

Change	Affected provision				
Updating the Normative references	2. Normative references				
	The following referenced documents are essential for the application of this document as defined in its requirements. For undated references, the latest edition of the referenced document (including any amendment) applies.				
	ENplus DE ST 1002, Requirements for certification, inspection and testing bodies operating ENplus certification				
	NOTE: The document only applies to Germany (only available in German language). In all other countries EN <i>plus</i> ® ST 1002 applies.				
	ENplus® ST 1002, Requirements for certification and testing bodies operating ENplus® certification				
	NOTE: The document applies to all countries, except Germany, where ENplus DE ST 1002 is available.				
	ENplus® ST 1003, Usage of the ENplus® trademarks – Requirements				
	ENplus® GD 3001, Storage for wood pellets				
	ENplus® GD 3004, Plausibility checks of mass balance systems				
	ISO 3166, Codes for the representation of names of countries and their subdivisions				
	ISO 5370, Solid biofuels – Determination of fines content in pellets ISO 18846, Solid biofuels - Determination of fines content in quantities of pellets				
	NOTE: ISO 18846 is expected to be replaced by ISO 5370, Solid biofuels—Determination of fines content in pellets				



Updating the Foreword	 This document replaces the ENplus® HandbookST 1001:2022, , version 3.0first edition, and will come into force on 1 January July 20253, and therefore: a) initial inspections between the publication date (1 October 2022) and the date of entry into force (1 January 2023) may be conducted against either the requirements of this document, or against the ENplus® Handbook, version 3.0; b) all initial inspections after the date of entry into force (1 January 2023) shall be conducted against the requirements of this document; c) all surveillance and recertification inspections after the transition date (1 January 2024) shall be conducted against the requirements of this document. Requirement 7.3.2.4 has a transition period until 1 January 2025.
Including proforma invoices as examples of delivery documentation	3.11 delivery documentation A document that includes information relating to the delivery of a product. NOTE: A delivery note,—a bill of leading, over—an (proforma) invoice, used individually or in combination, are examples of delivery documentation.



Removing the mistake in the definition of on-product use of ENplus® trademarks	3.32 on-product use of ENplus® trademarks The use of ENplus® trademarks in connection with, or reference to ENplus® certified pellets including:
	 a) the use directly related to the individual certified pellets i.e. tangible products (bulk products), products in individual packaging, containers or bags, as well as vehicles for the transport of products;
	 b) the use on documentation associated with pellets (an invoice/ packaging list/ advertisement/ brochure/ website/ social media, etc.), where the use of ENplus® trademarks refers to the individual certified pellets.
	NOTE: Any use which can be received or understood by buyers or the public as referring to a specific product included in the product is considered as on-product use.
Clarifying the definition of the producer	3.33 producer A company producing wood pellets in its own facilities.
	NOTE: A producer trading its own pellets through large-scale delivery is not considered a trader . A producer is considered a trader where its trading activities include small-scale delivery , or trades pellets procured from other companies .

We are the world-leading certification scheme for wood pellets.



Updating the definition of the trade of bulk pellets without physical contact

3.38 trade of bulk pellets without physical contact

Trading in **bulk pellets** that takes ownership of the pellets but does not have physical possession of the pellets.

NOTE 1: "Physical possession" is defined as having physical control of the pellets either directly or through a contracted **service provider** within a multisite company (7.2.4.1 c)) or a subcontractor. Service provision according to 7.2.4.1 a) or 7.2.4.1 b) is not defined as "physical possession".

NOTE 2: An entity conducting the **trade of bulk pellets without physical contact** can use **ENplus® trademarks** either based on its own ENplus® certification or based on written permission from the ENplus® certified **company** as defined in ENplus® ST 1003. a contracted **service provider** or another subcontractor.

NOTE 2: An entity conducting the trade without physical contact can use **ENplus®** trademarks either based on its own ENplus® certification or based on written permission from the ENplus® certified **company** as defined in ENplus® ST 1003.

NOTE 3: Trading without physical contact as an ENplus® certified **company** is defined as a critical business activity (see Annex B).

We are the world-leading certification scheme for wood pellets.



Updating the references to be in line with the rest of the documentation

4. General requirements

- 4.1 The company that intends to make on-product use of the ENplus® trademarks shall comply with the requirements for producers (see Requirements for producers5) where it is responsible for:
- a) production of bulk pellets:
- b) large-scale delivery of bulk pellets from its own production:
- c) storage of bulk pellets in a facility from which the pellets are delivered to the end-users:
- d) bagging and trade of bagged pellets from its own production.

