

## **Basic Criteria for Award of the Environmental Label**

### **Wood Pellet and Wood Chip Boilers**

**RAL-UZ 112**



**February 2011**

RAL gemeinnützige GmbH

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**Prolongation for 2 years (until 31.12.2016) without any change**

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### **1. Introduction**

- 1.1** The Environmental Label Jury has set up these Basic Criteria for Award of the Blue Angel Eco-Label in co-operation with the Federal Minister for the Environment, Nature Conservation and Nuclear Safety, Umweltbundesamt (Federal Environmental Agency) and considering the results of expert hearings conducted by RAL. RAL gGmbH has been tasked with awarding the Environmental Label.

Upon application to RAL and on the basis of a Contract on the Use of the Environmental Label to be concluded with RAL gGmbH the permission to use the Blue Angel eco-label may be granted for all products, provided that they meet the requirements specified hereinafter.

- 1.2** Their high level of automation enables wood pellet and wood chip boilers to make an efficient and low-emission use of renewable fuels for heating purposes. Thus, they help protect our climate and reduce the primary energy use of non-renewable energy

carriers. Ambitious limit values have been established to minimize the emissions of these systems and thus achieve better air quality.

It is noted in particular that the review of the limit values specified in these Basic Criteria is based on bench tests under idealised standard conditions. These tests allow the comparison of measurement results and usually strongly differ from practical values.

The above-shown Blue Angel eco-label may be awarded to wood pellet and wood chip boilers as specified under „Scope“ which make more efficient use of the fuel used and emit far less pollutants than what would be permitted under current DIN standards and the 1st Bundesimmissionsschutzverordnung (BImSchV) (Federal Immission Control Ordinance).

## **2. Scope**

**2.1** These Basic Criteria apply to boilers according to DIN EN 303-5<sup>1</sup>. Included are boilers with a nominal heat output up to and including 500 kW exclusively designed and approved by the manufacturer for the use of the following fuels:

- wood pellets pursuant to DIN EN 14961-2<sup>2</sup> (grade A1), ENplus (grade A1) or DINplus;
- and/or wood chips pursuant to DIN EN 14961-4<sup>3</sup>, ÖNORM M 7133<sup>4</sup> or according to Section 3, para. 1 No. 4 of the 1st BImSchV (Federal Immission Control Ordinance)<sup>5</sup>.

**2.2** A basic requirement to be met by a Blue Angel eco-labelled device is an efficient and low-emission on-site operation. That is why only those appliances will be considered for the award of the Blue Angel eco-label

- that are exclusively designed and approved for the use with fuels listed in paragraph 2.1 of these Basic Criteria (exclusion of (co-)firing using other renewable or fossil fuels).
- which, depending on the heat demand, can be adjusted to each part load within the given heat output range in an infinitely variable manner.

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<sup>1</sup> Edition of June 1999

<sup>2</sup> Edition of July 2010 (draft standard)

<sup>3</sup> Edition of July 2010 (draft standard)

<sup>4</sup> Edition of 1998

<sup>5</sup> First Ordinance implementing the Federal Immission Control Act of 26 January 2010

- where ignition, output and combustion control as well as the cleaning of the heat exchanger are carried out fully automatically in order to avoid malfunctions through improper operation (exclusion of systems with manual control units, (for example, for lever-controlled combustion air supply)).
- which represent a complete system and, thus, allow the evaluation of the system's efficiency and emissions (exclusion of pure solid fuel burners).

**2.3** Due to the fact that the selection of fuel type may have a substantial impact on the system's efficiency and emission behaviour the following requirements shall be met with respect to the approval of fuels:

- Compliance with the requirements specified below shall be verified for both wood chips and wood pellets if the system is approved for both fuels.
- Should a Blue Angel eco-labelled system be subsequently approved for the use with additional fuels the Contract on the Award of the Environmental Label shall be prematurely terminated and the continued use of the label shall not be allowed for either advertising or labelling.

