

Precisely Right.



# **Certification Scheme**

## Wood pellets for commercial use

in accordance with

**DIN EN 14961-2** 

(Edition: September 2011)

#### **Foreword**

DIN CERTCO was founded in 1972 by the DIN German Institute for Standardisation and is responsible for awarding recognised DIN marks. It certifies products, persons, services and companies in line with DIN standards and other similar specifications.

We ensure customer satisfaction and confidence by certifying our neutrality, independence and expertise, as well the quality of our processes and results in accordance with DIN EN 45011. In addition, our QM-System is DIN EN ISO 9001 certified.

The development of this certification scheme is made in connection with the development of the European Standard DIN EN 14961-2 and due to the demand of the market for a quality mark for wood pellets, which can be made not only from natural wood.

This certification scheme is alongside DIN CERTCO's general terms and conditions the basis for providers of wood pellets for commercial use of the property class B in accordance with DIN EN 14961-2:2011-09, to mark their products with the certification mark "DIN-Geprüft Industriepellets". By doing so, they demonstrate that their products meet all requirements of the property class B in accordance with DIN EN 14961-2:2011-09 and in many cases exceed.

The Certification Mark "DIN-Geprüft" creates customer confidence: they can rest assured that an independent, neutral and specialist institution has carefully investigated and reviewed all the inspection criteria. External monitoring ensures that the product quality is maintained during production. All of which provides customers with added value that will help them decide which products to purchase.

Wood pellets of the property class B in accordance with DIN EN 14961-2:2011-09 receive the Certification Mark "DIN-Geprüft Industriepellets" if they fulfil the requirements set out in section 3 and 6, in accordance with the process described in this certification scheme.

All certificate holders can be viewed on the DIN CERTCO homepage (<u>www.dincertco.de</u>), which is updated on a daily basis.

### **Amendments**

This certification scheme differs from the certification scheme DIN-Geprüft Industriepellets" (2010-07) as follows:

- Actualization from basis for inspection and certification.
- Name of water content changed to moisture content in table 1.
- Additives and their definition are added to the combustion requirements.
- Pre-ashing with a temperature of 815 °C is now allowed to prepare the ash for the determination of ashmelting temperature.
- The declaration of the ash melting temperature on the packaging or shipping papers is now optional.

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### 1 Scope

This certification scheme is applicable to woodpellets of the property class B in accordance with DIN EN 14961-2:2011-09. It contains, in conjunction with the test basic mentioned below, all of the requirements for awarding the "DIN-Geprüft Industriepellets"

The certification scheme presented here lays down the requirements for the product itself as well as for the testing, monitoring and certification of same.

### 2 Test and certification specifications

The following referenced documents are the basis for testing and certification. For dated references, only the edition citied applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

- DIN EN 14961-2:2011-09 "Solid biofuels Fuel specifications and classes, Part 2: Wood pellets for non-industrial use" and in accordance with DIN EN 15234-2 "Solid fuels Fuel quality assurance Part 2: Wood pellets for non-industrial use"
- DIN EN 14961-1:2010-04 "Solid biofuels Fuel specifications and classes"
- DIN EN 14778-1 "Solid biofuels Sampling"
- this certification scheme
- the general terms and conditions of DIN CERTCO
- the respective schedule of fees of DIN CERTCO

### 3 Product requirements

#### 3.1 Raw material

Wood pellets in accordance with this certification scheme may only be produced from woody biomass in addition of auxiliary pressing material up to 2 %. The following wood classes are permitted according to DIN EN 14961-1:2010-04.

- Forest, plantation and other virgin wood
- By-products and residues from wood processing industry
- Used wood

### 3.2 Contamination, foreign substances

Foreign substances are allowed, as long as they do not contain any heavy metals or halogenated organic compounds as a result of treatment with wood preservatives or due to coatings. Additionally, the appropriate technical fuel requirements must be met.