NOTE: The critical business activities to be covered by the ENplus® certification scope are shown in Annex B.

- 4.2 The company that intends to make on-product use of the ENplus® trademarks shall comply with the requirements for traders (see <u>6Requirements for traders</u>) where it procures pellets from a supplier and is responsible for:
- a) small-scale delivery of bulk <u>pellets:</u>
- b) large-scale delivery of bulk <u>pellets:</u>
- c) storage of bulk pellets in a facility from which the pellets are delivered to the end-users;
- d) bagging of pellets:
- e) trade of bagged pellets (only where the trader is the bag design owner).

NOTE 1: The critical business activities to be covered by the ENplus® **certification scope** <u>are</u> shown in Annex B.

NOTE 2: Where the **company** performs activities under 4.1 (**producer**) as well as 4.2 (**trader**), the **company** needs to comply with the requirements of Requirements for producers (see 5) and Pequirements for traders (see 6).



Clarifying the requirement related to multisite companies	Where applicable, t_The requirements in 4.4 should_shall_be described in the contract_written agreement_between both the central office and the sites at least in case when the multisite company covers different legal entities. Where the company includes sites that are not covered by the certification, it shall ensure that those sites do not create a risk for the multisite company's compliance with the certification requirements.			
Clarifying the provision related to the periodic calibration, verification, or validation of operated measuring devices, including scales, and weighing system of the bagging line	 5.2.2 Production process (including storage and bagging) 5.2.2.1 The producer shall perform: a) periodic maintenance and cleaning of the production, storage and bagging installations, transporting equipment and operating equipment with an impact on pellet <u>quality</u>: b) periodic calibration, verification, or validation of operated measuring devices, including scales, and weighing system of the bagging line. Where the periodicity is not specified by the legislation, international standards, national standards or device instructions, it shall be at least once a certification period. NOTE 1: Legislation, international standards, national standards, <u>manual instructions</u>, or company's documented specification that is fit for purpose provide reference basis for the calibration, verification, or validation of the measuring devices. 			



Adding non-conforming products to the scope of documented information	 5.2.2.2 The producer shall retain the following documented information relating to the production, storage, and bagging processes: a) standard operating procedures for production, non-conforming products, storage, and bagging of pellets including production parameters, such as additive dosing;
Adding a reference to the requirement on the separation of fine fraction	ENplus® ST 1001, 5.2.3.1: The requirement does not apply where a written agreement between the producer and its customer specifies a higher amount of fines in situations where the pellets are not directly delivered to an end-user and subsequent separation of fines is ensured (see 5.2.5.2).
Adding spontaneous ignition or CO off-gassing as examples of risks related to the increased temperature	 5.2.3.2 The producer shall choose a device and a methodology to ensure that the temperature of outgoing bulk pellets is not higher than 40 °C and that the temperature is periodically measured before delivery in accordance with Table 2 (see 5.2.4.1). Where the pellet temperature exceeds 40 °C, the producer: a) shall not deliver the pellets to the end-user; b) shall either not deliver the pellets to another company or shall inform the company as a part of the delivery documentation (see 5.2.5.1) about the increased temperature and related risks (for example, spontaneous ignition or CO off-gassing).



Clarifying provisions applicable to the producers filling pellets in big bags	5.2.3.4 The producer delivering filling pellets in big bags shall ensure that:
	a) the fabric of the big bag is water repellent;
	 b) the big bag opening is closed in order to avoid contamination and water absorption;
	c) information attached to the big bag includes the ENplus® ID of the refueler a reference to the applicable delivery documentation, as per 5.2.5.1, and ENplus® quality class and diameter.
Clarifying provisions related to the self-monitoring at the loading process / before or after bagging	ENplus® ST 1001, Table 2:

We are the world-leading certification scheme for wood pellets.



Table 2

Self-monitoring at the loading process / before or after bagging

Last loading point/ before or after bagging	Bulk before loading	Bagging station	Frequency
Overlength (visual control + measurement of unusual pellets)	Х	Х	1 per day with loading / bagging
Amount of fines (≤ 3,15 mm) (where separation of fines is required according to 5,2,3,1)	X	X	1 per day with loading/bagging for sieving device with loading speed under 1 ton/minute and where the speed cannot be verified (separately per loading site or storage location) 1 per week with loading/bagging for sieving device with loading speed above 1 ton/minute (separately per loading site or storage location)
Temperature	Х		1 per day with loading of a transport vehicle (during the loading process)

NOTE_1: An increased amount of fines is usually found in the last 10% of the volume of a storage coursed by segregation.