### 3. Requirements and Compliance Verifications

The above Blue Angel eco-label may be awarded to the boilers under “Scope”, provided that they meet the following requirements:

#### 3.1 General Requirements

The product shall not only meet the energy and emission technology requirements hereunder but also the requirements of DIN EN 303-5<sup>6</sup> for structural design and safety behaviour (avoidance of critical operating modes during normal and faulty operation, limitation of surface temperatures, automatic switch-off and electrical safety).<sup>7</sup>

#### 3.2 Requirements for Efficient Energy Use

The boiler efficiency shall be determined in accordance with DIN EN 303-5<sup>8</sup> at nominal load conditions (nominal heat output) as well as at part load conditions (lowest adjustable output, 30 percent of the nominal heat output at the most). If the system is approved for both wood pellets and wood chips the boiler efficiency shall be determined for each of these fuels.

The boiler efficiency of systems with a nominal heat output of less than or equal to 12 kW shall not fall below 90 percent at nominal load and 89 percent at part load conditions.

The boiler efficiency of systems with a nominal heat output of more than 12 kW shall not fall below 90 percent at nominal and part load conditions.

#### 3.3 Auxiliary Power Demand

The auxiliary power demand shall be determined in accordance with Appendix 2 to these Basic Criteria. If the system is approved for both wood pellets and wood chips the demand shall be determined and indicated for the each of these fuels separately.

**The auxiliary power demand of boilers approved for operation with wood-pellets only** shall not exceed the following values

**Table 1):**

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<sup>6</sup> Edition of June 1999

<sup>7</sup> On the strength of legal bases, other co-applicable EU Regulations must be observed for the marketing of wood chip boilers, such as, for example, the EMV Directive (Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility).

<sup>8</sup> Edition of June 1999

**Table 1: Requirements for the Auxiliary Power Demand of Wood Pellet Boilers**

Nominal Heat Output	Operation at Nominal Load <sup>9</sup>	Operation at Part Load <sup>1</sup>	Sleep (Standby without Heat Generation)
<b>up to 50 kW</b>	80 W or 0.8% of the nominal heat output	80 W or 0.6% of the nominal heat output	15 watts
<b>over 50 kW and up to 500 kW</b>	80 W or 0.6% of the nominal heat output	80 W or 0.3% of the nominal heat output	25 watts

The auxiliary power demand of boilers approved for operation with wood chips and (wood pellets, if applicable) shall not exceed the following values (Table):

**Table 2: Requirements for the Auxiliary Power Demand of Boilers Approved for Operation with Wood Chips and (Wood Pellets, if applicable)**

Nominal Heat Output	Operation at Nominal Load <sup>1</sup>	Operation at Part Load <sup>1</sup>	Sleep (Standby without Heat Generation)
<b>up to 50 kW</b>	80 W or 1% of the nominal heat output	80 W or 0.7% of the nominal heat output	20 watts
<b>over 50 kW and up to 500 kW</b>	80 W or 0.8% of the nominal heat output	80 W or 0.4% of the nominal heat output	30 watts

The auxiliary power demand for the ignition process shall be determined and indicated in the test report.

The electric power consumption of the integrated power-consuming units of the boiler specified in Appendix 2 to the Basic Criteria RAL-UZ 112 (if available) shall be separately indicated in watts.

The waterside resistance shall be determined in accordance with DIN EN 303-5<sup>10</sup> and indicated in the test report.

### 3.4 Emission Requirements

The emission limits hereunder – related to dry exhaust gas in standard reference condition (0 °C, 1013 mbar) with an oxygen volume content of 13 percent - shall be observed. The measurement unit mg/Nm<sup>3</sup> is to be understood as mg of pollutant per standard cubic meter of exhaust gas (mass concentration). Testing shall be done using the measurement methods described in para. 4. If the boiler is approved for both

<sup>9</sup> The relative values related to the nominal heat output need only be met if the auxiliary power demand exceeds 80 W.

<sup>10</sup> Edition of June 1999

wood pellets *and* wood chips the values shall be determined and indicated separately for each of these fuels.

#### 3.4.1 Nitrogen Oxides (NO<sub>x</sub>)

When operating the boiler with wood pellets neither the nitrogen monoxide content nor the nitrogen dioxide content in the exhaust gas (given as nitrogen dioxide) may exceed 150 mg/Nm<sup>3</sup> at nominal load conditions.<sup>11</sup>

When operating the boiler with wood chips neither the nitrogen monoxide content nor the nitrogen dioxide content in the exhaust gas (given as nitrogen dioxide) may not exceed 190 mg/Nm<sup>3</sup> at nominal load conditions.

