDim Positive/Negative record is created.

It also controls the possible values for **Relation Name 1**, **Relation 2** and **Relation 2 Name**.

You can choose the following four options:

None	No relations exist. I.e. for selected VarDim Subsets of a Matrix Limitation Setup or Collection.
Master	The combination is related to the Master defined in the field Relation 1 Name
Item	The combination is related to the Item defined in the field Relation 1 Name
Assortment	The combination is related to a VarDim Type with Type is <i>Code</i> which is related to another VarDim Type. I.e. ASMT_SIZE1 which is related to SIZE_1

NOTE

Relation 1 will also be set to *None* if the Positive/Negative List is related directly to a VarDim Type.

Relation Name 1

Based on **Relation 1** the filter is shown as *Item*, *Master* or *VarDim Type*.

Here an Item is filled if **Relation 1** is *Item*, a Master is filled if **Relation 1** is *Master* and a VarDim Type is filled if **Relation1** is *Assortment*.

Relation 2

This field is an Option field and is normally filled in by the program depending on the record from which the VarDim Positive/Negative record is created.

It is also related to the content of **Relation 1**.

The possible values are:

None	No second relations exist. I.e. if Relation 1 is <i>Master</i> and you have selected the VarDim Type values that are applicable, Relation 2 will be set to <i>None</i> .
Country/Region	The current VarDim Positive/Negative record is related to the Country/Region defined in the Relation 2 Name field. This combination only affects generation of the list of valid VarDim Types in a VarDim Order.
Customer	The current VarDim Positive/Negative record is related to the Customer defined in the Relation 2 Name field.
Assortment Matrix	If you create Assortments for a Master, Relation 1 will be the Master, and Relation 2 will be set to <i>Assortment Matrix</i> .
Assortment	If you create VarDim Types to be used as Assortments (Type = <i>Code</i>), Relation 1 will be the VarDim Type, and Relation 2 will be set to <i>Assortment</i> .
Collection Matrix	If you select specific Options Var 1-9 of a Master for a Collection, Relation 1 will be the Master and Relation 2 will be set to <i>Collection Matrix</i> .

Collection Assortment Matrix	NOT IMPLEMENTED YET
Collection	If you select a VarDim Subset on a Collection, Relation 1 will be <i>None</i> and Relation 2 will be set to <i>Collection</i> .
Stand. Subset Matrix	If you select Options Var 1-9 of a Master on a Matrix Limitation Setup (or Shipment Date Code), Relation 1 will be <i>Master</i> , and Relation 2 will be set to <i>Stand. Subset Matrix</i> .
Stand. Subset Assortment Matrix	NOT IMPLEMENTED YET
Stand. Subset	If you select VarDim Subset on a Matrix Limitation Setup (or Shipment Date Code), Relation 1 will be <i>None</i> and Relation 2 will be set to <i>Stand. Subset</i> .

With regards to **Relation 1** and **Relation 2**, the TRIMIT VarDim Validation will start by searching for **Relation 1** considering *Item* as the highest priority, *Master* as the next and *None* as the lowest search priority.

Within each of the **Relation 1** options, the TRIMIT VarDim Validation will search for **Relation 2** starting with Sell-to Customer No., then Bill-to Customer No., Concern, Chain, Sell-to Country/Region Code and *None*

Fields in the VarDim Positive/Negative List - Lines

Relation 2 Name

Here a Country/Region or a Customer No. must be filled in when **Relation 2** is *Customer* or *Country/Region*.

This column will not be shown in the page if **Relation 2** is *None*.

I.e. if you want to enter a Positive List for Master 2110 and Customer 2030: the header above the first column will show "Customer" and you can enter the Customer No. on the Lines.

If you want to enter a Positive List for Master 2110 and Country/Region DK: the header above the first column will show "Country" and you can enter a Country/Region on the Lines.

VarDim Type

You can fill this field with a VarDim Type, or it will be filled automatically by the System.

NOTE

If you might enter a VarDim Positive/Negative List via a **Master**, be aware that you choose the right **VarDim Type**. There is no check if the specific VarDim Type is connected to the Master!

Value

You can fill this field with a VarDim Variant Option of the **VarDim Type** if the **Type** is *Variant*. If the **Type** is *Code*, you can fill in a value of the related table of the **VarDim Type**. The related table is defined in the field **Table Relation Type is Code** of the **VarDim Type**.

I.e. if **VarDim Type** is *COLOR_1* you can simply choose one of the variants of *COLOR_1*. If the **VarDim Type** is *ASMT_SIZE1* you can choose the variants of *SIZE_1* that are Assortments.

Variant Name

This field is automatically filled with the **Name** of the **Value**.

Name

This field is filled with the **Name** of the **Value** connected to your Master, if you have changed the default Name of the Value related to the VarDim Type.

Short Name

This field is automatically filled with the **Short Name** of the **Value**.

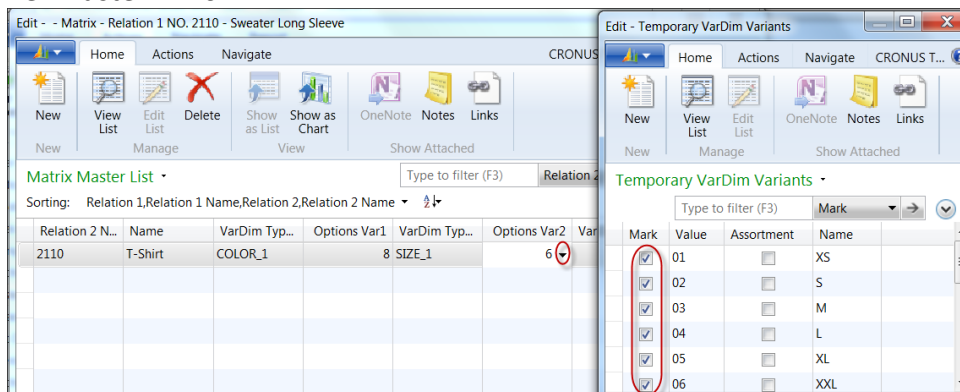
Assortment

This field is automatically filled with the **Assortment** Boolean of the **Value**.

Automatically created Positive Lists

Besides going directly to the **Positive List** you will also create records with **Relation 2** is *None* automatically in the Positive List if you choose the Options Var 1-9 in the **Matrix Master List** (via Master List or Card, ribbon **Actions**, click **Matrix**, click **Matrix**).

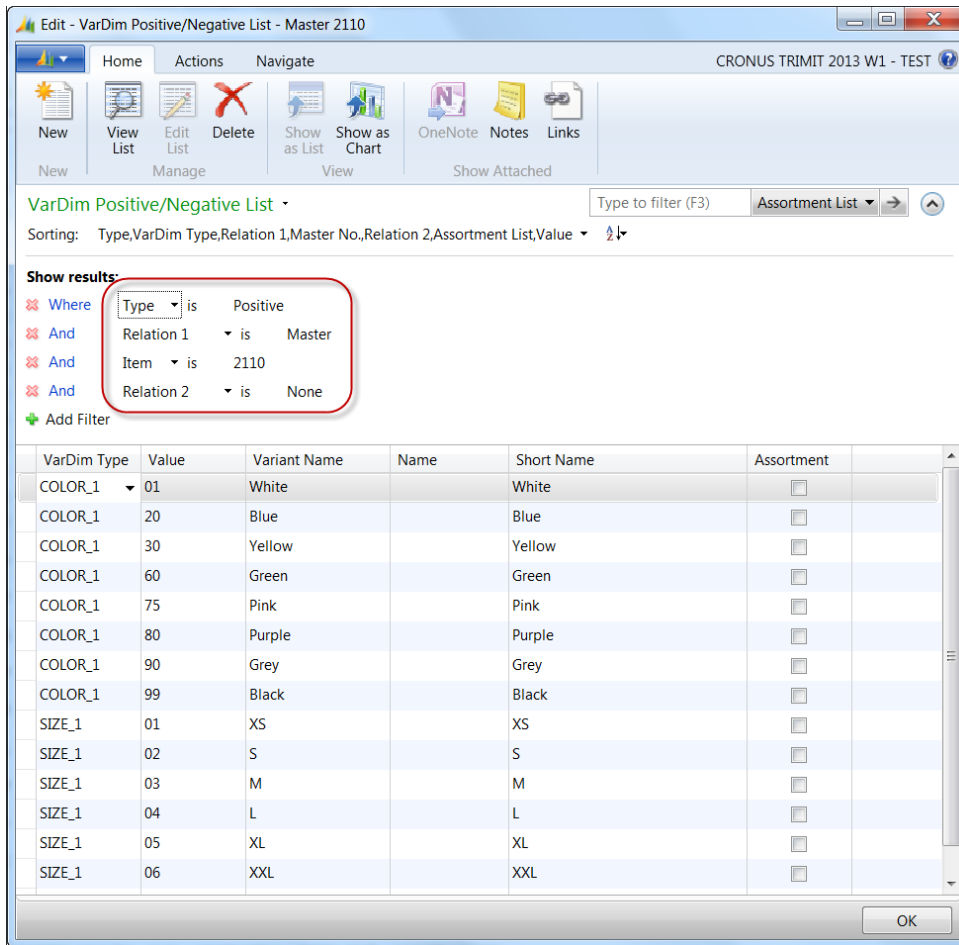
I.e. Master 2110:



Relation 2 N...	Name	VarDim Typ...	Options Var1	VarDim Typ...	Options Var2	Var...
2110	T-Shirt	COLOR_1	8 SIZE_1		6	

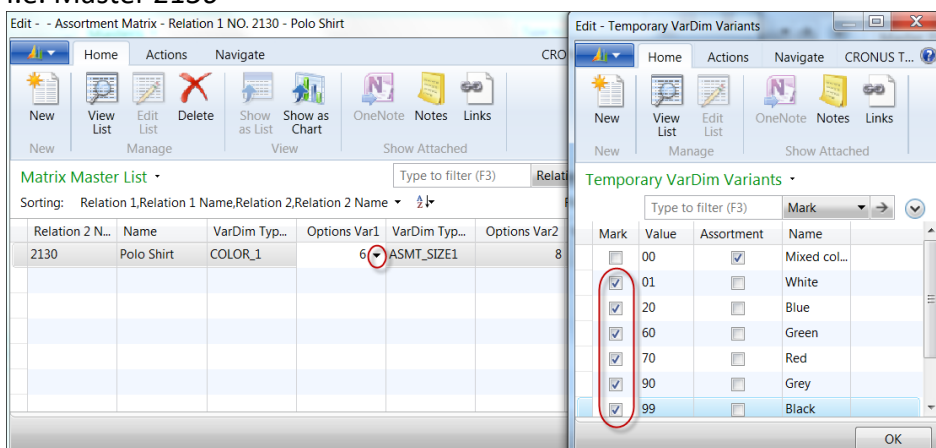
Mark	Value	Assortment	Name
☒	01	☐	XS
☒	02	☐	S
☒	03	☐	M
☒	04	☐	L
☒	05	☐	XL
☒	06	☐	XXL