### 3.3 Combustion requirements

Table 1

Property class	Unit	Requirements
Diameter	mm	6 ± 1.0
		8 ± 1.0
Length <sup>1)</sup>	mm	3.15 ≤ L ≤ 40.00
Moisture content	w -%	≤ 10
Ash content (550 °C)	w -% dry	≤ 3.0
Mechanical durability as received	w -%	≥ 96.5
Fines at the end of production line <sup>2)</sup>	w -%	≤ 1.0
("at the factory gate", last loading		
before delivering to end-user)		
Net calorific value as received	MJ/kg	16.0 to 19.0
	kWh/kg	4.4 to 5.3
Bulk density as received	kg/m <sup>3</sup>	≥ 600
Additives <sup>3, 4)</sup>	w -%	≤ 2
Nitrogen content	w - % dry	≤ 1
Sulphur content	w - % dry	≤ 0.04
Chlorine content	w - % dry	≤ 0.03
Arsenic	mg/kg dry	≤ 1
Cadmium	mg/kg dry	≤ 0.5
Chromium	mg/kg dry	≤ 10
Copper	mg/kg dry	≤ 10
Lead	mg/kg dry	≤ 10
Mercury	mg/kg dry	≤ 0.1
Nickel	mg/kg dry	≤ 10
Zinc	mg/kg dry	≤ 100
Ash melting temperature <sup>5)</sup>	°C	Value must be stated

<sup>1)</sup> Amount of pellets longer than 45 mm can be 1 %.

 $<sup>^{\</sup>rm 2)}~$  Parts of size less than 3.15 mm

Type of additives to be defined. Chemically unmodified products from primary agricultural and forestry biomass (for example wholemeal corn, cornstarch and rye flour) may be mixed with the raw materials for the production of wood pellets to ease the pressing procedure and also, as a result, an improvement of the energy balance and to increase the abrasion resistance.

Material which improves quality of fuel (e.g. combustion properties), reduces emissions or make production more efficient.

<sup>&</sup>lt;sup>5)</sup> Preashing with 815 °C is allowed.

### 4 Testing

#### 4.1 General

For the performance of the tests required as the basis for the assessment and certification of the products, DIN CERTCO avails itself of the testing laboratories to which it has awarded recognition.

### 4.2 Types of test

### 4.2.1 Initial Test (Type Test)

The initial testing carried out is type testing and establishes whether the wood pellets complies with the requirements of section 3 of this certification scheme.

### 4.2.2 Verification Test (Control Test)

The verification test is performed annually and is intended to establish whether the certified product corresponds to the type-tested product in the production phase.

It is ordered by DIN CERTCO and must be documented in due time by a positive test report and, where applicable, a factory inspection report.

The samples (see section 4.3.1 and 4.3.2) required for this are taken in the years in which a factory inspection is conducted (according to section 6.3.1), as a part of the factory inspection.

In the years in which there is no factory inspection, sampling should be conducted independently by the manufacturer.

The range of features to be tested corresponds to that of a type test (see section 4.2.1).

### 4.2.3 Supplementary Test

A supplementary test shall take place when additions, extensions or modifications (see section 5.9) are made to the certified product, which may influence the product's conformity with the pertinent, fundamental requirements.

The type and scope of the supplementary test shall be laid down on a case by case basis by DIN CERTCO in conjunction with the testing laboratory.

### 4.2.4 Special Test

A Special Test is conducted when:

- defects are detected
- the production has been suspended for a period of more than 6 months
- required by DIN CERTCO, reasons to be specified
- requested in writing by a third party if a particular interest in the maintenance of proper conduct of market procedures in relation to competition or quality is involved.

The type and scope of the special test shall be laid down in accordance with the specific, respective purpose on a case by case basis by DIN CERTCO in conjunction with the testing laboratory.

Should defects be detected in the course of the special test or because of the suspended production, the certificate holder shall bear the costs of the examination procedure.

Should the special test at the request of a third party reveal no defects, the costs shall be borne by said third party.

### 4.3 Sampling

The sampling is based on the requirements of DIN EN 14778-1 according to the sample plan mentioned below and is usually performed during the factory inspection by an authorized inspector.

The sampling will be done by the applicant or the respective inspector and has to be send to a laboratory recognized by DIN CERTCO.

The applicant supplies the products to be tested free of charge and provides appropriate help with sampling.

It must be decided, whether the samples are to be sent by the manufacturer to the testing laboratory authorized to perform the tests. Decision shall be made depending on the conditions on site in each individual case. The manufacturer shall bare the expansions for transport.

The necessary sample quantity must be at least 10 kg of each delivery type.

The samples must be clearly and permanent labeled. The sampling process must be reported. The samples for testing must arrive at the authorized laboratory at least within 14 days.

When taking samples a distinction between two types is to be made:

### 4.3.1 Extraction from flowing goods

The necessary specimen material is to be taken from the "flow of goods" in the form of a minimum of 5 spot samples, each with a mass of 2 kg. The sampling has to be made at the latest possible extraction point at the production factory.

The specimen samples are to be taken so that between extractions, staggered within a given time, a multiple (at least ten times) of the quantity of a single specimen probe sample pass on the conveyor route.