#### 3.4.2 Carbon Monoxide (CO)

When using **wood pellets** to run a boiler with a nominal heat output of up to and including 50 kW the carbon monoxide content of the exhaust gases must not exceed the following limits: 80 mg/Nm<sup>3</sup> at nominal load and 180 mg/Nm<sup>3</sup> at part load conditions.

When using wood pellets to run a boiler with a nominal heat output of more than 50 kW up to and including 500 kW the carbon monoxide content of the exhaust gases must not exceed the following limits: 70 mg/Nm<sup>3</sup> at nominal load and 150 mg/Nm<sup>3</sup> at part load conditions.

When using **wood chips** to run a boiler with a nominal heat output of up to and including 50 kW the carbon monoxide content of the exhaust gases must not exceed the following limits: 80 mg/Nm<sup>3</sup> at nominal load and 180 mg/Nm<sup>3</sup> at part load conditions.

When using wood chips to run a boiler with a nominal heat output of more than 50 kW up to and including 500 kW the carbon monoxide content of the exhaust gases must not exceed the following limits: 70 mg/Nm<sup>3</sup> at nominal load and 150 mg/Nm<sup>3</sup> at part load conditions.

#### 3.4.3 Organic Gaseous Carbon (OGC)

The content of gaseous organic carbon (OGC) in the exhaust gas shall not exceed 5 mg/Nm<sup>3</sup> at nominal load and part load conditions.

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<sup>11</sup> Based on current knowledge the formation of nitrogen oxides in wood firing systems primarily depends on the nitrogen content of the fuel. Thermal NO<sub>x</sub> formation is largely ruled out. There is, however, indication that NO<sub>x</sub> emissions can be controlled by combustion engineering measures.

#### 3.4.4 Dust

When using **wood pellets** the dust content of the exhaust gases may not exceed 20 mg/Nm<sup>3</sup> at nominal load and 40 mg/Nm<sup>3</sup> at part-load conditions.

When using **wood chips** the dust content of the exhaust gases may not exceed 30 mg/Nm<sup>3</sup> at nominal load and 40 mg/Nm<sup>3</sup> at part-load conditions.

#### 3.5 Setting and Operating Instructions

The **Setting Instructions** shall include clear and explicit information on how wood pellet and wood chip boilers can be properly adjusted by qualified personnel. They shall be clearly labelled as instructions “for qualified personnel”. Setting according to the Setting Instructions must ensure an efficient and low-emission operation of the system. The Setting Instructions shall include information on how to match the wood chip firing and the exhaust gas unit as well as on how to combine the system with a buffer tank. They shall also include a recommendation to use Energy Efficiency Class A appliances if external circulating pumps are used.

The **Operating Instructions** shall include clear and comprehensible instructions for an environmentally friendly, i.e. efficient and low-emission, operation of the system by the user as well as information on regular system maintenance and cleaning by a specialist company. They shall be clearly labelled as instruction “for the user”. The Operating Instruction shall include a note that installation and setting should only be done by “qualified and trained personnel”.

The documents shall at least meet the requirements of DIN EN 303-5<sup>12</sup>. Compliance with DIN EN 62079<sup>13</sup> "Preparation of instructions. Structuring, content and presentation" is recommended.

##### ***Compliance Verification***

The applicant shall submit the following documents to establish compliance with the requirements under paras. 3.1 to 3.5:

- Test report according to Appendix 1 to the Basic Criteria RAL-UZ 112 confirming product compliance with the requirements under paras. 3.1 to 3.5 in combination with para. 4 indicating the measurement methods/instruments used as well as the measurement inaccuracies.
- Setting and Operating Instructions providing information according to para. 3.5 as well as the Attachment to the Operating Instructions according to Appendix 3 to

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<sup>12</sup> Edition of June 1999

<sup>13</sup> Edition of November 2001



these Basic Criteria including the corresponding page/percent information (if the design of the heating system necessitates changes to the text of paras. 3 and 4 of the Annex in terms of an efficient and low-emission operation the applicant may make proposals for such changes).