The **Positive List** / **None** of Master 2110 will now look like:

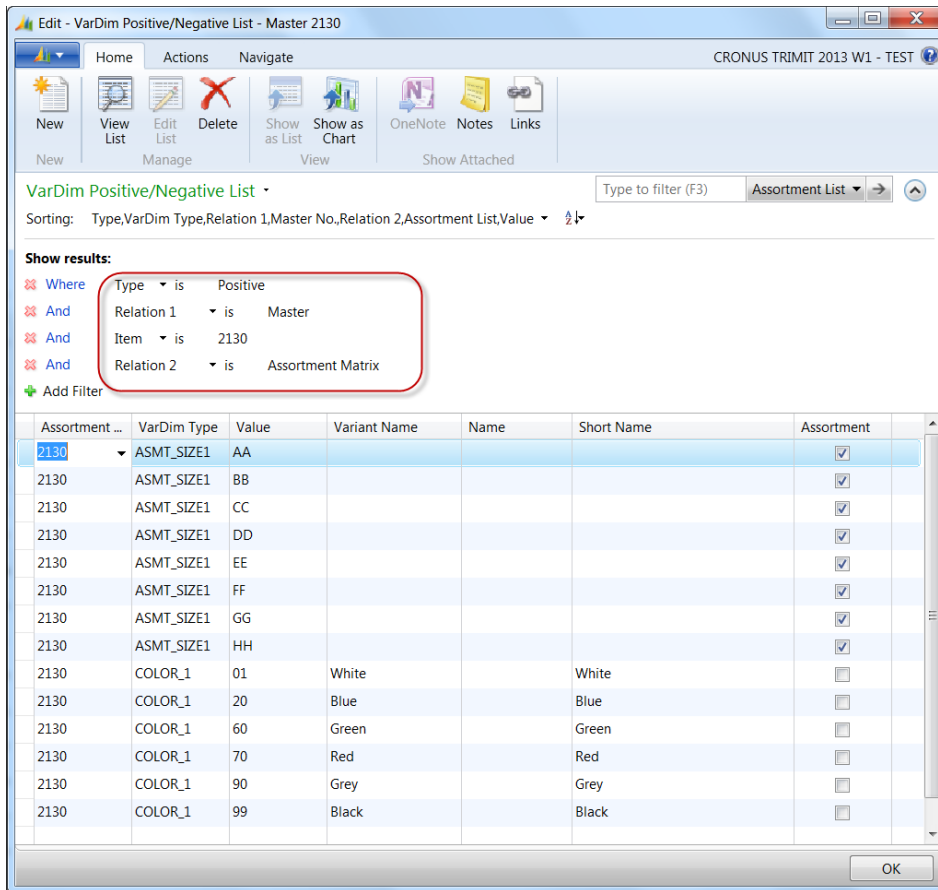


Besides going directly to the **Positive List** you will also create records with **Relation 2** is **Assortment Matrix** automatically in the Positive List if you choose the Options Var 1-9 in the **Matrix Master List** (via Master List or Card, ribbon **Actions**, click **Assortments**, click **Assortment**).

I.e. Master 2130



The **Positive List** / **None** of Master 2130 will now look like:



Edit - VarDim Positive/Negative List - Master 2130

CRONUS TRIMIT 2013 W1 - TEST

VarDim Positive/Negative List

Sorting: Type,VarDim Type,Relation 1,Master No.,Relation 2,Assortment List,Value

Type to filter (F3) Assortment List

Show results:

Where Type is Positive

And Relation 1 is Master

And Item is 2130

And Relation 2 is Assortment Matrix

Assortment ...	VarDim Type	Value	Variant Name	Name	Short Name	Assortment
2130	ASMT_SIZE1	AA				☒
2130	ASMT_SIZE1	BB				☒
2130	ASMT_SIZE1	CC				☒
2130	ASMT_SIZE1	DD				☒
2130	ASMT_SIZE1	EE				☒
2130	ASMT_SIZE1	FF				☒
2130	ASMT_SIZE1	GG				☒
2130	ASMT_SIZE1	HH				☒
2130	COLOR_1	01	White		White	☐
2130	COLOR_1	20	Blue		Blue	☐
2130	COLOR_1	60	Green		Green	☐
2130	COLOR_1	70	Red		Red	☐
2130	COLOR_1	90	Grey		Grey	☐
2130	COLOR_1	99	Black		Black	☐

OK

Also via several other relationships where you are able so select specific Options Var 1-9 for a Master records will be written in the **Positive List** automatically. To see those relationships in the page **VarDim Positive/Negative List** you simply can change the filter of **Relation 2**.
I.e. for Master 2510 only a few colors are connected to a Collection but the Code of the Collection is hidden in a TRACK code and is not visible.

Edit - VarDim Positive/Negative List - Master 2510

CRONUS TRIMIT 2013 W1 - TEST

Home Actions Navigate

New View List Edit List Delete Show as List Show as Chart OneNote Notes Links

VarDim Positive/Negative List

Type to filter (F3) Assortment List

Sorting: Type,VarDim Type,Relation 1,Master No.,Relation 2,Assortment List,Value

Show results:

Where Type is Positive

And Relation 1 is Master

And Item is 2510

And Relation 2 is Collection Matrix

Add Filter

VarDim Type	Value	Variant Name	Name	Short Name	Assortment
SIZE_5	03	L	L	L	
SIZE_5	04	XL	XL	XL	
SIZE_5	05	XXL	XXL	XXL	
SIZE_5	06	3XL	3XL	3XL	
SIZE_5	07	4XL	4XL	4XL	
SIZE_5	08	5XL	5XL	5XL	

OK

And via the **Object Designer** if you run the Table **6037116 VarDim Positive/Negative**:

VarDim Positive/Negative								
Type to filter (F3) Type								
Sorting: Type,VarDim Type,Relation 1,Relation 1 Name,Relation 2,Relation 2 Name,Value								
Type	VarDim Type	Relation 1	Relation 1 N...	Relation 2	Relation 2 Name	Value	VarDim Vari...	Variant Name
Positive	SIZE_5	Master	2510	None		08	205	5XL
Positive	SIZE_5	Master	2510	Collection Matrix	{F37A60FC-B70E-4D7E-8ECC-C07C4A16240D}	03	205	L
Positive	SIZE_5	Master	2510	Collection Matrix	{F37A60FC-B70E-4D7E-8ECC-C07C4A16240D}	04	205	XL
Positive	SIZE_5	Master	2510	Collection Matrix	{F37A60FC-B70E-4D7E-8ECC-C07C4A16240D}	05	205	XXL
Positive	SIZE_5	Master	2510	Collection Matrix	{F37A60FC-B70E-4D7E-8ECC-C07C4A16240D}	06	205	3XL
Positive	SIZE_5	Master	2510	Collection Matrix	{F37A60FC-B70E-4D7E-8ECC-C07C4A16240D}	07	205	4XL
Positive	SIZE_5	Master	2510	Collection Matrix	{F37A60FC-B70E-4D7E-8ECC-C07C4A16240D}	08	205	5XL

VARDIM COMBINATIONS

VarDim Combinations (Table **6037115 VarDim Combinations**) describe the interdependence between the various VarDim Types.

A VarDim Type can be set up to be overall to another or several other VarDim Types.

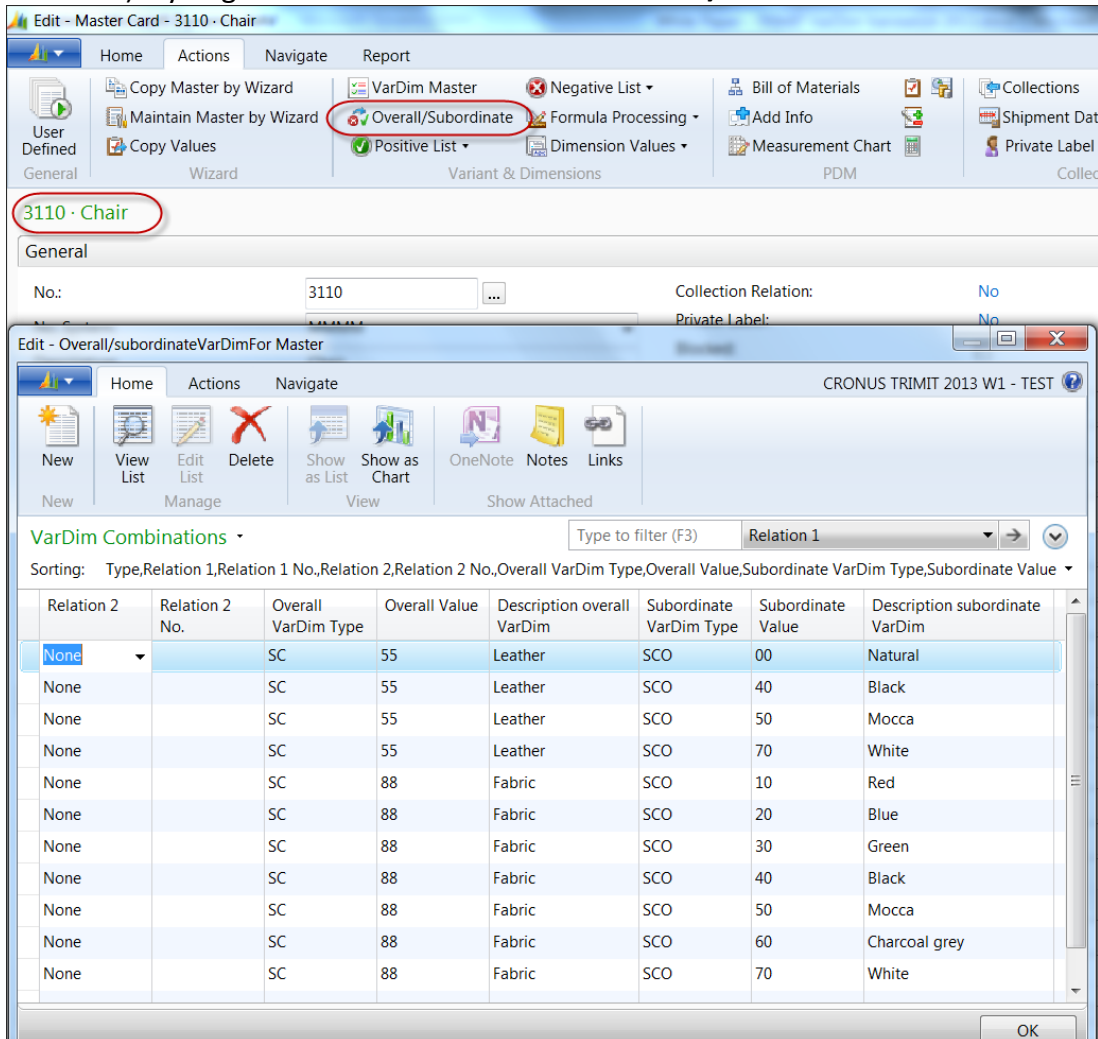
Implicitly, one or more VarDim Types can be set up to be subordinate to another VarDim Type.

