

Data Quality Guideline for the HVAC industry

Version 10.0

Last updated: 07 Jan. 2025

Industry – Wholesale – Crafts

Preamble

The aim of this Data Quality Guideline is to further improve the quality of product data. In particular, new developments and the associated new requirements for article master data are to be considered here.

The publication is always released on 1 April of each year with an expiry period of six months. Once a new DQG has been published, it comes into force immediately and implementation should start straight away. During the transition period of six months, two DQG versions are used for the review. Special cases can be defined depending on complexity.

Introduction

The continuous improvement of the quality of electronic product data in data transfer forms the basis of every process optimisation. This applies, for example, to the handling of electronic ordering processes or the connection of various software systems. The market partners in the HVAC sector have been working hard in this area for many years, so that processes have been continuously improved.

Achieving a higher quality of product data is a common goal for all sales levels and involves the active participation of all market partners in the HVAC sector. In order to further optimise standardised electronic data exchange – and in particular the quality of product master data – in the future, it is important for industry, trade and crafts to harmonise the existing standards and rules in the sector and to specify the individual requirements of the individual sales levels. In this way, a common basis for increasing data quality is to be created for all parties involved.

This document contains the definition and specification of article master data quality within the HVAC industry. All content is initially described in general terms. The document also includes three appendices that supplement the content with aspects from the sales level perspective of the partners.

This results in a compilation of all data quality requirements in which all qualifying sub-areas are described in detail.

Overview of the Appendix

Appendix 1: Definition of data content and principles of data quality

Appendix 2: Data quality requirements of the DG Haustechnik

Appendix 3: Data quality requirements of the ZVSHK

Appendix 4: Code lists

The Data Quality Guideline and its Appendices are regularly expanded and updated. By signing the Appendices, the industry partners declare themselves in favour of joint activities to improve the quality of product data. The requirements listed contain content-related aspects for texts, media data, logistics data, etc. as well as deadline requirements for the delivery of data.

The ongoing development of the requirements is supported by various expert groups and specialised committees. The industry partners involved are grateful for this work – especially that of the Standardisation of Master Data working group. With the help of this committee work, the continuous updating of the topic and thus further process optimisation and cost-reducing measures can be driven forward.

ARGE Neue Medien, DG Haustechnik and Zentralverband Sanitär Heizung Klima are responsible for the content and therefore the contacts for queries.

The role of the industry is predominantly that of the data provider. Trade and commerce primarily act as initiators for the optimisation of data content. ARGE Neue Medien is directly involved with its member companies and provides tools for data quality management via its platforms.

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Version history

Data Quality Guideline of the HVAC industry dated 10 January 2021

- | | |
|------------|---|
| Chapter 1 | Product range
Extension of the definition of A-articles for variant manufacturers |
| Chapter 10 | Spare parts
Extension of the definition for the provision of spare parts lists and exploded drawings |

Data Quality Guideline of the HVAC industry dated 12 February 2020

Overview of changes and amendments to the DQG 5.2 Data Quality Guideline of the HVAC industry

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|------------------|---|
| Chapter 1 | Product range
Textual adjustments |
| Chapter 2 | Currentness
Textual adaptations |

1 Product range

Article master data covers the entire product range. All products that can be ordered, including spare parts, are mandatory in the article master data.

For variant manufacturers, this means all A-articles including the associated spare parts and article sets. A-articles are the articles that make up the majority of sales. They account for at least 80 % of sales.

The article typification of individual special articles, such as services, customised products or calculation articles, enables a more precise description of the quality requirement.

A discontinued article is an article that is removed from the range. These articles must be labelled as discontinued and a discontinuation date (expected date from which the article will no longer be available) must be specified.

2 Currentness

The currentness of data sets is of central importance for all market partners in the industry. Reliable statements can only be made with up-to-date data.

All changes to an article stock, in particular to new articles or price changes, must therefore be made available in good time. This also applies explicitly in the case of comprehensive price adjustments. The provision of e.g. inflation surcharges does not replace the delivery of the adjusted master data under any circumstances. The digital product data is the binding basis for transactions between the market partners. Changes to an article stock must therefore be transmitted to the processing centre for this data at least six weeks before general market validity (start of validity).

Exception: error corrections and promotional prices.

3 Article number

Just as important as the completeness and currentness of data is its clear allocation. To this end, it is important that the article numbers used in the master data are structured identically to those in the print media (e.g. catalogues or brochures). An article number should therefore always correspond to the number printed on the articles. With newly introduced article number systems, care should be taken not to use spaces or special characters and to avoid leading zeros wherever possible.

A GTIN is supplied for each article, with the exception of certain article types. This is used to identify articles or packaging units across manufacturers. A GTIN is recommended for each packaging unit.

4 Article texts

There are different types of text that can be used when processing article master data. The following article texts can be provided:

- Short description of the article
- Article description
- Marketing text
- Note on use
- Short texts
- Dimension texts
- Long texts
- Tender texts

Short texts

The short text is needed to describe and thus also to identify an article. This applies not only in the company's own system during initial processing, but also for the further use of the short text in the downstream business process and when it is passed on to other systems. For this reason, the focus should be on designing the short text in such a way that it can be transferred directly into a retailer's merchandise management system in its original form and without revision. In the next step, the dealer adopts the short texts for their craft customers, who then use the data for their own customers, for example in offers or invoices.

This means that the short text must provide a clear and legible description of the article. For this reason, marketing aspects, for example, do not belong in a short text. Duplicate text should be avoided, especially for products and spare parts. Therefore, to ensure clarity for spare parts, the article number of the associated article is permitted in the short text.