### **3.6 Services**

The environmentally friendly operation of a wood pellet or wood chip heating system also heavily depends on proper installation and setting of the system, regular maintenance and cleaning of the system as well as on user behaviour. To ensure a permanently efficient and low-emission operation the manufacturer itself or its service partner shall provide specific services in selection, dimensioning and installation of the system as well as during the operation of the system:

- Technical training for fitters and sales personnel
- Advice and offer for the installation of a buffer tank
- Advice on the installation of the exhaust gas equipment
- Submission of an offer for the initial operation of the heat-generating equipment by the manufacturer and explanation of the parameters for an efficient, low-emission combustion as well as explanation of the boiler control system (customer training)
- Offer for maintenance services available during regular service hours
- Offer for an annual checking and maintenance of the system
- Availability of equivalent spare parts for at least 10 years following the placing on the market of the system.

### **3.7 Fuel Quality**

The manufacturer undertakes to inform consumers in a proper way about fuel quality requirements and about current standards and quality assurance systems. The manufacturer shall also properly describe possible consequences (especially sintering, loss of warranty, increased emissions) of running the system with fuels that have not been approved for use in the system or do not possess the fuel properties required.

The manufacturer shall specify the properties of wood chips required for a failure-free and low-emission operation according to DIN EN 14961-4<sup>14</sup> or ÖNORM M 7133 (e.g. grain size, water content, ash content, calorific value, bulk density, fine fraction).

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<sup>14</sup> Edition of July 2010 (draft standard)

If the system is approved for use with wood pellets the manufacturer shall point to relevant technical and quality standards (DIN EN 14961-2<sup>15</sup> (Grade A1), ENplus (Grade A1) or DINplus).

### 3.8 Environmentally Responsible Product Design

Unless there is compelling technical reason to the contrary the following principles for “designing recyclable technical products” shall be observed and explained in writing. The checklist “Recyclable Design” under Appendix 4 to these Basic Criteria shall serve as a basis for checking the individual features.

- Avoidance of non-separable material connections between different materials
- Avoidance of composite materials
- Easy detachability of modules – also for the purpose of easy repair
- Reduction of the variety of materials

In addition, the manufacturer shall, upon filing the application for award of the Blue Angel eco-label, submit a written declaration of compliance with following requirements:

- Plastic product components greater than 50 grams in weight shall be marked with a symbol or abbreviated term according to DIN EN ISO 1043-1<sup>16</sup> or DIN ISO 1629<sup>17</sup> (rubber) or DIN ISO 2076<sup>18</sup> (chemical fibres). Plastics must not contain heavy metals, phthalates or halogenated flame retardants.

If the system is marketed with an integrated circulating pump an efficient speed-controlled circulating pumps shall be used. The efficiency of this pump shall meet the requirements for external circulating pumps in energy efficiency class A.

#### ***Compliance Verifications***

The applicant shall declare compliance with the requirements under paras. 3.6, 3.7 and 3.8 (Manufacturer Declaration according to the “Annex to the Contract”).

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<sup>15</sup> Edition of July 2010 (draft standard)

<sup>16</sup> Edition of June 2002

<sup>17</sup> Edition of November 2004

<sup>18</sup> Edition of May 2001

## **4 Testing**

### **4.1 Testing Laboratories**

Testing shall be conducted by an independent testing laboratory accredited according to DIN EN ISO 17025<sup>19</sup> for the testing of „Heating boilers for solid fuels“ or by a laboratory recognized by Deutsches Institut für Bautechnik (German Institute for Structural Engineering) for the testing of fireplaces for solid fuels. Testing shall comprise the complete compliance verifications under paras. 3.1 to 3.5.

### **4.2 Test Methods**

Measurements shall be taken at nominal load (nominal heat output) and part load (lowest adjustable output, 30 percent of the nominal heat output at the most). In addition, the auxiliary power demand for the duration of the ignition process shall be determined and indicated in the test report.

Testing, especially the verification of compliance with the efficiency and emission requirements under paras. 3.2 and 3.4 shall be conducted according to DIN EN 303-5<sup>20</sup>. If technically possible, the measurements of all necessary values shall be conducted in a single session (exclusion of measurements of individual parameters using system settings optimized for this particular parameter). Testing shall be conducted for each fuel approved by the system manufacturer. Beforehand, the fuels shall be subjected to an elemental analysis including determination of the calorific value.

