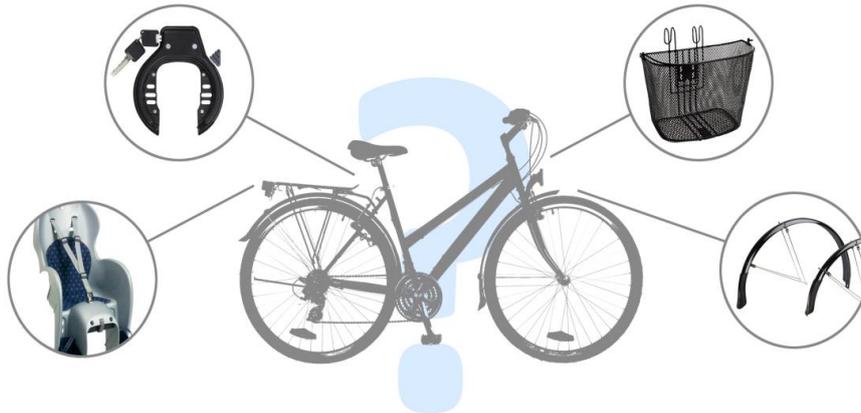# Product Configurator

What is MONITOR Product Configurator?

The Product Configurator is a supplement to MONITOR which provides system support to manage and combine several variants and models of a product. By starting with a basic part you can according to set rules, compose different variants and create different models. Bases on this it is then possible to calculate prices and create manufacturing orders.

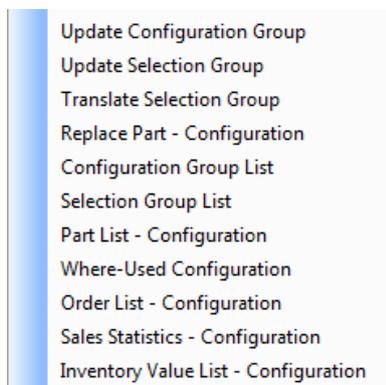## Why Use the Product Configurator?

The ongoing trend is that the market demands more unique and customer-specific products. A number of years ago you could, for example, not choose from very many variants when you bought a new car. Today you can make quite a few personal choices and the manufacturing in many cases follow the customer's specific requests. A product configurator helps you to manage several variants and models of a product. The advantages are many and of great support in several operation fields.

➢ **Sales** – The Product Configurator makes it easy to define different product variants when making quotes and orders. You can directly see which configurations that are possible to create and what they will cost. Our Product Configurator can with advantage be combined with a web solution in order to present an optional and user friendly interface to e.g. salesmen or customers etc. – this provides better availability.

➢ **Production** – The Product Configurator gives you the ability to manufacture the right product variant with correct operation and material contents. This is a smooth way to manage variants from each separate order, directly generated from the customer order. Pre-calculations, structure lists, delivery time checks and corresponding structure management are made for any configuration. Many different product variants based on a minimal range of parts.

> ➢ **Aftermarket** – The Product Configurator enables detailed follow-ups and traceability of each product variant. With an integrated product register, the information about each sold (specific) product is managed via a unique serial number. This facilitates the management and provision of spare parts, guarantee undertaking and maintenance of each unique product variant.

The Product Configurator in MONITOR

The integrated Product Configurator in MONITOR means an expansion of the system with a number of procedures to register and maintain the basic data. The basic data consists of (apart from the regular preparation) configuration groups where alternatives and rules for the product variants are specified. In addition to this, there are also expanded functions in the calculation and order procedures where the parts and product variants are handled, and also related functions to administer and show configuration statistics.

Update Configuration Group
Update Selection Group
Translate Selection Group
Replace Part - Configuration
Configuration Group List
Selection Group List
Part List - Configuration
Where-Used Configuration
Order List - Configuration
Sales Statistics - Configuration
Inventory Value List - Configuration

The Principle…

The Product Configurator in MONITOR can be seen as an alternative to the existing alternate preparation. In the alternate preparation you use a complete as a basis where all possible material and operations are listed. With the aid of rules you then decide which of these will be included or not in the preparation. With the Product Configurator you start with a basic preparation (body) instead and then you decide how the part is to be constructed by specifying different selections and rules. In order for a product to become complete, you are required to have specified a basic model (preparation) and a configuration group which describe and govern the available alternatives for the product.

Basic preparation ➕ **Configuration** ➡ **Complete product**

In connection to e.g. order registration, calculations, quoting, etc. selections are then made from the alternatives and rules that have been created in the configuration group. In other words, the basic preparation together with the configuration describes the complete product.

monitor ERP SYSTEM

Register Basic Data

The basic data needed to use the Product Configurator in MONITOR consists of a preparation and a configuration group with defined parts and rules of how these are to be used. You register the basic preparation as usual. The preparations should describe a stripped basic model, that is, only to include the elements that will always be a part of the product and that is not selectable in any way.

