

Identification labelling of components for Voith Turbo products

July 2006

VN 3211-1

Works Standards

Part 1: General instructions

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ICS

Descriptors: parts labelling, Voith trade mark

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Earlier editions:

Amendment:

Voith Turbo

1 Scope

This Voith standard applies to Voith Turbo GmbH & Co. KG (VT) with its domestic and foreign locations and the labelling of components (individual part, assembly, unit), which are called material in the following, and their packing unless other regulations have been made in the division or works-specific packing instructions or the Ordering Instructions and Conditions of Sale.

This standard is to be used for every component and packing, particularly for wear parts in the spare parts range (standardized parts, catalog parts, merchandise,...), which can be labelled directly. This Voith standard must be applied after the release of all new developments and for all tools for batch products, which have been requested by the design departments.

Exceptions from this regulation must be approved by the Board of Management. The quality responsible in charge for the Market Areas has to document these exceptions in processing instructions and allocate the individual standards for a supplier's labelling after consultation of the Purchasing management.

Parts which are used in motor vehicles must be labelled as per VN 3211-2 and with an additional material marking as per VDA 260.

2 Purpose

The purpose of this standard is:

- to ensure the required identification of the components,
- · ensure an identification of the component origin,
- determine marking types, contents and font sizes as well as to
- determine uniform marking in the drawings

by clear and standardised labelling within VT for quality assurance, product liability and material control.

3 Definitions (Terms as per DIN 199-1)

· Voith parts of outside origin

Subjects of outside development and manufacture

REMARK: The development and manufacturing responsibility is with the outside company.

Voith internal parts

Subjects of Voith's own development and manufacture

· Voith parts of outside manufacture

Subjects of Voith's own development but outside manufacture

REMARK:

The responsibility for development is with Voith; the responsibility for manufacture is with the outside company.

· Identification labelling

Labelling of materials and packing in accordance with Section 5.3.

4 Obligation for identification labelling

4.1 Without exceptions, the identification labelling must include the following

Material, for which

- features that have to be documented have been determined,
- customer safety or manufacturing regulations have been specified by official authorities,
- parts labelling is required in Ordering Instructions and Conditions of Sale, standards or drawings,
- further processing at outside manufacturers or internally at Voith has been determined, particularly for cast parts and forged, unmachined pieces,
- an identification of optional designs or various suppliers of the same component is required.

4.2 An identification marking - as far as possible from the economic aspect - should be allocated to

Material which

- is manufactured outside and/or
- can easily be mixed up, even if produced by Voith internally, and is of an important function.

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4.3 No identification labelling – unless required for logistics - should be allocated to

Material which

• is of subordinate function or used in insoluble groups, particularly by VT's own manufacture

4.4 An identification labelling with the "Voith" trademark should be allocated to

Material which

- is manufactured in accordance with an original (Voith) drawing. This is also valid if this is a supplier's product from the technological aspect.
- is manufactured in accordance with the original drawing by the supplier but to which Voith
 has made financial contributions or other contributions by targeted performance of any kinds
 of tests.

5 Requirements of the identification labelling

5.1 Material

Material for which the identification labelling is required according to 4.1, 4.2 and 4.4, is to be labelled permanently Section 5.4 according to Section 5.2 Content of the parts labelling.

If agreed upon, non-permanent labelling of such material is only possible if permanent labelling:

- would influence the demands on function or
- is impossible from the aspect of size and composition.

Material with labelling in accordance with Section 4.3, for which an identification labelling is required only for logistics may optionally receive a non-permanent labelling in accordance with Section 5.4 and the content of Section 5.2.

5.2 Content of the parts labelling

Unless no other information is required in the Ordering Instructions and Conditions of Sale, standards or drawings, the information according to Table 1 is generally valid.

If in a special case these are not possible for reasons of space, the information can be omitted in the sequence from the bottom to the top if agreed upon and with the exception of those marked with \boxtimes .

The Voith Turbo product labelling can also be omitted on material manufactured by Voith or for packing where the identification labelling according to Section 4.2 and Section 4.3 is only required for reasons of logistics.

Table 1

Item	Content of the identification labelling	Voith parts of outside origin *)	Voith internal parts *)	Voith part of outside manufac ture	Packing
1	Voith product marking 1)	×	×	×	×
2	Originator's ²⁾ trade mark (non-Voith)				
3	Manufacturer's trade mark or code (non-Voith) 9)				
4	Country of manufacture (L/L) in English; only if required ³⁾	×	×	×	×
5	Voith material number / raw part number	⊠ ⁴⁾	X	×	X
6	Originator's ²⁾ material identification number				
7	Manufacturer, material/type ident. labelling, only for non-metallic material	×		X	⊠ ⁵⁾
8	Casting date (month - year ⁶⁾), for cast material		-	× ⁷⁾	× ⁷⁾
9	Charge number or symbol, for example for cast, forged or non-metallic material			× ⁷⁾	× ⁷⁾
10	Date of manufacture (month-year); only for material whose usefulness can be influenced by age.	⊠ ⁵⁾	X	⊠ ⁵⁾	⊠ ⁵⁾