### **4.3 Calibration Gases and Measuring Instruments**

Certified calibration gases shall be used for the calibration of measuring equipment. The use of calibration gas generators shall not be permitted. Measuring instruments shall be used in accordance with DIN EN 303-5<sup>21</sup>. A heated measuring line shall be used for measuring the contents of nitrogen oxides and total hydrocarbons (for determining the OGC).

## **5 Applicants and Parties Involved**

### **5.1 Distributors of wood pellet and wood chip boilers according to para. 2 shall be eligible for application.**

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<sup>19</sup> Edition of August 2005

<sup>20</sup> Edition of June 1999

<sup>21</sup> Edition of June 1999

**5.2** Parties involved in the award process are:

- RAL to award the Blue Angel eco-label,
- the federal state being home to applicant's production site,
- Umweltbundesamt (Federal Environmental Agency) which after the signing of the contract receives all data and documents submitted in application for the Blue Angel in order to be able to proceed with the development of the Basic Award Criteria.

**6. Use of the Environmental Label**

**6.1** The terms governing the use of the Environmental Label by the applicant are stipulated by a Contract on the Use of the Environmental Label to be concluded with RAL.

**6.2** Within the scope of such contract the applicant undertakes to comply with the requirements under paragraph 3 while using the Blue Angel eco-label.

**6.3** Contracts on the Use of the Environmental Label are concluded to fix the terms for the certification of products under paragraph 2. Such contracts shall run until December 31, 2016.

They shall be extended by periods of one year each, unless terminated in writing by March 31, 2016 or March 31 of the respective year of extension.

After the expiry of the contract the Environmental Label may neither be used for labelling nor for advertising purposes. This regulation shall not affect products being still in the market.

**6.4** The Contract on the Use of the Environmental Label shall specify:

**6.4.1** Applicant (distributor)

**6.4.2** Brand / trade name, type designation, range of nominal heat output in kW.

## Appendix 2 to the Basic Criteria RAL-UZ 112

### Measurement of the Auxiliary Power Demand in Different Operating Modes

The point of fuel supply shall be used as system boundary for determining the auxiliary power demand.

#### 1. Auxiliary Power Demand

The objective of measuring the auxiliary power demand in the operating state is to determine the boiler's electric power consumption at nominal load and part load conditions (lowest adjustable power, 30% of the nominal heat output at the most).

For this purpose, the system's electric energy consumption (without taking into account the heating-water circulating pump and a possibly existing fuel conveyor system) is to be determined over a measuring time of at least 6 hours pursuant to DIN EN 303-5<sup>1</sup> for the heating equipment testing and shall be given in watts - based on the measuring time – as average electric power consumption in relation to the nominal heat output.

#### 2. Auxiliary Power Demand in Sleep Mode (Standby without Heat Generation)

The objective of measuring the auxiliary power demand in sleep mode is to determine the electric power consumption of the boiler when there is no heat demand and when only electrical consumers are turned on to maintain operation readiness. For this purpose, the system's electric energy consumption is to be measured over a period of at least 10 minutes. This measuring time may have to be extended if control processes have an impact on the system's own electric power consumption. The energy consumption determined shall be given in watts - based on the measuring time – as average electric power consumption.

#### 3. Auxiliary Power Demand for the Ignition Process

The auxiliary power demand of the ignition device shall be determined during the ignition process and expressed as electric work in watt hours. Manufacturer data without measurement of the auxiliary power demand for the ignition process will also be accepted if the type approval test has been conducted prior to the publication of these Basic Criteria.

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<sup>1</sup> Edition of June 1999

#### **4. Electric Power Consumption of Central Consumers**

The electric power consumption of the following internal power-consuming devices (if available) shall be separately given in watts:

- Fan motor(s),
- Heat exchanger cleaning motor(s),
- Ash removal motor(s) and fuel auger motor(s).

If the system is equipped with a fuel conveyor system (mechanical or pneumatic conveyor) the electric power consumption of the motors shall be indicated.

#### **5. Waterside Resistance**

The waterside resistance shall be determined in accordance with DIN EN 303-5<sup>1</sup>. If the boiler is equipped with a heating water circulating pump its auxiliary power demand (minimum/maximum values) shall be indicated in the test report. These values shall be accompanied by information on the type of pump control system (multi-stage including the number of pump performance levels or automated control with indication of the control range in percent).

