

# Structured Article Maintenance in SAP ERP



## Applies to:

SAP ERP; For more information, visit the [Enterprise Resource Planning homepage](#).

## Summary

This document gives some very basic information about the maintenance of structured articles in SAP ERP. It also tries to give some hints on where to find more information.

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**Created on:** 19 November 2008

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## Structured Article Maintenance in SAP ERP

This document assumes that you already know what structured articles are and what they are used for. If not, you can refer to the help portal: [SAP Retail -> Master Data](#). You'll find the basic information about structured articles under Article Master Data – Article Categories.

Structured articles are created and changed with the article master transactions MM41 and MM42, using the button 'Components' on the basic data tab page. Note that in very old releases (before R/3 4.6), you create and change structured articles with individual transactions. These transactions still exist, but are no longer maintained and should no longer be used.

Technically spoken, structured article components are assigned to a structured article header using a bill of material. Nonetheless, you should not take advantage of this fact and should not use the standard bill of material transactions to create or change structured articles. In SAP for Retail, structured articles have a well-defined meaning and are therefore subject to some restrictions that don't exist for standard bills of material. Using the standard transactions you could create / change structured articles in a way that is not appropriate for usage in SAP for Retail.

Bills of material assigning empties to full products are created and changed in the same way with the article master transactions. So you'll find some information about empties as well even though full products / empties are no structured articles from a business point of view.

### Customizing for Structured Articles

You'll find the customizing for structured articles under the following path:

Logistics General – Material Master – Retail-Specific Settings – Settings for Structured Materials

### Structured Articles in Logistics Processes

This topic is too complex to explain it in a short introduction. So just a few hints can be given here.

There are special functions for structured articles in the following ERP processes:

- Listing (Listing the structured article header also lists the structured article components "as components" – some processes differentiate between "individual" listing and "listing only as component").
- MRP ([SAP Retail -> Purchasing](#), Requirements Planning – Special Article Categories).
- Replenishment ([SAP Retail -> Purchasing](#): Requirements Planning – Replenishment – Master Data and Requirements Planning – Multi-Step Replenishment – Master Data).
- Purchase Order (split structured articles for information only!).
- Sales Order (handling for structured articles is controlled by the customizing of the order item categories).
- Goods movements ([SAP Retail -> Merchandise Logistics](#), Goods Receipt: Special article categories and Inventory Management: Special article categories).

Please refer to the documentation of the corresponding process to know details on how structured articles are handled there.

## Development Objects for Structured Articles

All development objects for structured articles can be found in package (“development class”) WSTR.

If you do customer-specific development for structured articles, you might mainly be interested in function modules of function groups

- MGW0 – database accesses for structured materials
- MGW1 – table accesses and help functions for structured materials
- WSOS – structured materials in logistics processes
- WST0 – buffer and update bill of material data
- WST3 – structured materials: service modules

Structured article maintenance integrated into article master uses function groups WST0, WST1 and WST2 (and some function modules of WST3, MGW0, MGW1).

The message class containing error, warning and information messages for structured materials is MU.

## Interesting User-Exits and BAdIs for Structured Articles

The following User Exits exist:

- WSOS0001: Calculate quantity of a structured article header from quantities for the structured article components (used in replenishment).
- WBWE0001: Valuation for structured materials (used in goods movements)

A BAdI for Structured Articles can be found in customizing under the path Logistics General – Material Master – Retail-Specific Settings – Retail-Specific Business Add-Ins:

- WSTR\_CHG\_RESTRICTION – Changeability of structured articles (as of SAP R/3 Enterprise 4.70).

Other BAdIs mentioned there refer to general article master functions and to the “Prepack Allocation Planning” (transaction WSTN11) that is not part of this document.

There are two BAdIs not yet in IMG, these can be found with transactions SE18, enhancement spot WSTR\_LOG\_PROCESS (as of SAP ERP 6.03).

- BADI\_DECISION – allows to run MRP on component level even though the components are listed individually.
- BADI\_TWZLA\_ACCESS – customer-specific access to table TWZLA (splitting of structured articles in purchase orders and goods movements).

One of the BAdIs for Assortments is of special interest for structured articles:

- LISTING\_PREPACK\_COMP – indicates whether WLK1 is created for components of prepacks.

## Interesting Notes for Structured Articles and Empties BOMs

- 133301 – Transfer of bills of material for empties to other systems
- 115784 – ALE: ALE distribution of multiple BOMs
- 193915 – Assignment of empties to variants
- 316056 – Decimal places for component quantities of structured materials
- 323491 – Customizing in the environment of structured articles
- 910401 – No multilevel bills of material in Retail.

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