I.e. the color of a Chair depends of the cover of the Chair: Leather covered Chair can only have the colors Black, White and Brown, but a Fabric covered Chair can have the colors Black, Blue, Red, White, Grey and Brown.

When a list of valid values for the VarDim Types of a Master have been created based on the VarDim Positive/Negative List or the VarDim Variant Option list, the program will use the VarDim Combination set up to check all values in the list of valid values. If the value turns out not to be valid, it will be removed from the list of valid VarDim values.

Create and Maintain VarDim Combinations

To be used in the TRIMIT VarDim Validation, a VarDim Combination List can be related to an Item or a Master. The page to create and maintain the VarDim Combinations List can be opened via the Master List/Card or Item List/Card (via **Departments/Warehouse/+ Product Design (PDM)/Item or + Master**) if you go to ribbon **Actions** and click **Overall/Subordinate** as shown below.



The screenshot shows the TRIMIT software interface. The main window is titled "Edit - Master Card - 3110 - Chair". The "Actions" ribbon is active, and the "Overall/Subordinate" button is highlighted. Below the main window, a dialog box titled "Edit - Overall/subordinateVarDimFor Master" is open. The dialog box has a ribbon with "Home", "Actions", and "Navigate". The "Home" ribbon is active, showing buttons for "New", "View List", "Edit List", "Delete", "Show as List", "Show as Chart", "OneNote", "Notes", and "Links". The "View List" button is selected. The dialog box displays a table of VarDim combinations. The table has columns: "Relation 2", "Relation 2 No.", "Overall VarDim Type", "Overall Value", "Description overall VarDim", "Subordinate VarDim Type", "Subordinate Value", and "Description subordinate VarDim". The table contains 11 rows of data, showing combinations of overall and subordinate VarDim types and values.

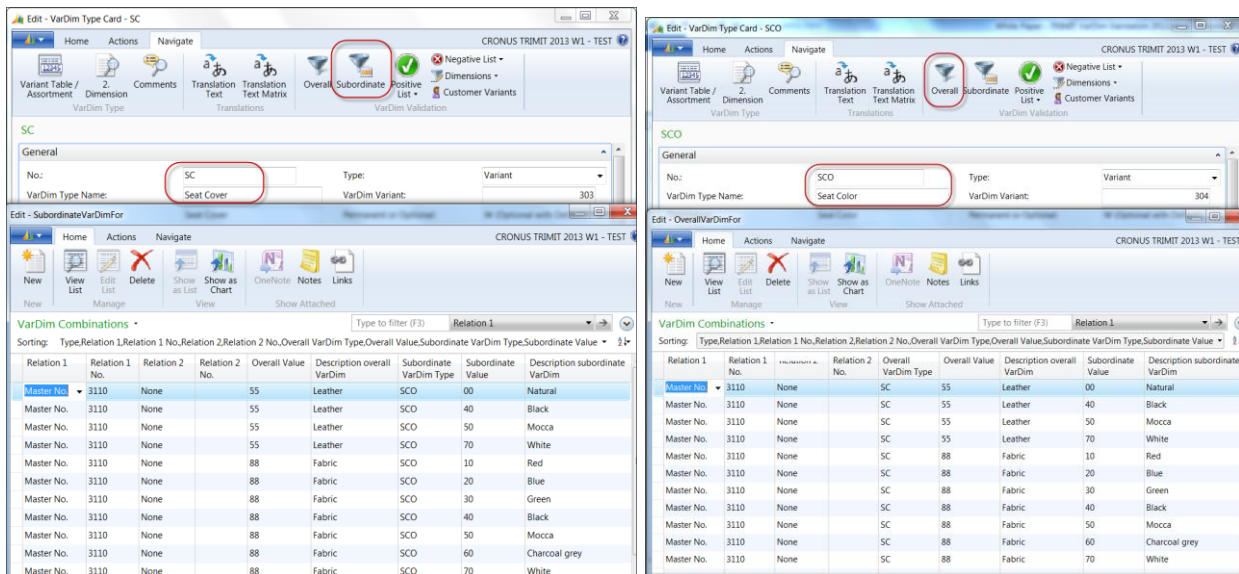
Relation 2	Relation 2 No.	Overall VarDim Type	Overall Value	Description overall VarDim	Subordinate VarDim Type	Subordinate Value	Description subordinate VarDim
None		SC	55	Leather	SCO	00	Natural
None		SC	55	Leather	SCO	40	Black
None		SC	55	Leather	SCO	50	Mocca
None		SC	55	Leather	SCO	70	White
None		SC	88	Fabric	SCO	10	Red
None		SC	88	Fabric	SCO	20	Blue
None		SC	88	Fabric	SCO	30	Green
None		SC	88	Fabric	SCO	40	Black
None		SC	88	Fabric	SCO	50	Mocca
None		SC	88	Fabric	SCO	60	Charcoal grey
None		SC	88	Fabric	SCO	70	White

A VarDim Combination List can also be set up without a relation to an Item or a Master but only with a relation to VarDim Types.

The page to create and maintain the VarDim Combinations List can be opened via the VarDim Type List/Card (via **Departments/Warehouse/+ Product Design (PDM)/+ VarDim Types**) if you go to ribbon **Navigate** and click **Overall** or **Subordinate** as shown below.

Subordinate will show the VarDim Combinations to a lower level: I.e. Value of Seat Cover determines possible Values of Seat Color.

Overall will show the VarDim Combination to a higher level: I.e. Value of Seat Color depends on Values of Seat Cover.



Fields in the VarDim Combinations

Relation 1

This field is an Option field and when the VarDim Combinations are created and maintained from an Item or a Master, it is automatically filled in by the program.

You can choose the following three options:

None	No relations exist. I.e. for selected VarDim Subsets of a Matrix Limitation Setup or Collection.
Master	The combination is related to the Master defined in the field Relation 1 No.
Item	The combination is related to the Item defined in the field Relation 1 No.

Relation 1 No.

Here an Item No. or a Master No. is filled in when the combination is related to an Item or a Master. When the VarDim Combinations are created and maintained from an Item or a Master, this field is automatically filled in by the program.

NOTE

It depends from where you open this page if you will see the **Relation 1** and **Relation 1 No.** If you came from the Master or Item, they will already be filled automatically and will not be shown in this page.

Relation 2

This field is an Option field.

You can choose the following three options:

None	No second relations exist.
Country/Region	The current VarDim Combination is related to the Country/Region defined in the Relation 2 No. field.
Customer	The current VarDim Combination is related to the Customer defined in the Relation 2 No. field.

Relation 2 No.

Here a Country/Region code or a Customer No. is filled in when the combination is related to Country/Region or a Customer. This combination only affects the generation of the list of valid VarDim Types in a VarDim Order.

Overall VarDim Type

This field is related to the table VarDim Type and here any VarDim Type can be filled in.

Overall Value

Here a value from the table VarDim Variant Option can be filled in if the **Overall VarDim Type** is of the **Type Variant**.

If the **Overall VarDim Type** is of the **Type Code**, a value from the related table can be filled in. The Related Table is defined in the field **Table Relation Type is Code** at the current VarDim Type.

Description Overall VarDim

This field is automatically filled in with the **Name** of the current **Overall Value**.

It is possible subsequently to change the description. It is this description that will be shown in the list of valid VarDim Values and when it is chosen in a VarDim Order or a VarDim Item.

NOTE

It depends from where you open this page if all the three fields **Overall VarDim Type**, **Overall Value** and **Description Overall VarDim** will be shown and are editable.

The field **Description Overall VarDim** might not be in the page by default and has to be chosen manually to be shown in this page.

If you came from the Master Card, there is no check if the **Overall VarDim Type** is related to the Master, so you need to be aware that you should only choose VarDim Types that are related to the specific Master.

Subordinate VarDim Type

This field is related to the table VarDim Type and here any VarDim Type can be filled in.

Subordinate Value

Here a value from the table VarDim Variant Option can be filled in if the **Subordinate VarDim Type** is of the **Type Variant**.

If the **Subordinate VarDim Type** is of the **Type Code**, a value from the related table can be filled in. The Related Table is defined in the field **Table Relation Type is Code** at the current VarDim Type.

Description Subordinate VarDim

This field is automatically filled in with the **Name** of the current **Subordinate Value**

It is possible subsequently to change the description. It is this description that will be shown in the list of valid VarDim Values and when it is chosen in a VarDim Order or a VarDim Item.

NOTE

It depends from where you open this page if all the three fields **Subordinate VarDim Type**, **Subordinate Value** and **Description Subordinate VarDim** will be shown and are editable.

The field **Description Subordinate VarDim** might not be in the page by default and has to be chosen manually to be shown in this page.

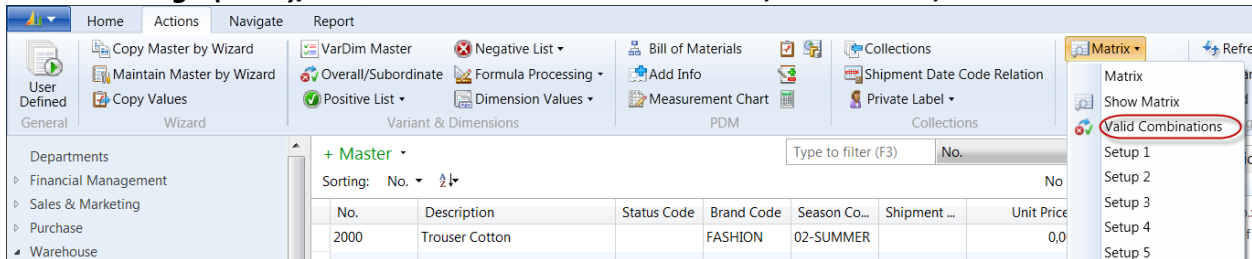
If you came from the Master Card, there is no check if the **Subordinate VarDim Type** is related to the Master, so you need to be aware that you should only choose VarDim Types that are related to the specific Master.

VALID COMBINATIONS

The VarDim Combinations is typically a functionality used within the Furniture Industry, where a lot of different VarDim Types can be related to a Master, and there can be a lot of dependencies between the values of the VarDim Types.

Within the Fashion Industry, usually you see Masters that are used in Matrices, and that is also the place where you can set up that some combinations of color and size are not valid.

You can set up the **Valid Combination** via the Master Card/List: go to **Departments/Warehouse/+ Product Design (PDM)/+ Masters** and then ribbon **Actions**, click **Matrix**, click **Valid Combinations**



A Matrix will open of the Master and you are able to enter a 0 or – in a Cell to make the combination not valid and you can enter a 1 or + to make it valid.