NOTE 2: In case the check for overlength has been performed in the production process (Table 1), it is not necessary to perform it again at the loading process/before or after bagging (Table 2).

We are the world-leading certification scheme for wood pellets.



Precising provisions related to the delivery documentation

5.2.5 Delivery documentation

- **5.2.5.1** The **producer** communicates within the **delivery documentation** the ENplus® certified status of pellets to the customer. The All the applicable delivery documentation for ENplus® certified pellets shall contain at least the following information:
- a) ENplus® certification seal or ENplus® ID of the producer;
- ENplus® quality class in a format "ENplus A1", "ENplus A2" or "ENplus B" or the respective ENplus® quality seal;
- bag design approval number or an internal article number that can be linked to the bag design approval number (in case of bagged pellets);
- d) mass of delivered pellets in kg or metric tonnes;
- de the diameter of pellets:
- e)f) the form in which they come (bulk pellets, bagged pellets, or pellets in big bags);
- flg) the date of loading, or a date of delivery:
- g) h) clear identification of the **transport vehicle** where the **producer** is responsible for the transport of **bulk pellets**;
- <u>i)</u> information about pellets temperature exceeding 40 °C (see 5.2.3.2 b)), information that the check of cleanliness of the transport vehicle has not been executed (see 5.2.3.5), information that the share of fines exceeds 1.0 % (see 5.2.5.2), when applicable.

NOTE: The vehicle's license plate is a typical example of the clear identification of the **transport vehicle** (see bullet point h))).



Excluding mechanical durability from the provision of ENplus® ST 1001, 6.1	6.1 Product requirements 6.1.1. The trader with bagging activities shall determine the application of the quality classes (ENplus® A1, ENplus® A2) for the bagged pellets and shall ensure compliance with the threshold values specified in A.1 for the content of fines (< 3,15 mm).
Separating two provisions that were previously included in the ENplus® ST 1001, 6.2.1.6	 6.2.1.5 The trader shall ensure that the ENplus® certified pellets of the specific ENplus® quality classes are physically separated and remain identifiable throughout the whole trading/handling process, including storage. This shall be achieved by one of the following strategies: a) physical separation in terms of space during the storage, handling, and trading activities; b) physical separation in terms of time; c) clear identification of the ENplus® certified pellets / ENplus® quality class. 6.2.1.6 The trader shall declare the same quality class as stated in the delivery documentation of the purchased pellets or may downgrade it to the lower quality level if this is included in the trader's certification scope, e.g. ENplus® A1 may be downgraded to ENplus® A2. Where the trader combines pellets from different ENplus® quality classes, the resulting class shall be the lowest ENplus® quality class between the combined classes. E.g. ENplus® A1 + ENplus® A2 = ENplus® A2.

We are the world-leading certification scheme for wood pellets.



Clarifying the provision on the periodic calibration, verification, or validation of operated measuring devices, including the scales and weighing system of the bagging line

6.2.2 Facilities and equipment

6.2.2.1 The **trader** shall perform:

- a) periodic maintenance and cleaning of the storage and bagging installations, operating, and transporting equipment with an impact on pellet <u>quality</u>:
- b) periodic calibration, verification, or validation of operated measuring devices, including the scales and weighing system of the bagging line. Where the periodicity is not specified by the legislation, international standards, national standards or device instructions, it shall be at least once a certification period.

NOTE 1: Legislation, international **standards**, national **standards**, <u>manual instructions</u>, or **company**'s documented specification that is fit for purpose provide reference basis for the calibration, verification, or validation of the measuring devices.

Adding a reference to the provision on the increased amount of fines applicable to traders

6.2.3 Outgoing goods (including loading at the production site)

6.2.3.1 The **trader** operating a loading station for **bulk pellets** shall separate the fine fraction before loading the **transport vehicle** or filling **big bags** to ensure that the fines content of the outgoing pellets does not exceed 1,0 w-%. The device for separating the fines shall be constructed to reduce the share of fines from 10,0 w-% to below 1,0 w-%. Pellets shall not be stored after the separation of fines, except for pellets in a hopper or **big bags**. If there is a hopper, it shall be completely discharged periodically once after the decuple of the hopper's volume has been operated. In case the hopper's capacity is larger than 20 metric tonnes, it shall be completely discharged every 200 tonnes.