### 4.3.2 Extraction from stock piled goods

The necessary specimen material, a minimum of 5 spot samples each with a mass of at least 2.0 kg, is to be extracted as evenly as possible from the stock, the transport vehicle or from the pallet and container and so forth.

Small packing units (< 20 kg) have to be taken as a unit.

### 4.4 Test procedure

### 4.4.1 Diameter and length

A mass of 20 g to 100 g (around 20 single pellets) must be randomly taken from one of the 5 individual samples and measured.

### 4.4.2 Preparation of a mixed sample

For the further investigations (4.4.3 to **Fehler! Verweisquelle konnte nicht gefunden werden.**), a mixed sample must be created from the five individual samples taken according to 4.3.

#### 4.4.3 Amount of fines

The fines are determined according to DIN EN 15149-2.

### 4.4.4 Bulk density

The bulk density is determined according to DIN EN 15103.

#### 4.4.5 Moisture content

The moisture content is determined according to DIN EN 14774-2.

#### 4.4.6 Ash content

The ash content is determined according to DIN EN 14775 (at 550 °C).

### 4.4.7 Calorific value

The calorific value is determined according to DIN EN 14918.

### 4.4.8 Mechanical durability of pellets (abrasion)

The mechanical durability is determined according to DIN EN 15210-1.

### 4.4.9 Ash melting temperature

This is determined according to DIN CEN/TS 15370-1.

The following characteristic temperatures can be additionally specified:

- shrinkage starting temperature (sintering temperature)
- hemisphere temperature
- flow temperature

### 4.4.10 Sulphur and chlorine content

This is determined according to DIN EN 15289.

### 4.4.11 Nitrogen content

This is determined according to DIN EN 15104.

### 4.4.12 Foreign substances

These are determined according to DIN EN 15297.

The requirements are regarded as met in the results of the testing laboratory include small detection quantities for the analytical process and the detection limit for the analytical process is the same as the critical value.

#### 4.4.13 Additives

These are defined during the factory inspection on the basis of the manufacturer documentation by calculating the quantity balance between the quantity of auxiliary pressing material used and the supplied quantity of the pellets.

### 4.5 Identifying marking

The packaging and/or the accompanying papers (with unpacked consignments) must be indicated by the following data durably and in German language and/or in the national language of the sales market well readably:

- Name or registered trademark of the manufacturer or the supplier/distributor
- Designation of the product with indication of the diameter (in mm) e. g. industry pellets diameter 6 mm
- Nominal weight and/or mass of the packaging content
- Ash melting temperature (optional)
- Notice, that during transport and storage the pellets are to be protected from moisture.
- The pellets must only be combusted in heat-producing appliances that are suitable and permissible for this type of fuel (cf. operating instructions for the heat-producing appliance).
- For clear identification of the delivery, every product or its packaging/insert/accompanying documents must be labelled with the year of manufacture and, in the case of several monitored production sites, the production site. This can take the form of an identification code and/or a serial number providing information on the year of manufacture and the production site (the encoding must be declared to DIN CERTCO).
- certification mark "DIN-Geprüft Industriepellets" with corresponding registration number (following successful certification)
- Chemical untreated material (yes/no).

### 4.6 Test report

The testing laboratory sends the client the results of the tests in a test report. The original of this report must be submitted to DIN CERTCO.

As a rule, the test report may be no older than 6 months at the time of application. In individual cases, older test reports can also be recognized if the testing laboratory verifies in writing that the information in the test report is valid.

The test report must correspond to DIN EN ISO/IEC17025, section 5.10 and must contain at least the following information:

- Name and address of the manufacturer
- Name and address of the applicant (if different than manufacturer)
- Test bases (standards and certification scheme) including date of issue
- Type of test (e.g. type test, additional test, etc.)
- Test date
- Results and evaluation of test
- Name and signature of the individual responsible for the test

#### 5 Certification

A pre-requisite for performing the test according to this certification scheme is a previous appraisal by a DIN CERTCO inspector or by a testing laboratory/regulatory body recognized by DIN CERTCO. The QA measures for continuous self-monitoring according to section 6.2 and the relevant records are inspected as part of this process.

A separate factory inspection must take place at each production site (section 6.3.1), and this must relate clearly and in detail to the products being monitored.

Certification in the sense of this certification scheme relates to the assessment of conformity of a product by DIN CERTCO on the basis of test reports submitted by testing laboratories recognized by DIN CERTCO. To this end, the products to be certified are examined and subsequently monitored in respect of conformity with the requirements laid down in section 3.