The rules and recommendations for creating short texts are documented in the corresponding appendices. If company guidelines prevent compliance with a rule, the responsible specialist committee, in which all partners involved are represented, will find a solution to achieve the necessary data quality.

Long texts and dimension texts

Long texts are used to provide a detailed description of a product or a group of similar products. Dimension texts refer to the specific design and describe, for example, technical details or special product features.

Tender texts

The tender text is a combination of the short text, the long text and the dimension text. Tender texts are used to initiate business and are used, for example, to create service specifications. For this reason, the texts should be unambiguous and limited to the essential information about the article.

5 Attributes

Each article is different and has its own individual properties. In order to be able to clearly distinguish an article and, if necessary, to maintain it in price lists, online and merchandise management systems, catalogues or shop systems, attributes can be provided. Attributes are properties and characteristics that describe or identify an article in more detail. These can refer to the ETIM classification system or be individually assigned by the supplier.

6 Prices

To ensure good master data quality, the valid factory list price or 'Price on request' must be specified for each article in the current price list. In addition, there is the option to transfer a 'Recommended Retail Price' (RRP) for each article as information for the end customer.

The alternative information for price information 'Price on request' can be provided together with the information of defined attributes. This applies, for example, to custom-made products or services.

7 Groups

When assigning articles to groups, it is advisable to use the structure of existing media, e.g. print catalogues.

The classification and labelling of the groups is based on the respective product range and is unambiguous in terms of content. All articles are assigned to a commodity group and a product group, which are given different names. In view of the fact that information is passed on throughout the electronic process chain, the aspects of traceability and meaningfulness are of particular importance.

A commodity group is used for an initial rough classification of the article and assigns it to a defined manufacturer-specific group based on the 'use' (e.g. radiator, valve). The designation of the commodity groups should be unambiguous and meaningful in terms of content. Descriptive designations should be chosen for the groups. It is recommended that unused commodity groups be deleted.

Accordingly, a product group provides a more detailed classification of the article and assigns it to a manufacturer-specific group according to market-relevant aspects. These can be brand or series names, for example. The name of the product group should also be unambiguous and meaningful. It is recommended that unused product groups be deleted.

The article is assigned to a pricing structure using the discount group and the bonus group. Groups that are not required should also be deleted in this area.

8 Logistics

Article master data is required for ordering and accounting, but also for warehousing and materials management and transport. Business processes can only run smoothly if this data is always up-to-date, error-free and complete. This applies particularly to logistics, where the optimal distribution of storage compartments and route control, for example, is regulated based on the specified gross dimensions of an article.

For this reason, information on logistics data for articles and spare parts is included in a complete data set. Packaging dimensions and weights are relevant for each article.

An article set has its own article number and is formed from articles that can be ordered individually. However, if an article consists of several parts that cannot be ordered individually, it is an article and not an article set. If an article in the article set is replaced, a new article set with a new article number must be created.

Hazardous goods must be labelled as such. In particular, further information must be provided in the event of hazardous goods.

A specification of the commodity code and the country of provenance or origin for an article is necessary in particular for cross-border trade.

9 Media

Image data

All articles and spare parts in the range should have an image. If necessary, a representative image is possible. The image for an article should show this product in both web quality and print quality. Images in web quality and format are used in shop systems, for example. Print quality is used when creating catalogues, brochures or advertisements.

When new articles are created, it is important to ensure that the market partners are given binding information about the delivery date for the outstanding information. Especially for new articles, images are very important for the market partners.

Documents

Media data includes not only images but also supplementary documents. These are of particular importance to market partners, for example in the context of installation or maintenance. Assembly and maintenance instructions therefore provide valuable additional information in electronic systems. These instructions can for example be provided as PDF documents or videos.

10 Spare parts

All spare part articles in the product range of an industrial company should be labelled as 'spare parts'. A historical product is a no longer available article from a manufacturer, for which spare parts can still be ordered. These spare parts are ideally recorded in a spare parts list. Each short text must be unique, i.e. the product must be identifiable on the basis of the short text.

To enable a meaningful and structured identification of the spare part at a later date, it is necessary to assign all spare part articles to a material group and a product group. A discount group should also be specified. All articles that represent spare parts for a product or historical product should be entered in a spare parts list for the product. This spare parts list should have a unique name. The spare parts list contains all spare parts for the product with the corresponding factory article and item numbers, as used in the corresponding exploded view.

A product or historical product with a spare parts list can be assigned a corresponding exploded view and a line drawing or a colour image. An orderable item and a historical product can have the same article number in the database but are distinguished by the attribute 'Year of manufacture from'.

To support wholesalers and craft businesses in identifying spare parts, it is necessary to provide spare parts data and exploded views. This also includes spare parts lists. The information can be provided either as data, in compliance with the DQG, or via standardised electronic services. The provision has been mandatory since DQR 8.

11 Special features

A number of items have special labelling and delivery requirements, and thus also special requirements for the provision of their article master data. These requirements are also considered in data quality management by using mechanisms within master data processing for the electronic mapping of these requirements. Certain products are subject to legal aspects (e.g. hazardous goods, Construction Products Regulation) or guidelines (e.g. Ecodesign Directive). In each case, the current framework conditions and legal situations are complied with by making amendments or changes to the appendices as required.

Appendix

Appendix 1: Definition of data content and principles of data quality

Appendix 2: Data quality requirements of the DG Haustechnik

Appendix 3: Data quality requirements of the ZVSHK

Appendix 4: Code list of permitted values