Edit - Matrix Master - No. 2110 - Sweater Long Sleeve

Variant	Variant Description	XS	S	M	L	XL	XXL
01	White	-	+	+	+	+	+
20	Blue	+	+	+	+	+	+
30	Yellow	-	+	+	+	+	+
60	Green	-	+	+	+	+	+
75	Pink	+	+	+	+	+	+
80	Purple	+	+	+	+	+	+
90	Grey	+	+	+	+	+	+
99	Black	+	+	+	+	+	+

This information is stored in the table **6037114 Matrix Cell**.

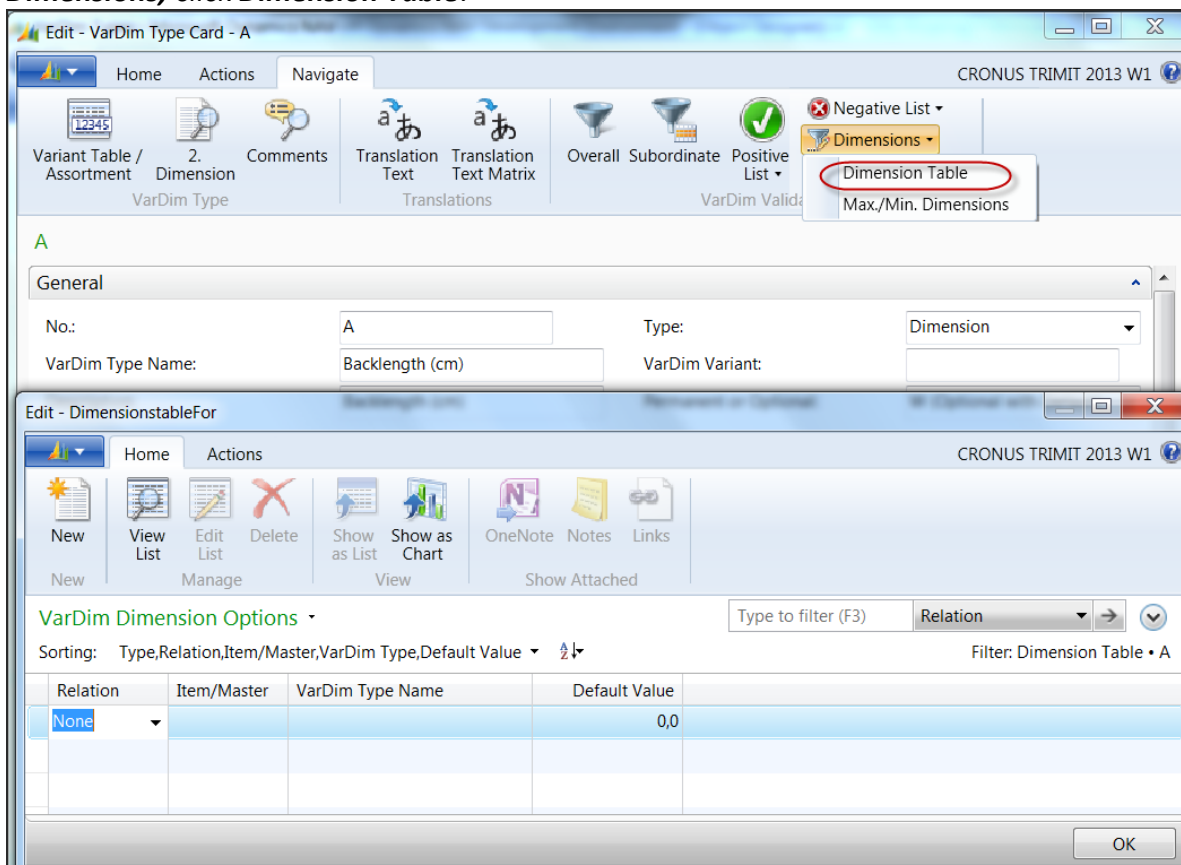
VARDIM DIMENSION OPTIONS

The **VarDim Dimension Options** (Table **6037117 VarDim Dimension Option**) are only used in connection with VarDim Types with the **Type** *Dimension* or *Decimal Figure*. The VarDim Dimensions can be set up either as a list of valid dimensions or as a minimum and/or maximum dimension.

Create and Maintain the VarDim Dimension Options

VarDim Dimension Options can be set up with relation to an Item, a Master or with no relation. VarDim Dimension Options are set up for VarDim Types where the **Type** is *Dimension* or *Decimal Figure*.

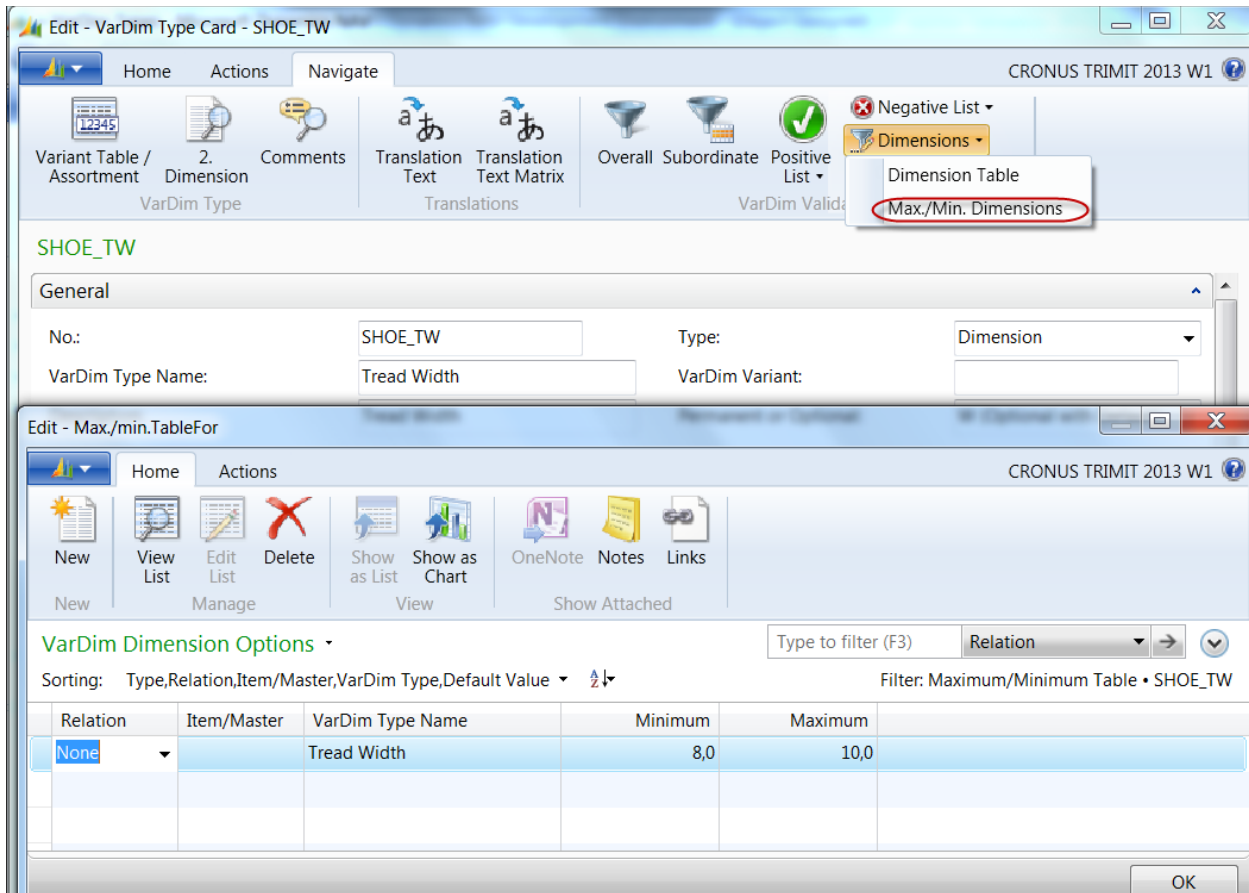
The page to create and maintain the valid VarDim Dimensions can be opened via the VarDim Types: go to **Warehouse/+Product Design (PDM)/+ VarDim Types** and then ribbon **Navigate**, click **Dimensions**, click **Dimension Table**.



The screenshot shows two overlapping windows from the TRIMIT 2013 W1 software. The top window, 'Edit - VarDim Type Card - A', has a ribbon with 'Navigate' selected, showing a 'Dimensions' dropdown menu with 'Dimension Table' highlighted. The bottom window, 'Edit - DimensionstableFor', displays the 'VarDim Dimension Options' table. The table has columns for 'Relation', 'Item/Master', 'VarDim Type Name', and 'Default Value'. The first row shows 'None' for Relation, 'Backlength (cm)' for Item/Master, and '0,0' for Default Value. The 'Type' is set to 'Dimension'.

Relation	Item/Master	VarDim Type Name	Default Value
None	Backlength (cm)		0,0

The page to create and maintain the Maximum and Minimum for the VarDim Dimensions can be opened via the VarDim Types: go to **Warehouse/+Product Design (PDM)/+ VarDim Types** and then ribbon **Navigate**, click **Dimensions**, click **Max./Min. Dimensions**.



Fields in the VarDim Dimensions

Relation

This field is an Option field. It determines if the **VarDim Dimension Options** are general options, or only applicable for specific Masters or Items.

You can choose the following three options:

None	No relations exist: the VarDim Dimension Options are applicable for all Masters/Items.
Master	The VarDim Dimension Options are related to the Master defined in the field Item/Master .
Item	The VarDim Dimension Options are related to the Item defined in the field Item/Master .

Master/Item

Here an **Item No.** can be entered if **Relation** is *Item*.

Here a **Master No.** can be entered if **Relation** is *Master*.

VarDim Type Name

This field is a calculated field and shows the Name of the current **VarDim Type**

Default Value

This field is only used if you clicked **Dimension Table**. You can enter any decimal.

It is also possible to enter several VarDim Dimension Options for the same Item or Master, simply by creating several Lines in this page.

Minimum

This field is only used if you clicked **Max./Min. Dimensions**. You can enter any decimal.

Maximum

This field is only used if you clicked **Max./Min. Dimensions**. You can enter any decimal

NOTE

If you entered the **Dimension Table** and you entered **Max./Min. Dimensions** for the same **Relation** the system will check if a **Minimum** is not smaller than the smallest **Default Value** in the **Dimension Table** and if a **Maximum** is not bigger than the biggest **Default Value** in the **Dimension Table**.

PROCESS

THE GENERATION OF THE LIST OF VALID VARDIM VALUES

TRIMIT VarDim Validation will start by searching for a **VarDim Positive List**. If a VarDim Positive List does not exist, the **TRIMIT VarDim Validation** will search for a **VarDim Negative List**. If it turns out that there does not exist a VarDim Negative List neither, the list of Valid Values will be generated based on the related **VarDim Variant Options**.