The requirement does not apply where a written agreement between the **trader** and its customer specifies a higher amount of fines in situations where the pellets are not directly delivered to an end-user and subsequent separation of fines is ensured (see 6.2.5.3).



Adding spontaneous ignition or CO off-gassing as examples of risks related to the increased temperature	 6.2.3.2 The trader operating a loading station shall measure the pellet temperature once per day with loading (during the loading process). The trader shall choose a device and a methodology to ensure that the temperature of outgoing pellets is not higher than 40 °C. Where the pellet temperature exceeds 40 °C, the trader: a) shall not deliver the pellets to the end-user; b) shall either not deliver the pellets to another trader or shall inform the trader as a part of the delivery documentation (see 6.2.5.1) about the increased temperature and related risks (for example, spontaneous ignition or CO off-gassing).
Clarifying provisions related to the delivery of big bags	b.2.3.12 6.1.3.12 Big bags shall be delivered under following conditions: The trader delivering pellets in big bags shall ensure that: a) the fabric of the big bag is water repellent; b) the big bag opening is closed to avoid contamination and water absorption; and c) information attached to the big bag includes a reference to the applicable delivery documentation, as per 6.2.5.1, and the the ENplus® ID of the refueler, ENplus® quality class and diameter.
Clarifying provisions related to the self-monitoring at the loading process / before or after bagging	ENplus® ST 1001, Table 3:

We are the world-leading certification scheme for wood pellets.



Table 3

Self-monitoring of pellets quality by traders

Last loading point / before or after bagging	Bulk before loading	Bagging station	Frequency
Amount of fines (≤≦ 3,15 mm) (where separation of fines is required according to 6.2.3.1)	X	X	1 time per day when loading/bagging for a sieving device with a loading speed under 1 ton/minute and where the speed cannot be verified (separately per loading site or storage location)
			1 time per week when loading/bagging for a sieving device with a loading speed above 1 ton/minute (separately per loading site or storage location)
			For vending machines : 1 time per month during the vending machine operation.
Temperature	Х	-	1 per day with loading (during the loading process)

We are the world-leading certification scheme for wood pellets.



Clarifying provisions related to the delivery documentation applicable to traders

6.2.5 Delivery documentation

- **6.2.5.1** The **trader** shall present the **delivery documentation** to the customer to communicate the ENplus® certified status of pellets. The All the applicable **delivery documentation** for the ENplus® certified pellets shall contain at least the following information:
- a) the ENplus® certification seal or ENplus® ID of the trader issuing the delivery documentation together with the "ENplus A1", "ENplus A2" or "ENplus B";, or the respective ENplus® quality seal;
- b) the ENplus® quality class in a format "ENplus A1", "ENplus A2" or "ENplus B" or the respective ENplus® quality seal;
- c)b) the mass of delivered pellets in kg or metric tonnes;
- d)c) the bag design approval number or an internal article number that can be linked to the bag design approval number, in case of bagged pellets;
- e)d) the diameter of the pellets;
- the form in which they come (bulk_pellets, bagged pellets, or pellets in big bags):
- g)f) the date of loading, or date of delivery;
- h)g) a clear identification of the transport vehicle where the trader is responsible for the transport of bulk pellets;



	i)h) information about pellets temperature exceeding 40 °C (see 6.2.3.2b)), information that the check of cleanliness of the transport vehicle has not been executed (see 6.2.3.11), information that the share of fines exceeds 1.0% (see 6.2.5.3), when applicable.
	NOTE 1: The vehicle's license plate is a typical example of clearly identifying the transport vehicle (see h)).
	NOTE 2: The requirements for the use of the ENplus® trademarks (see a) and b)) are included in ENplus® ST 1003.
	NOTE 3: In case of vending machine , provision g) applies and corresponds to the identification of the specific vending machine .
	NOTE 4: In case two companies issue the delivery documentation related to the same delivery, the delivery documentation issued by each of them shall contain the ENplus® ID of the seller, i.e. of the company that has the direct commercial agreement with the customer. This shall be based on a written agreement between the companies.
Clarifying the provision related to multisite companies	ENplus® ST 1001, 7.2.4.1: NOTE: A service provider that is part of a multisite company certification (see 7.2.4.1.c.) is not allowed to deliver services to companies outside the respective multisite company certification.



see 7.2.4.1) and other hip of all pellets during for the quality of the hemporary transfer of
ement
mem
based on the provisions ent is necessary.