To this basic preparation you add different selections and alternatives in a configuration group. Each basic preparation/part number is linked to a configuration group. The configuration group defines the selectable alternatives, so-called *Selection Groups* (see position 1).

There are three types of selection groups:

- **Mandatory selection (one)**   (that is, a necessary selection)
- **Not mandatory selection (one)** (that is, an optional selection)
- **Not mandatory selection (several)** (that is, multiple optionals that can be selected and combined)

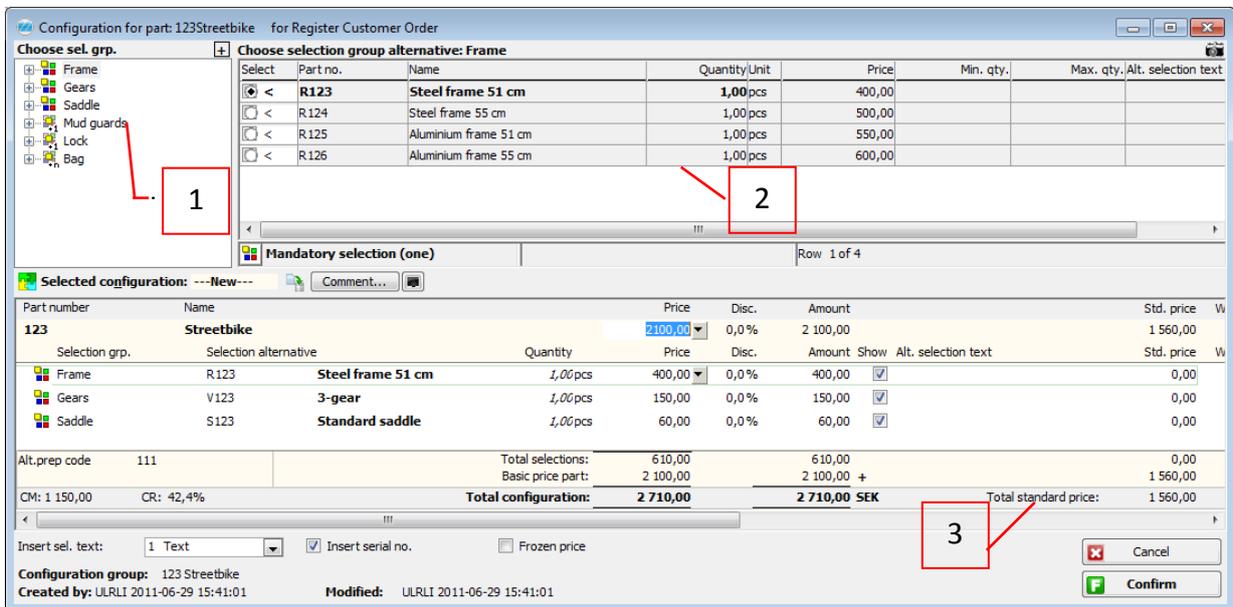Each selection group has to contain the alternatives that are to be selectable.
If e.g. Frame is a selection group, you should register alternate frames (parts) (see pos. 2).
To each selection group and part you can, if desired, link a file or image that for instance describes the product in question. By entering different rules for each part, you can determine whether these should exclude or include other selections, if they are to be unique or if they are to be combined with other alternatives, etc.

Market (Register Customer Order)

In connection with the customer order registration for a part which has a linked configuration, a window automatically appears – *Configuration for part.* In this window you can make different selections according to the selection groups (pos. 1) and alternatives (pos. 2) that have been registered for the configuration group in question. In a summary of the selected configuration you can see price and standard price for each selection group. A total price for the entire configuration and a standard price is also displayed (pos. 3). The same procedure applies during e.g. registration of quotes.

(The window *Configuration for part* can also be opened manually for each order row by using the button.)

When confirming the configuration you can display all selections at the customer order rows. The price of the complete product can also on the order row be compared directly against for example standard price.

In connection to the registration of customer orders you also have the opportunity to automatically generate a serial number per order row. The number series is defined in advance per part code. The serial number is linked to the integrated product register and can be used to add information about the product to provide increased traceability and follow-ups of a unique product.

Production

After a product has been specified in e.g. the customer order registration, a manufacturing order can automatically be created for the correct product variant based on the need created during the customer order registration.