The manufacturer's QA-System is assessed on the basis of the factory inspection report to ensure it meets the production requirements for maintaining the conformity of the products.

The right to use the certification mark "DIN-Geprüft Industriepellets" will be granted by the issuing of the respective certificate.

### 5.1 Application for Certification

Applicants can be both manufacturers according to article 4 of the Produkthaftungsgesetz (ProdHaftG) [German Product Liability Act] or retailers who market the products independently within the meaning of the Produkthaftungsgesetz with the written consent of the certificate holder.

The following documents must be submitted by the applicant to DIN CERTCO:

- The original application for certification with a legally binding signature.
- Current test report according to section 4.6 on an initial test (see section 4.2.1), if the test was not ordered by DIN CERTCO.
- Factory inspection report (see section 6.3.1) if the factory inspection was not conducted by DIN CERTCO.
- Layout or an original package for small packages (≤ 20 kg) and/or the accompanying documents for larger packages (> 20 kg).

After the application is received, the applicant will be given an order confirmation from DIN CERTCO with a procedure number and information about the further procedure and any documents that may still be missing.

### 5.2 Definition of types and subtypes

Wood pellets with two different diameters (6 mm and 8 mm) may appear on a certificate as a type and subtype if they are manufactured at the same production site.

### 5.3 Conformity assessment

On the basis of the application documents submitted (see section 5.1), DIN CERTCO conducts the conformity examination.

The applicant shall receive written notification from DIN CERTCO in the event of any possible deviations.

### 5.4 The Certificate and the right to use the mark

After successful testing and conformity assessment of the submitted documents, (see section 5.1) DIN CERTCO issues a certificate to the applicant and awards the right to use the certification mark "DIN-Geprüft Industriepellets" in conjunction with a corresponding registration number.

Format of the registration number:

8U000

Wood pellets, for which the right to use the certification mark "DIN-Geprüft Industriepellets" has been awarded, must be marked with the respective certification mark "DIN-Geprüft Industriepellets" and the respective registration number.

The mark and the registration number may only be used for the type for which the certificate has been issued and which corresponds to the type-tested product.

For each respective type, a registration number shall be issued. For design types (subtypes) of a type, the same registration number shall be issued (see section 5.2).

In addition to this, the General Terms and conditions of DIN CERTCO shall apply.

#### 5.5 Publications

All certificate holders can be viewed on the daily up-dated homepage of DIN CERTCO (<a href="www.dincertco.de">www.dincertco.de</a>) under <Certificate Holders>. Manufacturers, users and consumers use this research possibility for obtaining information on certified products.

Besides the contact details of the certificate holders (telephone, telefax, e-mail, homepage), it is also possible to view the technical data of the registered wood pellets.

### 5.6 Validity of the certificate

The certificate is valid for 5 years. The period of validity is shown on the certificate. On expiry of the certificate, the right to use the mark also expires.

### 5.7 Renewal of the certificate

If the certification shall continue to apply beyond the date shown on the certificate, an up-todate, positive test report and an application for renewal must be submitted in good time to DIN CERTCO.

Proof of conformity with the requirements of the test and certification specifications according to section 2 shall be provided within the scope of a factory inspection according to section 6.3.1 including sampling and verification test according to section 4.2.1.

### 5.8 Expiry of the certificate

In the event that the new Standard conformity examination according to section 4 has not been completed before expiry of the validity period, the right to use the certification mark "DIN-Geprüft Industriepellets" and the registration number expires without the necessity for explicit notification from DIN CERTCO.

Furthermore, the certificate can also expire if:

- the surveillance according to section 6 is not performed punctually or completely,
- the certification mark "DIN-Geprüft Industriepellets" is misused by the certificate holder,
- the requirements laid down in the Certification scheme or its accompanying documents are not fulfilled.
- the certification fees are not paid on the due date
- the prerequisites for the issuing of the certificate are no longer fulfilled

#### 5.9 Alterations/amendments

### 5.9.1 Alterations/amendments to the product

The certificate holder is obliged to notify DIN CERTCO of all alterations to the product without delay. The testing laboratory in conjunction with DIN CERTCO shall decide on the scope of an examination that shall be conducted according to section 4.2.3 and whether it is a matter of a substantial alteration. The respective test report shall be forwarded to DIN CERTCO by the test laboratory.