Clarifying the provisions related to the reference samples	7.3.3.1 The producer of bulk pellets shall take at least a 1.5 kg reference sample per production day. 7.3.3.2.7.3.3.1 The producer or trader, as a bulk pellet loading station operator (small-scale delivery), shall take a reference sample during the delivery loading process. The reference sample should be taken from falling material. The sample shall consist of at least 1.5 kg for each loading point per delivery day.
Updating the reference in the provision related to complaint management	7.3.4 Complaint management 7.3.4.1 The company shall have a process to receive, evaluate, and make decisions on complaints relating to pellet quality and compliance with the ENplus® requirements as explicitly defined in this standard and other applicable ENplus® ST 1002 documentation. The company shall retain documented information to record and track complaints, as well as actions undertaken to address them.

We are the world-leading certification scheme for wood pellets.



Clarifying the provision related to companies accepting the complaints

7.3.4.7 When investigating the **complaint**, the **company** shall accept the **complaint** relating to the amount of fines in the end user's storage with **small-scale deliveries** of **bulk pellets**, if the amount of fines (<3.15 mm) in the store exceeds 4,0 w-%. The following conditions need to be met:

- a) the amount of pellet residue before the last delivery was < 10 % of the storage capacity;
- b) less than 20 % of the actual delivery has been consumed;
- c) the end-user's storage meets the criteria for the proper pellet storage in accordance with the ENplus® Storage Guidelines (ENplus® Guidance Document) which is valid in the respective country of the storage location;
- d) where pellets are blown from the **transport vehicle** with a blowing system into the enduser's storage, the <u>blowing distancehose length</u> has not exceeded has not exceeded 30m and the blowing system is in accordance with the ENplus® Storage Guidelines (ENplus® Guidance Document) which is valid in the respective country of the storage location, and any other provisions applicable to the overall blowing system and distance; including the internal ducts;
- e) the end-user's storage has been completely emptied, and where necessary, cleaned periodically in accordance with the *ENplus® Storage Guidelines* (ENplus® Guidance Document) which is valid in the respective country of the storage location.



Clarifying the provision related to companies accepting the complaints	 7.3.4.9 Where the complaint investigation includes the testing of products: a) testing shall be performed by an accredited testing body, except in the case of testing the fines content, moisture, mechanical durability or bulk density of which the testing can be conducted by the company; b) the company shall ensure that the sample is collected by a qualified internal, or external person. The company shall allow the complainant and any other involved party to be present during the collection of the sample; c) sampling of bulk pellets shall follow ISO 21945; d) testing of bagged pellets shall be based on a delivered, unopened bag; e) testing of a relevant reference sample shall can be used to investigate the cause of the complaint; f) the storage conditions and the sampling (a number of the samples, an increment, etc.) shall be documented.
Clarifying the usage of the share of pellets with a length < 10 mm in the delivery documentation	7.4.3 Where the trader company includes the share of pellets with a length < 10 mm in the delivery documentation for a small-scale delivery, it shall only be stated in length categories (L, M, S) as indicated in A.1.



Updating Table 4 in ENplus® ST 1001	Coarse_pellet_fines (3,15 mm ≤ <u>CPFFP</u> < 5,6 mm) (as received) analysis based on ISO 18846 5370 (d, e, f,-g) ISO 5370 18846 (d, f,-g) ISO 5370 18846 (e, f,-g)					
	≥ 4,6 (gh)	≥ 4,6 (<mark>gh</mark>)	≥ 4,6 (g h)			
	≤ 2,0 (<u>h</u> i)	≤ 2,0 (<u>h</u> i)	≤ 2,0 (<u>h</u> i)			
	ISO 21404 (ji)					
	(a) A maximum of 1 <u>w-</u> % of the pellets may be longer than 40 mm. No pellets longer than 45 mm are allowed.					
	(gh) Equal ≥ 16,5 MJ/kg as received.					
	(hi) The amount of additives in production shall be limited to 1,8 w-% while the amount of post-production additives (e.g. coating oils) shall be limited to 0,2 w-% of the pellets.					
	(ij) Ash is produced at 815 °C. All characteristic temperatures listed in ISO 21404 shall be stated in the report.					
Updating the ENplus® ST 1001, Table 7	Non-conforming products	7.3.2.2	7.3.2.2 <u>Procedures</u>	<u>. Rr</u> ecords		