- *) Terms as per DIN 199-1 and in accordance with Section 3
- 1) The corresponding component labelling VN 917 applies to Voith Turbo, and accordingly, the standards of the Corporate Design Guideline apply to printed media and packing. Generally, the product logo "Voith" and, in special cases (Retarder only), the stylized "V" according to Appendix 1 is to be used.
- Originator = outside company which is responsible for the development, production and delivery of the material.
 An originator labelling is only possible for reasonable exceptions and after the release by the head of the Market Area
- 3) Verification of origin only if required in the drawing or order text.
- 4) As far as required and/or possible from the economic point of view.
- 5) If required, the expiry date must be indicated on the packing.
- 6) Production date as per Section 5.4.
- 7) Per batch, Voith Turbo receives a Test Report according to DIN EN 10204 2.2 unless specified otherwise in the Ordering Instructions and Conditions of Sale.
- 8) The following applies in accordance with VN 3211-2:
 - the immediate labelling obligation:
 - For all new parts which have been developed particularly for Voith Turbo, Market Area "Road", as well as all commercially available new parts, if this can be implemented from the economic aspect.
 - the economic labelling obligation:
 - For all new parts from current productions, the supplier may decide about the earliest economic introduction of labelling.
- 9) Exceptions from this regulation must be approved by the Board of Management / Head of the Market Area (see also Section 1).

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5.3 Manufacturing date

The manufacturing date must be clearly identifiable. Possible arrangements:

1. According to the following establishment by Voith Turbo

WW - YYYY or YYYY-WW

The following is valid in this case:

Month: JA /FE /MR /AP /MY /JN /JL /AU /SE /OC /NO /DE

Year: 2006, 2007, 2008, 2010,......

- 2. According to the manufacturer's choice if month and year can be identified clearly, directly and without auxiliaries.
- 3. If stated in the drawing, also day or week and year in accordance with the supplier.

5.4 Design of the labelling

5.4.1 Types of labelling

General

In general, the types of labelling depend on the surface of the area to be labelled. Labelling of finished parts according to Section 4.1; 4.2 and 4.4 should be permanent if possible. It must be clean and clearly readable and must not lead to the formation of rust or other oxidation of functionally-relevant surfaces which have been labelled.

Permanent

Labelling which makes an identification of the individual component possible until it reaches the end of its service life, for example by embossing, etching, fluid and scratch-resistant colour stamps, captive straps, riveted or bonded plates or plates which have been fastened with notched nails.

Non-permanent

Labelling which makes a time-limited identification of the individual material possible, such as adhesive film, non-fluid and scratch-resistant colour stamps, removable straps or plates and colour chalk for own-manufactured parts according to Section 5.2.

5.4.2 Design

Labelling of parts must not influence the requirements regarding function and appearance of the material and must be clearly readable. If possible, it must also be clearly visible after machining of the material and after installation. The manufacturer is free about the arrangement of the content (e.g. several lines) unless stated otherwise in the drawing. Continuous labelling must be applied to piece goods. Its content should be fully readable on any section. Unless stated in the drawing, labelling of parts can either be raised, sunken or flush.

5.4.3 Font type and size

Unless stated otherwise in the drawing, the font size of the identification labelling should refer to the height of the trade mark and the manufacturer is free about its arrangement. However, it should not be smaller than 3 mm for non-metal material and 4 mm for metals. For labelling cast into metals, a minimum letter height of 6.3 mm (cast aluminium 5 mm) must be observed.

With exception of the trade mark, the font type should correspond to DIN 1451-3, type face normal, index figure 2 or DIN 30640 and DIN 30640 BBI 2, font type A.

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6 Voith trade symbol

6.1 Use of the trade symbol

Material and packing to be labelled with a trade symbol according to table 1, item 1, must be marked with the **VOITH** logo as per VN 917 or according to the standards of the Corporate Design Guideline. The trade symbol to be applied must be stated in the drawing; according to table 1 no other trade mark is admitted on this material and packing. Exceptions are possible for packing that is not delivered to customers or marketing companies but serves exclusively for the delivery of the own production or assembly.

Labelling of Voith products with the stylized "V" (see Appendix 1) is only admitted for the field of Retarder, and only if the design department finds out that the dimensions of the parts to be labelled do not allow the application of the **VOITH** trade mark, or if one feels that it would make sense not to emphasize the **VOITH** logo for various reasons but in spite of this wants to maintain an identification mark.

Download of the required data formats under:

 $\underline{\text{http://www.corporatedesign.voith.de/cd_de_workingaids.php?form_mainchapter=basiselemente\&form_sub_chapter=wortmarke}$

6.2 Protective zone around trade symbol and logo

Generally, a minimum distance between the letters of the trade symbol and disturbing contours or other symbols of the letter height should be kept all around.

As a deviation of this, the height "a" and length "b" as per VN 917 can be used as a protective zone for cast or embossed labelling.

If logos according to the standards of the Corporate Design Guideline are used or parts labelling as per VN 917 are applied with stamps, half letter height all around can be used as a protective zone if space is insufficient.

7 Drawing information

The area and type of labelling and/or labelling areas to be selected must be prescribed by the engineer by an information in the drawing about the area to be labelled.

This labelling information must be indicated on top of the drawing title block.

8 Standards cited

Standard number	Designation
DIN 199-1	Technische Produktdokumentation - CAD-Modelle, Zeichnungen und Stücklisten - Teil 1: Begriffe (Technical product documentation - CAD models, drawings and bills of material - Part 1: Terms)
VN 917:	Sach- Kennzeichnung der Bauteile für Voith Turbo Produkten Modellbuchstaben VOITH Allgemeine Vorschriften Maße Warenzeichen für Bauteilekennzeichnung (Identification labelling of components for Voith Turbo products, model letters VOITH General standards for dimensioning of trade marks for component labelling)
VN 3211-2	Werkstoff-Kennzeichnung von Bauteilen für Kraftfahrzeuge gemäß VDA 260 Material labelling of Components for Vehicles in accordance with VDA 260

9 Appendix 1 Stylized V