Should the testing laboratory determine a substantial alteration, the certificate with the corresponding registration number shall expire. For the modified product, a new application for initial certification authorising the use of the certification mark "DIN-Geprüft Industriepellets" may be submitted.

The certificate holder remains obliged to notify of any changes in the formal details (e. g. certificate holder or his address).

The certificate holder may apply to DIN CERTCO for an extension of the existing certificate for further design-types (sub-types) of the same type. It is for DIN CERTCO to decide whether these amendments require a complementary examination. The design-types shall be entered in the certificate for the already certified product and, provided that the conditions are fulfilled, shall be regarded as an integral part of same.

### 5.9.2 Alterations to the basic test specifications

If the basic test specifications for the certification are modified, an application for the alteration of the certification shall be submitted within 6 months of receiving notification from DIN CERTCO and, as a rule, after 12 months, proof of conformity with the modified examination specifications shall be submitted in the form of a positive test report (see section 4.2.3).

### 5.10 Product defects

In the event that a certified product on the market is found to be defective, the certificate holder shall be summoned in writing by DIN CERTCO to rectify the defects.

In conjunction with the testing laboratory, DIN CERTCO shall decide whether it is a serious or a minor defect.

In the case of defects having a direct or indirect effect on the technical safety or functionality of the product (serious defects), the manufacturer must ensure that, until the defects have been rectified, the products are no longer marked with the certification mark "DIN-Geprüft Industriepellets"

The defects must also be rectified without delay in installed products or products in storage. The manufacturer must submit proof to DIN CERTCO within 3 months, in the form of a test report on a special test in accordance with section 4.2.4, that the defects have been rectified and that the product in question again fulfils the stipulated requirements. In the meantime, DIN CERTCO can suspend the right to use the certification mark "DIN-Geprüft Industriepellets".

In the case of defects that have no influence on the technical safety or functionality of the product (minor defects), the manufacturer must submit suitable proof to DIN CERTCO within 3 months that the defects in the product in question have been rectified.

Should the manufacturer fail to observe these deadlines, he and the distributor of product will no longer be permitted to use the certification mark "DIN-Geprüft Industriepellets".

Should reason for complaint continue to exist, DIN CERTCO shall initially suspend the certificate and at the same time issue a final deadline for the rectification of the defects. Should the certificate holder fail to meet this demand, or fail to meet it within the period of grace, or if it is again not possible to prove that the defects have been rectified, the certificate shall be annulled.

#### 6 Surveillance

#### 6.1 General Information

A critical component of certification is the constant surveillance of the certified product throughout the certificate's entire term of validity. In order to ensure that the product quality remains the same, the manufacturer must continually conduct factory production controls. In addition to the production controls, a control test must be conducted annually on the basis of a type test; the result of this control test must be submitted to DIN CERTCO without request.

### 6.2 Surveillance by the manufacturer

The manufacturer must ensure, by suitable quality management measures, that the product characteristics confirmed by the certification are maintained. This can be accomplished by means of an in-house factory production control (FPC) focussed on the product itself or on the production and, in addition, can be guaranteed within the framework of a quality management system (QA-System) in accordance with the Standard series DIN EN ISO 9000

### **6.2.1** Factory Production Control (FPC)

Factory Produktion control comprises the continual monitoring of the production process by the manufacturer, which guarantees the conformity of the products manufactured with the specified requirements. The records of the production controls will be checked during the factory inspection.

The appropriate records must be submitted to DIN CERTCO or its representatives upon request. They must contain at least the following information:

- Description of the test object
- Manufacturing date
- Test date
- Results of the test and, if planned, comparison with the specified requirements
- Signature of the individual responsible for the test
- Date of the record

In the event of a negative test result, the manufacturer must immediately take all measures to eliminate the defect. Defective products must be marked and discarded. The test must be repeated regularly to determine whether the defect has been remedied.

### 6.2.1.1 Scope of incoming inspection

As part of the incoming inspection, a regular visual inspection must be carried out and documented in a suitable way.

When the raw material is delivered, a confirmation from the raw material supplier must be available verifying that the raw material contains no heavy metals or halogenated anorganic compounds.

### 6.2.1.2 Screening out the fines

To guarantee compliance with the requirements for the fines (Table 1), friction debris from the pellets generated during fabrication must be screened out directly before loading/packaging.

### 6.2.1.3 Scope of production monitoring tests

The monitoring tests carried out by the factory itself on the finished product must be carried out by qualified personnel at least once per shift. They comprise the following tests:

- 1. Determine the water content
- 2. Determine the mechanical durability (abrasion)
- 3. Determine the bulk density
- 4. The type and quantity of any additives used must be continually logged.