If a list of Valid Values has been generated, **TRIMIT VarDim Validation** subsequently will check all values in this list using the list of **VarDim Combinations**.

If the value appears not to be valid, it will be removed from the list of Valid Values.

The search in the VarDim Positive/Negative List and the list of valid VarDim Combinations will be executed in the below order.

The Customer information of the VarDim Order search is found in the current Sales Header. If no combination is found on one level, the search will continue on the next level. The search will stop when all combinations on the current level are added to the list of Valid Values.

VarDim Order

The **VarDim Order** are the Values of the VarDim Types of the Master for a specific Sales Line, Purchase Line or Production Order.

If a Purchase Line or Production Order are directly related to a Sales Line, the same search order is applicable and it is looking in the VarDim Order of the Sales Line.

If a Purchase Line or Production Order are not directly related to a Sales Line only the steps 6, 12 and 18 are applicable to determine which Values are valid.

1. Item/Sell-to Customer No.
2. Item/Bill-to Customer No.
3. Item/Concern
4. Item/Chain
5. Item/Sell-to Country/Region Code
6. Item/None
7. Master/Sell-to Customer No.
8. Master/Bill-to Customer No.
9. Master/Concern
10. Master/Chain
11. Master/Sell-to Country/Region Code
12. Master/None
13. None/Sell-to Customer No.
14. None/Bill-to Customer No.
15. None/Concern
16. None/Chain
17. None/Sell-to Country/Region Code
18. None/None

VarDim Item

The **VarDim Item** are the Values of the VarDim Types of the Master for a specific Item.

1. Item/None

2. Master/None
3. None/None

BLANKING OF VARDIM VALUES

When a value is filled into a VarDim Order or a VarDim Item, the **TRIMIT VarDim Validation** will check whether the current VarDim Type is a subordinate VarDim type to any other VarDim Types. If so, it will be checked whether the value filled in is valid.

If the value is valid, it will be checked whether the current VarDim Type is an overall VarDim type to any other VarDim Types. If so, the current values for all the subordinate VarDim Types will be checked. If it shows that a value is not valid, the **TRIMIT VarDim Validation** will prompt for a confirmation to clear the value. If the confirmation is accepted, the **TRIMIT VarDim Validation** will clear the current subordinate value including all possible underlying VarDim Types subordinate to this.

THE USE OF FORMULAS IN VARDIM ORDER

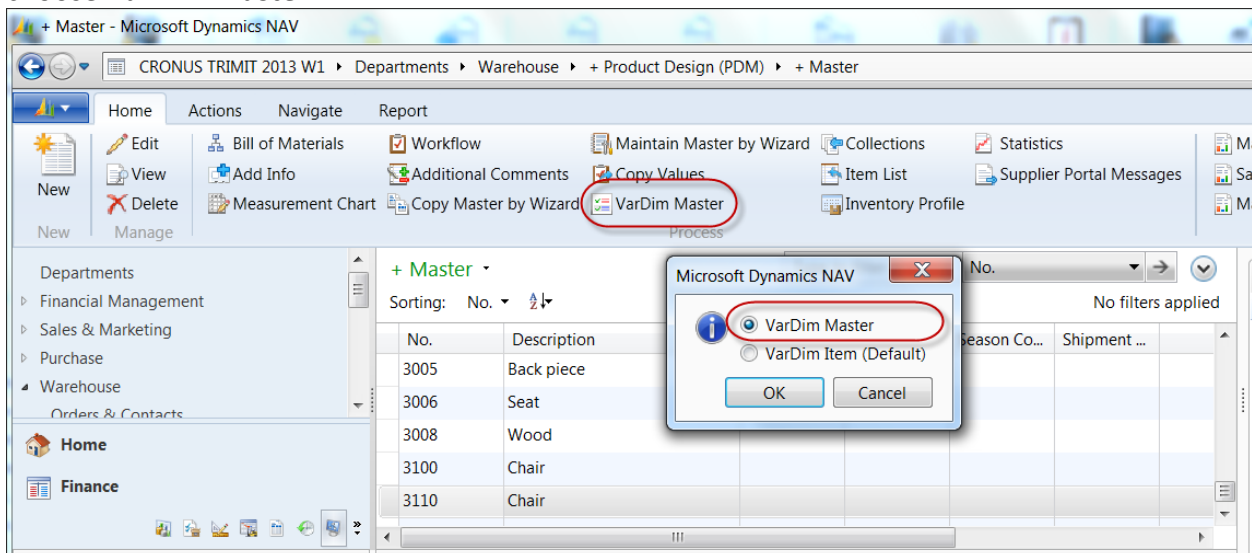
If there is a need for a more complex validation, the **TRIMIT Formula** functionality can be used. How Formulas are created and maintained is described in the **White Paper - TRIMIT Formulas**. In this White Paper the use of TRIMIT Formulas in VarDim Order and VarDim Item is described.

If a Formula has to be executed when a value is filled into a VarDim Order or a VarDim Item, the Formula No. must be set up in the related VarDim Master of the Master.

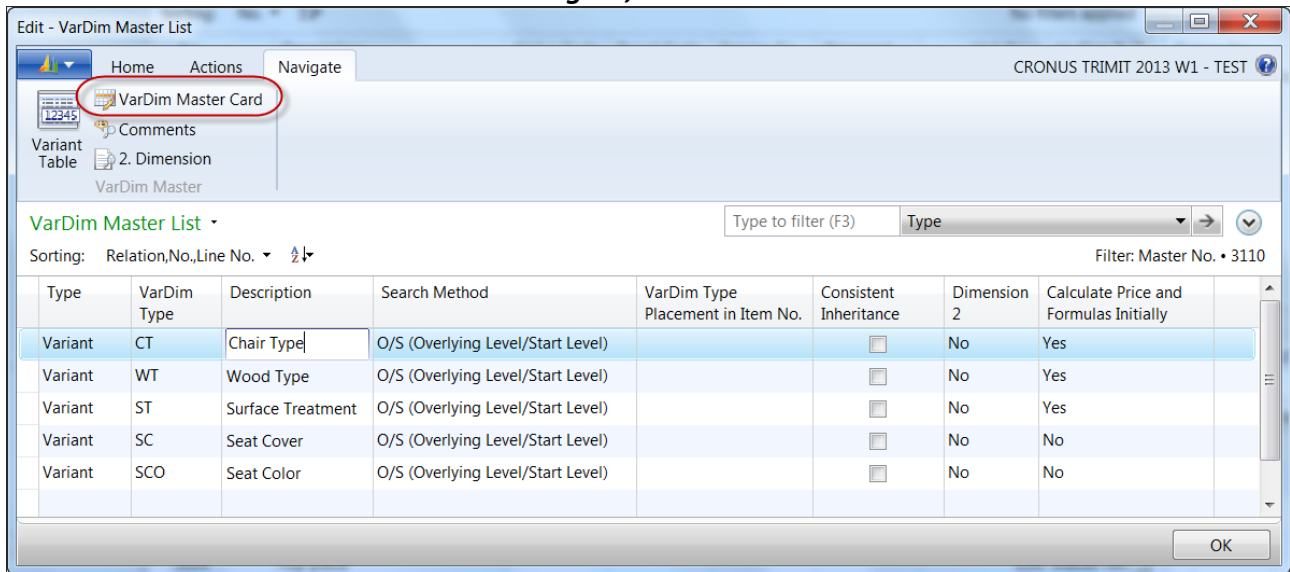
A Formula No. can be set up for:

- A **VarDim Order** related to a **Sales Line** in the field **Formula VarDim Sales**
- A **VarDim Order** related to a **Purchase Line** in the field **Formula VarDim Purchase**
- A **VarDim Order** related to a **Production Order** in the field **Formula VarDim Production**
- A **VarDim Item** in the field **Formula VarDim Item**

The Formula Nos. are set up via the Master List/Card: ribbon **Home**, click **VarDim Master**, and choose **VarDim Master**



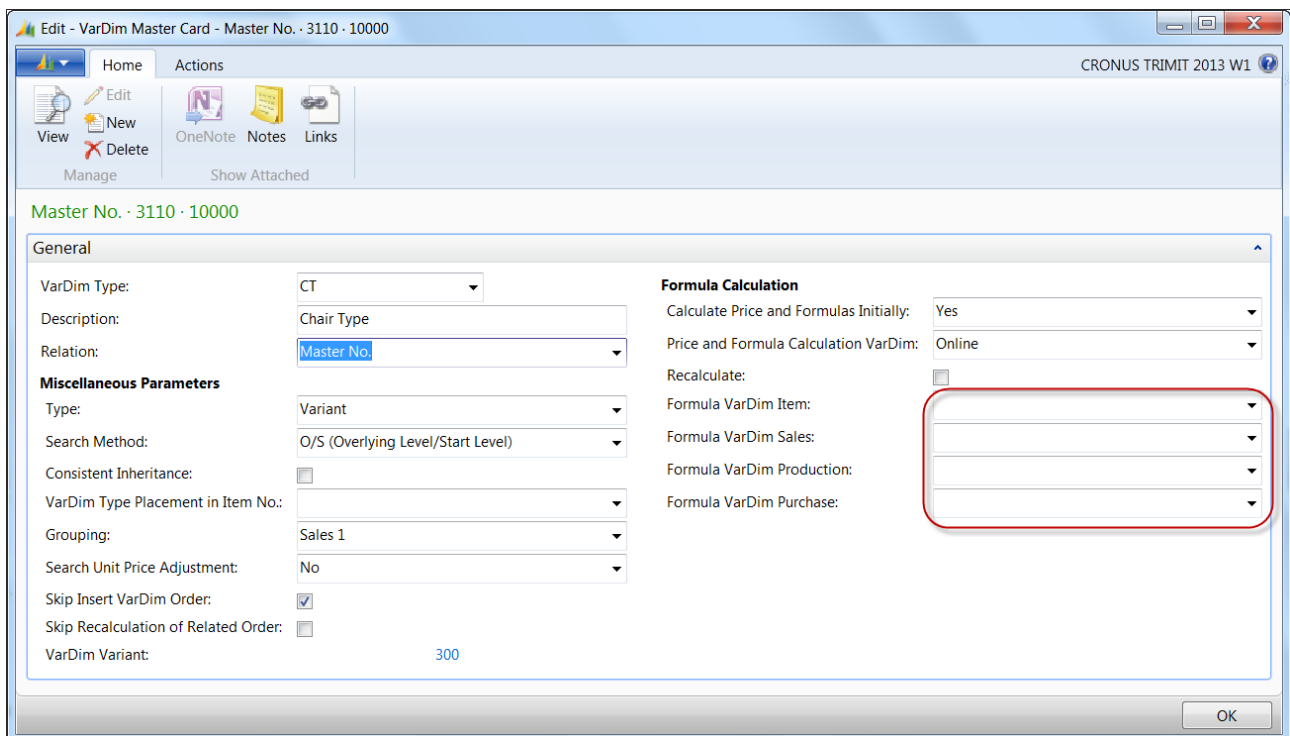
And in the VarDim Master List: ribbon **Navigate**, click **VarDim Master Card**.