In the Order Info you always see the correct configuration regarding work and material demands for the manufacturing order in question. Via the 🧩 button you can also display an overall view of the configuration in a separate window. This also applies to post-calculations and other procedures that display order.
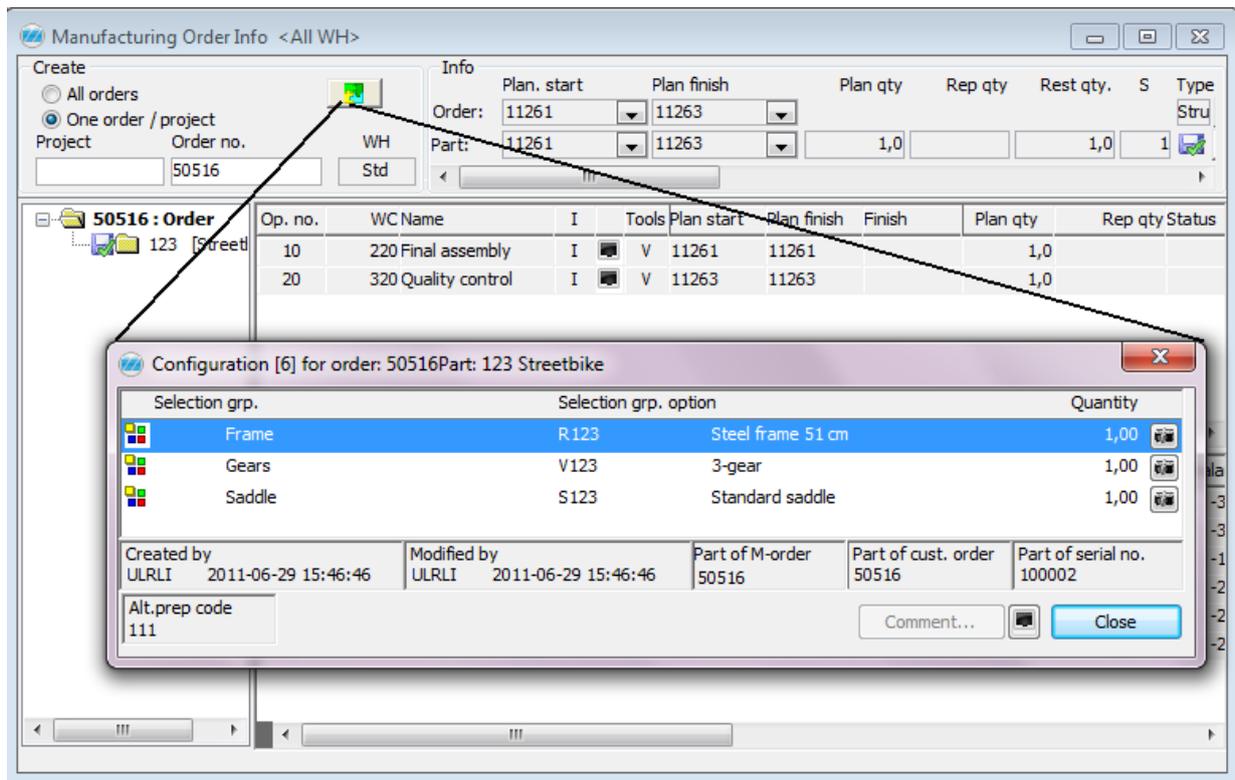
When you handle parts that have a linked configuration group, you always have to specify the execution in a configuration window. This applies to procedures as e.g. Pre-Calculation, Consists of (Structure List), Check Delivery Times, etc.

Aftermarket (Product Register)

The existing product register can be used to supply increased information on each delivered unit via a serial number. It is favourable to automatically obtain serial numbers in connection with the customer order registration. The product register is especially useful when using the product configurator and when variations in the execution can vary from unit to unit. An overall image of the configuration for the current serial number can easily be displayed via the button (pos. 1). To each unit/serial number you can also link the current manufacturing order (pos. 2) which provides an increased support for follow-ups and management of e.g. guarantee undertaking, claims, provision of spare parts, repairs etc.

Other Related Features

**Configuration Group List** – This procedure gives the opportunity to list and print a summarized report of the configuration groups. Depending on the selection of list type you can display different kinds of information related to the configuration groups. The list can e.g. display which selection groups that are included in the configuration group, alternatives to each selection group and rules or additions, if any.

Configuration group
123   Streetbike

Created by	Modified by
LAP / 2005-11-28	ULRLI / 2011-06-29
For part:	

Sel. grp.	Name		Type			Optional	Min. qty.	Max. qty.	Subgroup
	Frame		1 Mandatory selection (one)			No			

	Part number	Name	FOP	Min.	Max.	Default qty.	Alt.prep code	Main part
	* R123	Steel frame 51 cm	10			1	1	

Cannot be used in combination with V124 7-växlad selection grp. Gears

| | R124 | Steel frame 55 cm | 10 | | | 1 | 2 | |
| | R125 | Aluminium frame 51 cm | 10 | | | 1 | 3 | |

Cannot be used in combination with V124 7-växlad selection grp. Gears

| | R126 | Aluminium frame 55 cm | 10 | | | 1 | 4 | |

Sel. grp.	Name		Type			Optional	Min. qty.	Max. qty.	Subgroup
	Gears		1 Mandatory selection (one)			No			

	Part number	Name	FOP	Min.	Max.	Default qty.	Alt.prep code	Main part
	* V123	3-gear	10			1	1	
	V124	7-växlad	10			1	2	

Cannot be used in combination with R123 Steel frame 51 cm selection grp. Frame
Cannot be used in combination with R125 Aluminium frame 51 cm selection grp. Frame

Replace Part Configuration – This procedure is used in order to facilitate the exchange of one part for another in all selection groups where the part is used. It is also possible to adjust the values in the columns *FOP* and *Quantity* for a part in all selection groups where the part is used.