When processing raw materials with potentially elevated ash content, the ash content of the end product must be regularly determined.

If the product fails a test, the manufacturer must immediately implement all measures to remedy the shortcoming according to the procedures stated in section 6.2.1.5. Faulty products must be labeled and scrapped. The test must be repeated after the correction measures have been carried out to determine whether the shortcoming has been remedied.

For self-monitoring purposes, the methods listed in section 4 do not have to be used. The equivalence of the used methods must be proved (e. g. comparison tests).

The results of self-monitoring must be documented.

### 6.2.1.4 Outgoing goods

A reference sample of at least 1.5 kg must be taken once a day. This sample must be labeled accordingly so that any complaints/customer queries can be assigned to the relevant time of production and processed.

This sample must be stored for at least 1.5 years.

#### 6.2.1.5 Documentation and records

For the following quality-relevant processes, the manufacturer must have written procedures approved by the appropriate person responsible:

- Monitoring of incoming and outgoing
- Monitoring of the test equipment used (calibration, functional testing)
- Implementation of monitoring tests
- Duties and responsibilities, particularly for decisions about the further course of action in the event of detection of abnormalities, interruptions to production etc.
- Complaints management
- Training of employees

The execution of these processes must be documented on the appropriate form. At least the following information must be included:

- Description of the test object, test equipment, abnormality, type of training, or similar
- Date of implementation and if applicable manufacture
- Result of the test and if scheduled, comparison with the specified requirements
- Signature of the person responsible and if applicable the participants

Appropriate records must be provided to DIN CERTCO or its authorized representatives on request.

### 6.2.2 Quality Management System

DIN CERTCO recommends the installation and certification of a quality management system in conformity with the Standard series DIN EN ISO 9000 ff.

### 6.3 Surveillance by DIN CERTCO

DIN CERTCO annually examines the conformity of the product with the requirements laid down in this certification scheme on the basis of surveillance inspections (section 4.2.2) as well as the effectiveness of the factory production control according to section 6.2.1 within the framework of factory inspections.

### 6.3.1 Factory inspection

When possible, the factory inspection will be unannounced and it must take place at every manufacturing site, in addition to the initial inspection, at least 2 years after receipt of the certificate and before it is extended after 5 years.

The inspection body must be informed immediately of any interruption to the manufacture of the object being monitored that makes assessment in accordance with the contract impossible, stating the expected duration of the interruption. The same applies for resumption of production.

The applicant must appoint a specialist manager and provide the inspection body with his or her name. The same applies for the deputy. Any change must be notified to the regulatory body immediately in writing.

The assigned representatives of the inspection body are authorized to visit the operating and storage facilities of the company and its production sites including its delivery warehouses at any time during operating hours unannounced and perform the actions required in relation to the inspection. The assigned representatives of the inspection body must also be presented with all documentary evidence relating to the production for their examination, if required. It must also be ensured that samples can be taken if the applicant and the authorized inspector are absent.

The samples taken are tested by the inspection body. They should be average production samples. Sampling extends across all of the manufacturer's merchandise found in the production or storage facilities. Faulty goods (rejects) are exempt from sampling, provided they are stored separately and clearly labeled

A separate, special monitoring report shall be issued on the results of the factory inspection.

In addition to the information required in section 6.6.1 of DIN EN ISO 19011 the test report of the factory inspection must contain further information on at least the following:

- 1. Origin, type, composition and quality of the raw materials used
- 2. Information on storage of raw materials and end products (sorts separation)
- 3. Details on the production process (with individual production steps)
- 4. Information on the existing quality assurance system
  Are there written procedures and working instructions (quality manual), protocols, particularly for the following processes:
  - Monitoring tests according to section 6.2.1.3 of the certification scheme
  - Calibration and inspection of the measuring and test equipment
  - Responsibilities, particularly for decisions about the subsequent course of action in the event of detection of abnormalities, interruptions to production etc.
  - Further training of employees
  - Customer complaints
- 5. Information on supplying the pellets (screening, packaging, shipment etc.)
- 6. Corrective actions carried out to correct formerly detected deviations
- 7. Summary of the deviations
- 8. Inspector's appraisal

Should the results of the factory inspection prove insufficient, the applicant shall be informed accordingly without delay. In this case, the scope of additional measures needed to fulfil all requirements shall be determined between the certification body and the applicant. Should the applicant be unable to implement the necessary measures, the procedure shall be terminated.