Type	VarDim Type	Description	Search Method	VarDim Type Placement in Item No.	Consistent Inheritance	Dimension 2	Calculate Price and Formulas Initially
Variant	CT	Chair Type	O/S (Overlying Level/Start Level)		☐	No	Yes
Variant	WT	Wood Type	O/S (Overlying Level/Start Level)		☐	No	Yes
Variant	ST	Surface Treatment	O/S (Overlying Level/Start Level)		☐	No	Yes
Variant	SC	Seat Cover	O/S (Overlying Level/Start Level)		☐	No	No
Variant	SCO	Seat Color	O/S (Overlying Level/Start Level)		☐	No	No

NOTE

You could also take the fields regarding the formulas into the **VarDim Master List** so you don't have to go to the Card to see these fields.



General

VarDim Type: CT

Description: Chair Type

Relation: Master No.

Miscellaneous Parameters

Type: Variant

Search Method: O/S (Overlying Level/Start Level)

Consistent Inheritance: ☐

VarDim Type Placement in Item No.: Sales 1

Grouping: Sales 1

Search Unit Price Adjustment: No

Skip Insert VarDim Order: ☒

Skip Recalculation of Related Order: ☐

VarDim Variant: 300

Formula Calculation

Calculate Price and Formulas Initially: Yes

Price and Formula Calculation VarDim: Online

Recalculate: ☐

Formula VarDim Item: [Redacted]

Formula VarDim Sales: [Redacted]

Formula VarDim Production: [Redacted]

Formula VarDim Purchase: [Redacted]

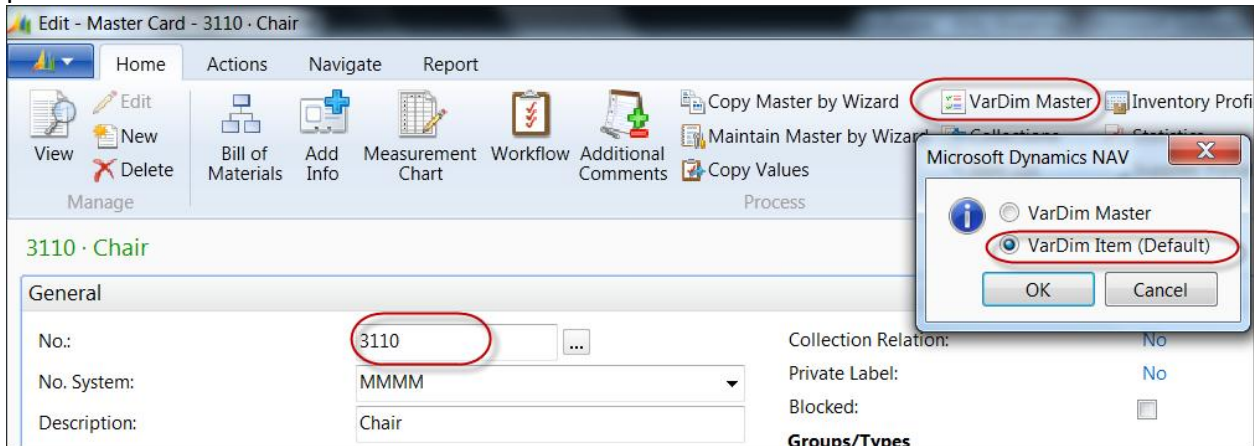
Set up a Dialog

A Formula can also be set up to show a dialog if a condition is met as shown below.

I.e.: If for chair 3110 the Seat Cover 55 Leather has been chosen you want to show a message that only the Seat Colors 00, 40, 50 and 70 are applicable before entering the Seat Color.

Step 1.

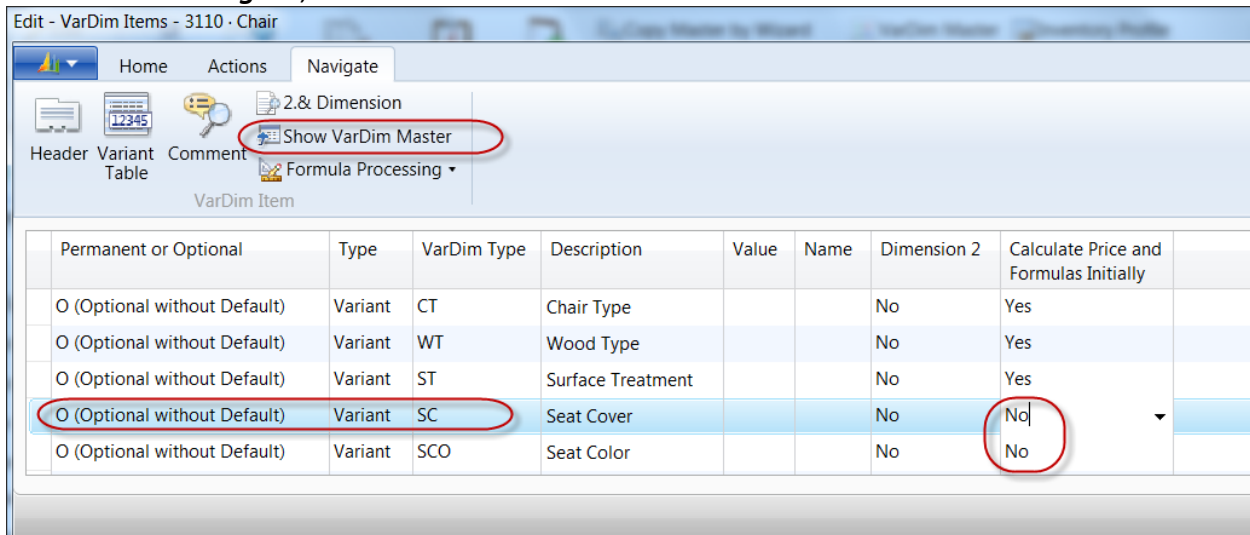
In the Master 3110 go to ribbon **Home**, click **VarDim Master**, choose **VarDim Item (Default)** and press **OK**



Step 2.

Make sure the **Calculate Price and Formula Initially** for SC and SCO is set to **No**.

Go to ribbon **Navigate**, click **Show VarDim Master**



Step 3.

On the VarDim Master Card of SC you can enter a Formula in **Formula VarDim Sales**

Edit - VarDim Master Card - Master No. : 3110 - 40000

CRONUS TRIMIT 2013 W1 - TEST

Home Actions

View Edit New Delete OneNote Notes Links

Manage Show Attached

Master No. : 3110 - 40000

General

VarDim Type: SC

Description: Seat Cover

Relation: Master No.

Miscellaneous Parameters

Type: Variant

Search Method: O/S (Overlying Level/Star...

Consistent Inheritance: ☐

VarDim Type Placement in Item No.:

Grouping: Sales 1

Search Unit Price Adjustment: Yes

Skip Insert VarDim Order: ☒

Skip Recalculation of Related Order: ☐

VarDim Variant: 303

Formula Calculation

Calculate Price and Formulas Initially: No

Price and Formula Calculation VarDim: Online

Recalculate: ☐

Formula VarDim Item:

Formula VarDim Sales: SALES ORDER DIALOG

Formula VarDim Production:

Formula VarDim Purchase:

OK

This looks as follows:

VarDim Sales - SALES ORDER DIALOG

Generelt

Formula Type: VarDim Sales

Description: Seat Color related to Seat Cover

Formula No.: SALES ORDER DIALOG

Formula Lines

Functions Find Filter Clear Filter

Inactive	Action in Formula	Table ID	Expression	Result	Condition	Stop Condition	Stop with	Ok
☐	Calculation					SC=""	Skip	☒
☐	Dialog			1	SC="55"		Result	☒

Formula Dialog List - 1

Code Type Text

1	Message	If Seat Cover is "Leather" you can only choose the colors 00, 40, 50 or 70
---	---------	--

Message
Error
Confirm

Action in Formula of the Formula Line

In this field you need to choose *Dialog*.

Result

In the field the **No.** of the Dialog is filled in.

When **Action in Formula** is set to *Dialog*, pressing **F4** shows all existing Dialogs and gives the possibility to create and maintain Dialogs.

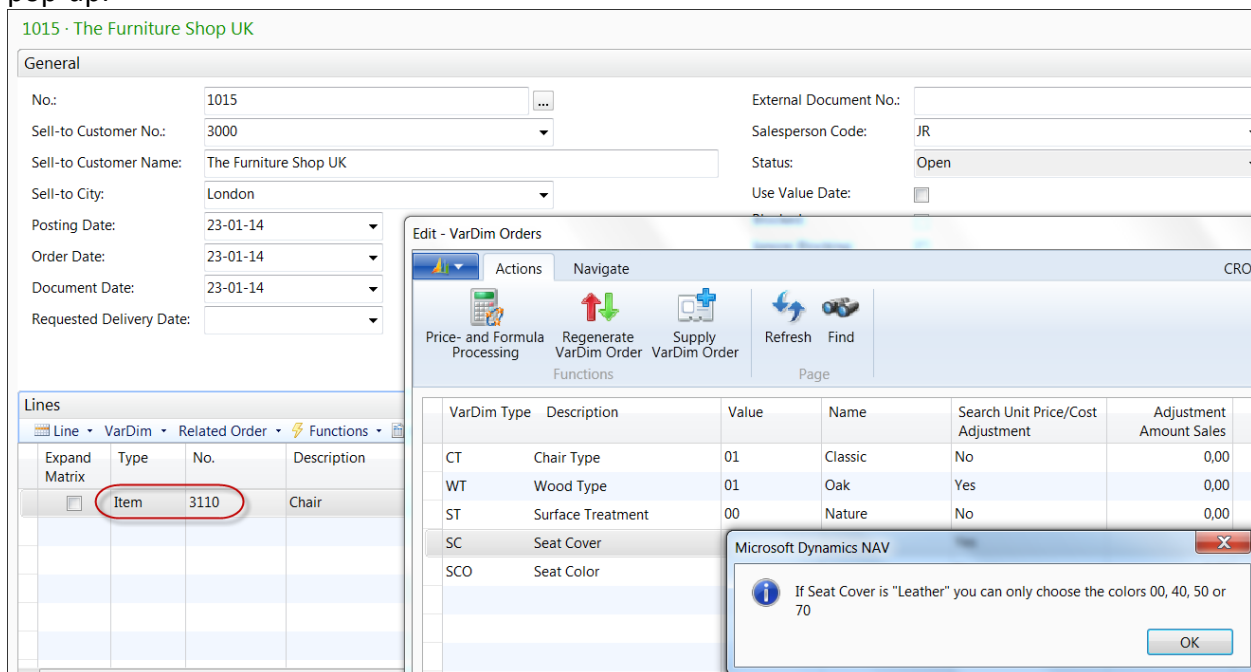
Using the field **Type** in the **Formula Dialog List** a Dialog can be set up as a *Message*, a *Confirm* or an *Error*.