Where-Used Configuration – This procedure displays which configuration group and selection group the part is used in.
Part R123 is used in e.g. selection group "Frame" and in configuration group "123" and "124" according to the image below.
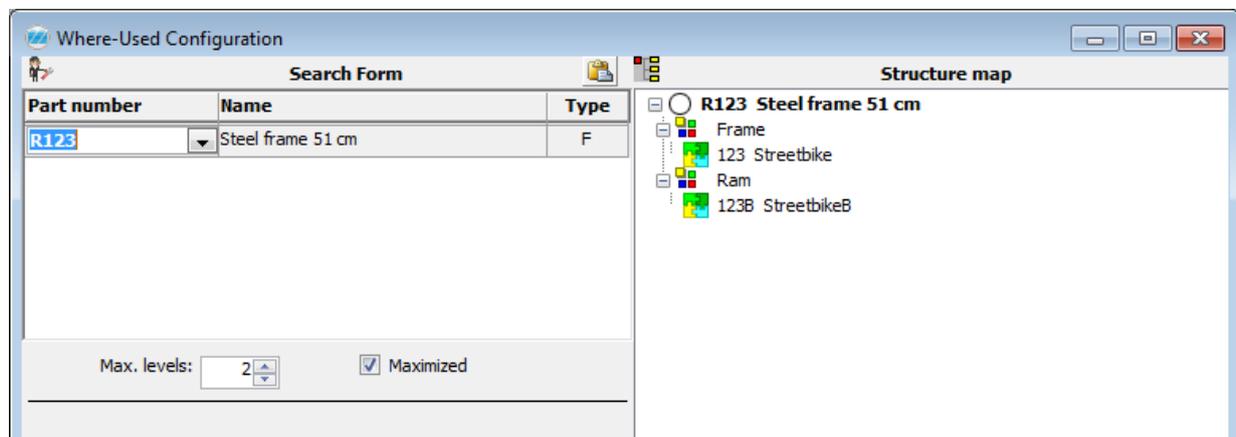
Order List Configuration – An order list which displays the selections made on an order. In the regular order lists you can only see the orders that have been registered for regular part numbers. This list displays existing orders for the selections made for each respective configured order. "- How many 7-geared bicycles do we have orders for, at this moment?"

Sales Statistics Configuration – Sales statistics for the selections made on the customer order.

The selections made for each configuration will not be included in the regular sales statistics. It might be of interest, for example as support to forecasts, to see how much is sold of each respective selection. "- How many Sport saddles have been sold and to which customers?" Regular consumption statistics for these parts are created as usual for consumption in the production and possible sale of spare parts.

Inventory Value List Configuration – Inventory valuation made only on configurable parts.

Valuation of configurable parts might primarily be done by changing directly from WIP to accounts receivable. But if a temporary finished stock is to be valuated for these parts as well, you have a separate list for this. The valuation for the stock balance is made according to the standard price registered on the customer order for which the stock balance is meant.

Web Solution

As mentioned earlier, you can easily combine the MONITOR Product Configurator with a web solution. It makes it possible to e.g. select design and execution of the website according to your own specific requirements and wishes.

All configuration data is loaded directly from the MONITOR database. If changes are made in the database, the information on the website will also change.

- The web solution exists to offer customers and retailer opportunity to configure and order products themselves depending on their requirements and whishes. With different logon information it is possible to adapt e.g. the range of products, layout, language etc. to meet the needs of the customer/retailer.

- This way the salesperson can use a web solution and directly design the product while discussing it with the customer and at once see what is possible to create and at the same time present the cost.

Only your imagination sets the limits for your usage, and the advantages are many:

➢ Increased availability – Your company can be reached at any time, by customers all over the world.

➢ Flexibility – You immediately see what is and is not possible for you to manufacture. You get the right assortment to the right customer.

➢ You can present the price at the same time as you specify the variant of the product.

➢ A correct execution of the manufacturing order with the right operation and material contents exactly based on the specification made by, or together with, the customer.

➢ The lead time from order to manufacturing and delivery is minimized by more efficient ways of decision making and reduced administration.

➢ Ability to complement the configuration with calculation formulas and such.
This can be used to e.g. enter measurements/demands and according to these get a customized product.