Condition

In this field a **Condition** can be written.

In this example **SC="55"** (Seat Cover = 55 Leather)

The example as shown above regarding the dialog would mean, that if you enter a Sales Line with **Item 3110** and in the VarDim Order you would have chosen 55 for the Seat Cover a message will pop-up:



Use of VarDim Types in Formulas on VarDim Order and VarDim Item

As shown in the above Dialog example the **VarDim Type SC** was used in the Formula Lines. There are some restrictions to do this.

When a **VarDim Type** is used in connection with an executed Formula Line on **VarDim Order** or **VarDim Item** a "" (empty) Value in a **VarDim Type** will cause an error calling the pages **VarDim Order** and **VarDim Item** unless one of the below scenarios are valid:

- The **VarDim Type** has the setting *W (Optional with Default)* in the Field **Permanent or Optional** in the **VarDim Item** and the Field **Value** is populated.
The setting must be found on the Item with **Item Type Master Item** if the **Item** has Variants and/or Dimensions as part of the **Item No.**, and on the actual setting for the **Item Type** on the Item used on the **Sales Line** for an Item without Variants and Dimensions as part of the **Item No.**

- The **VarDim Type** has the setting *No* in the Field **Calculate Price and Formulas Initially** in the **VarDim Item**.
The setting must be found on the Item with **Item Type** *Master Item* if the **Item** has Variants and/or Dimensions as part of the **Item No.**, and on the actual setting for the **Item Type** on the Item used on the **Sales Line** for an Item without Variants and Dimensions as part of the **Item No.**
- The **VarDim Type** itself has a setting *TRUE* in the Field **Allow Blank Variant/Code** if **Type** is *Variant* or *Code*, or **Allow Blank Dimension/Decimal** if **Type** is *Dimension* or *Decimal Figure*.

MATCH SEARCH VARDIM ORDER

If you have many different combinations of VarDim Types for a Master and it would not be a product for which you use a Matrix you can set up the Master with a Sequential No. System. In that case, you do not want to create a new Item every time a customer asks for a specific configuration, but want to make sure that the user selects the right Item that is already in the system.

This means that you will create Items up front for configurations frequently sold, and in a Sales Lines, after entering the configuration, you want to have a message that an Item already exists for this specific configuration.

For this procedure, TRIMIT developed the **Match Search** function.

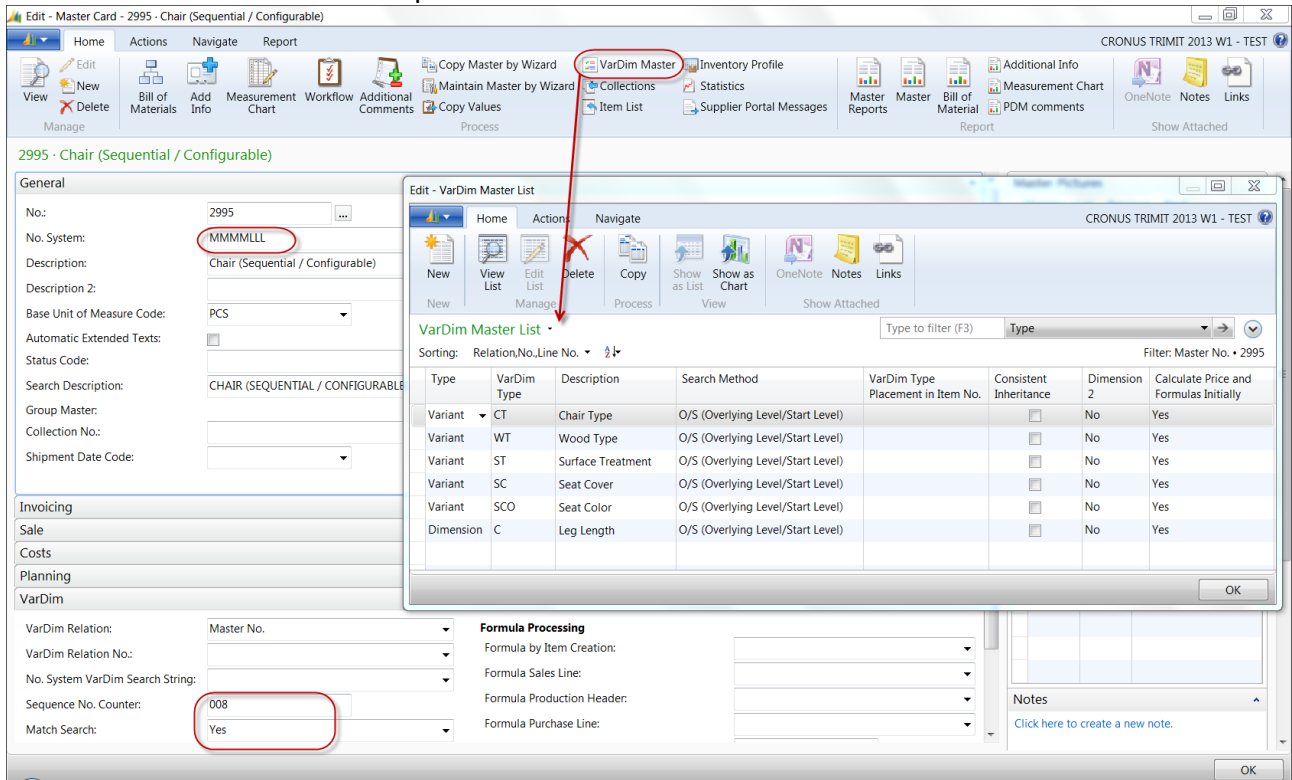
If a VarDim Order is used to create an order configured production order or purchase order for a configurable sequential Master, the **Match Search** can be used to check whether any Items exist already, that may be used as substitutes.

Set up Configurable Sequential Master

After entering the **No.** for the new Master, you need to fill the **Sequence No. Counter** on the FastTab **VarDim** before you can enter the **No. System** that needs to end with L's (which represents the sequential number). The Number of L's depends on the **Sequence No. Counter**.

After that you can enter the VarDim Master (via ribbon **Home**, click **VarDim Master**) for this Master and choose the VarDim Types that are applicable for this configurable Master.

I.e. Master 2995 has been set up like this:



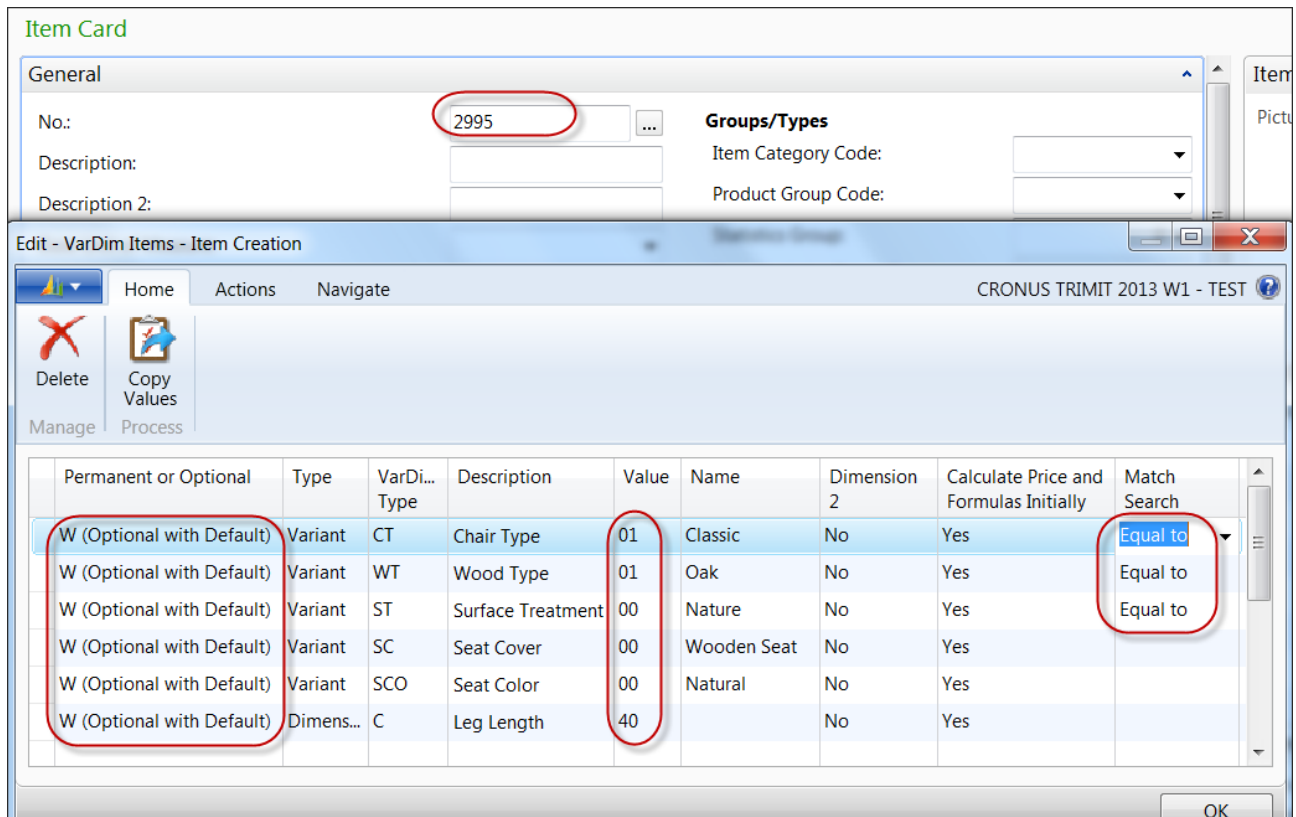
Type	VarDim Type	Description	Search Method	VarDim Type Placement in Item No.	Consistent Inheritance	Dimension 2	Calculate Price and Formulas Initially
Variant	CT	Chair Type	O/S (Overlying Level/Start Level)		☐	No	Yes
Variant	WT	Wood Type	O/S (Overlying Level/Start Level)		☐	No	Yes
Variant	ST	Surface Treatment	O/S (Overlying Level/Start Level)		☐	No	Yes
Variant	SC	Seat Cover	O/S (Overlying Level/Start Level)		☐	No	Yes
Variant	SCO	Seat Color	O/S (Overlying Level/Start Level)		☐	No	Yes
Dimension	C	Leg Length	O/S (Overlying Level/Start Level)		☐	No	Yes

Set up the VarDim Types on an Item to be used in a Match Search

The VarDim Types used in a Match Search are specified in the VarDim Item for a configurable Item using the field **Match Search** as shown below. Keep in mind, that the field **Match Search** on the FastTab **VarDim** of the Master needs to be set to Yes.

You first need to create an Item based on the configurable sequential Master: go to **Departments/Warehouse/Product Design (PDM)/Items**.

You can enter the **No.** that is the **Master** and then the **VarDim Items** opens where you can enter the values and the field **Match Search**.



Permanent or Optional	Type	VarDi... Type	Description	Value	Name	Dimension 2	Calculate Price and Formulas Initially	Match Search
W (Optional with Default)	Variant	CT	Chair Type	01	Classic	No	Yes	Equal to
W (Optional with Default)	Variant	WT	Wood Type	01	Oak	No	Yes	Equal to
W (Optional with Default)	Variant	ST	Surface Treatment	00	Nature	No	Yes	Equal to
W (Optional with Default)	Variant	SC	Seat Cover	00	Wooden Seat	No	Yes	
W (Optional with Default)	Variant	SCO	Seat Color	00	Natural	No	Yes	
W (Optional with Default)	Dimens...	C	Leg Length	40		No	Yes	

Permanent or Optional

For this first Item, it needs to be set to *W (Optional with Default)*. This will be the Item that you choose on the Sales Line, for which you want to know, if there are Matches with other Items of the same Master.

Match Search

The field **Match Search** is an Option field and three options are available:

Equal to or Smaller than	Can only be used when Type of the VarDim Type is set to <i>Dimension</i> or <i>Decimal Figure</i> . The program will check whether the value at a substitute is equal to or smaller than the similar value in the current VarDim Order
Equal to or Larger than	Can only be used when Type of the VarDim Type is set to <i>Dimension</i> or <i>Decimal Figure</i> . The program will check whether the value at a substitute is equal to or larger than the similar value in the current VarDim Order
Equal to	The program will check whether the value at a substitute is equal to the similar value in the current VarDim Order.

After you have confirmed the VarDim Item by pressing **OK** button, the actual Item No. has been created and all the data of the Master has been copied to the Item Card:

2995001 · Chair (Sequential / Configurable)

General

No.: 2995001

Description: Chair (Sequential / Configurable)

Description 2:

Base Unit of Measure: PCS

Automatic Ext. Texts: ☐

Master No.: 2995

Item Type: Finished Goods

Search Description: CHAIR (SEQUENTIAL / CONFIGUR...

Groups/Types

Item Category Code:

Product Group Code:

Statistics Group: 0

Item Statistics Group 2: 6

Item Statistics Group 3: 610

Item Statistics Group 4: 0

Item Statistics Group 5: 0

VarDimSearchString:

Blocked: ☐

Last Date Modified:

Invoicing FIFO | 0,00 | RETAIL | FINISHED

Foreign Trade

+ Sale 0,00

+ Costs Item Unit Cost Price List 0,00 0,00 0,00

+ Planning 3000 | Automatic | Inventory | No

+ Misc. 0 0 Available

+ Packaging / Measurement 0 0

Item Picture

Picture:

VarDim Item

VarDim...	Value	Name
CT	01	Classic
WT	01	Oak
ST	00	Nature
SC	00	Wooden Seat
SCO	00	Natural
C	40	

Item Transactions

Item No.: 2995001

Inventory: 0

Set up the VarDim Types on Items to be used as Substitutes

After the creation of the first Item, you need to create other Items based on the same Master that can be used as substitutes: these Items will however have *Permanent* values:

I.e.: 2995002:

2995002 · Chair (Sequential / Configurable)

General

No.: 2995002

Description: Chair (Sequential / Configurable)

Description 2:

Base Unit of Measure:

Automatic Ext. Texts: ☐

Master No.:

Item Type:

Search Description:

Groups/Types

Item Category Code:

Product Group Code:

Edit - VarDim Items - 2995002 · Chair (Sequential / Configurable)

CRONUS TRIMIT 2013 W1 - TEST

Manage Process

Permanent or Optional	Type	VarDi... Type	Description	Value	Name	Dimension 2	Calculate Price and Formulas Initially	Match Search
Permanent	Variant	CT	Chair Type	01	Classic	No	Yes	
Permanent	Variant	WT	Wood Type	01	Oak	No	Yes	
Permanent	Variant	ST	Surface Treatment	00	Nature	No	Yes	
Permanent	Variant	SC	Seat Cover	00	Wooden Seat	No	Yes	
Permanent	Variant	SCO	Seat Color	00	Natural	No	Yes	
Permanent	Dimens...	C	Leg Length	35		No	Yes	

OK

This means, that the *Value* of a VarDim Type cannot be changed; it is fixed.

Choose a substitute Item

After the Items have been created, they can be used as substitutes based on the Match Search fields per VarDim Type of the VarDim Item.

Let us say we enter a Sales Line for the **Item 2995001** and the VarDim Order will open, where we will change the **Seat Color** into **50 Mocca**.

1025 · The Furniture Shop UK

Sell-to Customer No.: 3000 Salesperson Code: JR

Sell-to Customer Name: The Furniture Shop UK Status: Open

Sell-to City: London Use Value Date: ☐

Posting Date: 23-01-14 Blocked: ☐

Order Date: 23-01-14 Ignore Blocking: ☐

Document Date: 23-01-14

Requested Delivery Date:

Click Availability Check: ☐

Lines

Expand Matrix	Type	No.	Description
☐	Item	2995001	

Edit - VarDim Orders

Price- and Formula Processing Regenerate VarDim Order Supply VarDim Order Refresh Find

VarDim Type	Description	Value	Name
CT	Chair Type	01	Classic
WT	Wood Type	01	Oak
ST	Surface Treatment	00	Nature
SC	Seat Cover	00	Wooden Seat
SCO	Seat Color	50	Mocca
C	Sleevelength (cm)	40	

When leaving the VarDim Order of a Sales (or Purchase) Line, a message pops-up that have to be confirmed by clicking the **Yes** button.

1025 · The Furniture Shop UK

Sell-to Customer No.: 3000 Salesperson Code: JR

Sell-to Customer Name: The Furniture Shop UK Status: Open

Sell-to City: London Use Value Date: ☐

Posting Date: 23-01-14 Blocked: ☐

Order Date: 23-01-14 Ignore Blocking: ☐

Document Date: 23-01-14 Skip Availability Check: ☐

Requested Delivery Date:

Order Type:

Lines

Expand Matrix	Type	No.	Description	Description 2	Location Code	Shipment Date Code	Shipment Date	Quantity	Reserved Quantity	Unit of Measure Co
☐	Item	2995001					23-01-14			

Microsoft Dynamics NAV

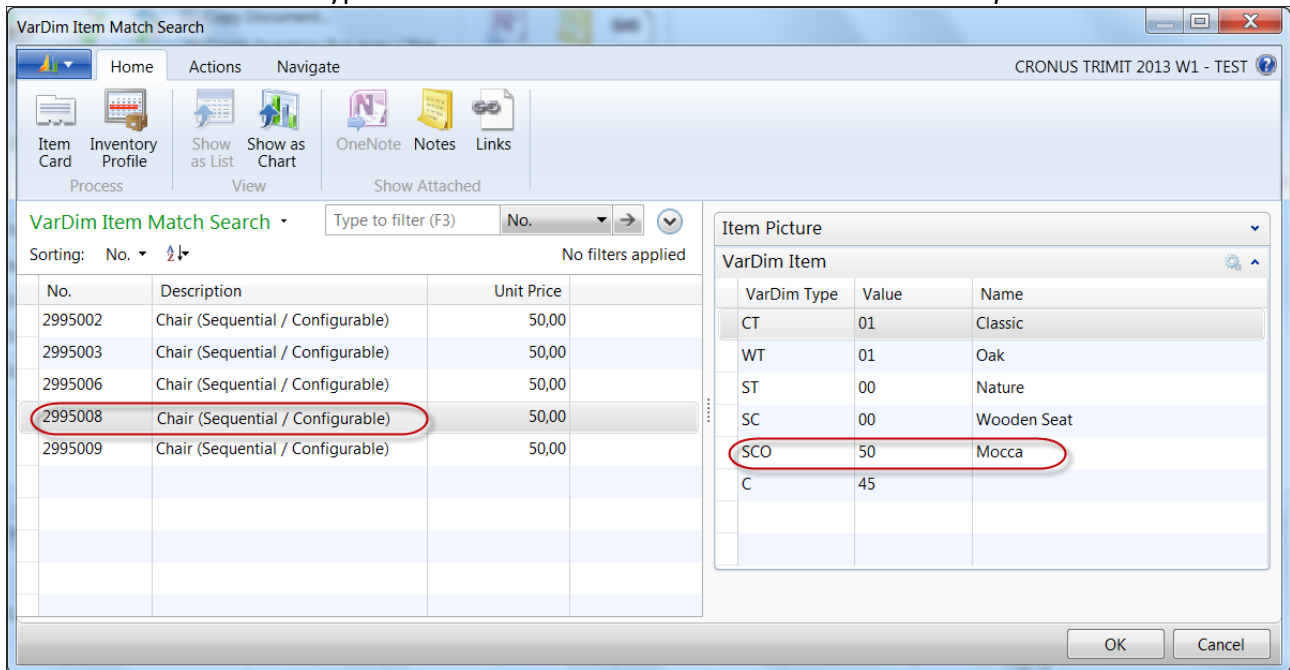
This partially completed VarDim Order matches the VarDim Item of several Items. Do you want to use one of those Items instead?

Yes No

The program will now check all Items related to the Master of the current Item and check all similar VarDim Items.

If all the checks proves positive, the Item will be added to the list of Substitute Items. When the generation of the list of Substitute Items is finished, the list will be shown and any of the Items can be chosen as an alternative to the current Item.

In this example, he will only show the sequential number 002, 003, 006, 008 and 009. These are the Items with the same **Chair Type 01**, **Wood Type 01** and **Surface Treatment 00**, because that were the three VarDim Types for which the **Match Search** has been set to *Equal to*.



No.	Description	Unit Price
2995002	Chair (Sequential / Configurable)	50,00
2995003	Chair (Sequential / Configurable)	50,00
2995006	Chair (Sequential / Configurable)	50,00
2995008	Chair (Sequential / Configurable)	50,00
2995009	Chair (Sequential / Configurable)	50,00

VarDim Type	Value	Name
CT	01	Classic
WT	01	Oak
ST	00	Nature
SC	00	Wooden Seat
SCO	50	Mocca
C	45	

Now you can choose the Item that might already fit the configuration that was entered on the Sales Line, and the Item on the Sales Line will be changed to the chosen substitute.

Expand Matrix	Type	No.	Description	Description 2	Location Code	Shipment Date Code	Shipment Date	Quantity	Unit Price
☐	Item	2995008	Chair (Sequential / Configurable)				23-01-14		