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<sup>1</sup> Edition of June 1999

## Appendix 3 to the Basic Criteria RAL-UZ 112: Attachment to the Operating Instructions

### Attachment to the Operating Instructions

Company: ...

Dear Customer!

To ensure an efficient and low-emission operation of your heating system please read the following carefully:

- Only qualified and trained personnel shall be permitted to install and adjust the system.
- Do not use fuels other than those specified by us in the Operating Instructions (page ...). Only this way can we guarantee a low-emission, economic and trouble-free operation of your heating system.
- We recommend regular inspection and cleaning of the heating system. For further information please see the Operations Instructions (page ...). This ensures not only the functional safety of the heating system and its safety devices but also the system's energy-efficient and low-emission operation. For optimum servicing of your heating system we recommend a maintenance contract.
- Your heating boiler offers a variable range of heat output from ...% to ....% of the nominal heat output. The appliances should preferably be operated at medium or upper level of capacity (adjusted to the respective heat demand) to avoid unnecessary emissions in low-load operation. The ideal is the combination with a modulating room or heating thermostat in order to avoid unnecessary clocking and to achieve the longest possible operating times.
- From an energetic point of view, a buffer tank and the combination with a solar plant would be recommendable. This would ensure an energy-efficient and low-emission operation of your heating system.

## Appendix 4 to the Basic Criteria RAL-UZ 112: Checklist „Recyclable Design“

This checklist is divided into the following requirement sections :

### **A. Structure and Connection Technology**

### **B. Material Selection and Marking**

### **C. Disassembly**

A, B, C	Requirement	The requirement is met?	
		Yes	No

### **A. Structure and Connection Technology**

A1	Can modules made of mutually incompatible materials be detached as such or are they connected via separation aids or can all materials used be separated by means of processing technologies.	Yes	No
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This concerns all connections between modules. Adhesive labels (e.g. company logos and labels) are concerned as well. The term "separation aids" stands, for example, for predetermined breaking points.

A2	Can modules that potentially contain pollutants (e.g. control) be easily detached from the pellet stove?	Yes	No
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Electric modules as well as measurement and control equipment should be easily traceable and separable.



## B. Material Selection and Marking

B1	Is the variety of plastic materials performing comparable functions limited to a single polymer or polymer blend?	Yes	No
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The smaller the number of plastics used the more efficient are separation and sorting processes.

B2	Are components made of the same sort of plastic dyed uniformly or compatibly?	Yes	No
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"Compatible dyeing" refers to different shades of one colour (e.g. grey and anthracite). If, in addition, different types of plastics exhibit different colours, such "colour coding" would be useful for a safe type-specific separation of plastics.

B3	Is the coating of plastic components limited to the necessary minimum?	Yes	No
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Large-surface paint coats, vapour depositions and printings on plastic components necessitate additional removal processes to ensure material-specific recycling. Markings for material identification or disassembly instructions shall not be considered as printings.

B4	Do the materials and material compounds used allow high-level material-specific recycling?	Yes	No
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Materials allowing material-specific recycling are those materials that can be recycled on an industrial scale, i.e. where recycling would be useful from a technological and economic point of view. This is taken for granted with respect to steel and stainless steel.

B5	Do the plastics used allow a proportionate use of recyclates and does the product specification permit such proportionate use? Please note: This must not result in a shortening of the service life.	Yes	No
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A complete cycle of materials won't exist until recyclates are actually used.

B6	Are the plastics marked in accordance with ISO 11469?	Yes	No
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The marking of plastics enables all recycling companies to sort plastics by type.

B7	Has the product been manufactured without the use of plastic additives and colour pigments containing Pb or Cd?	Yes	No
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### C. Disassembly

C1	Will it be easy to identify and separate modules that may contain pollutants?	Yes	No
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Components which are likely to contain hazardous substances must - as a minimum requirement for recyclable design - be easy to discover and separate.

C2	Will it be easy to identify connections that need to be separated?	Yes	No
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Connections that need to be separated during disassembly should be easy and quick to discover. If they are concealed appropriate instructions should be noted on the product.

C3	Can disassembly for the purpose of recycling be done using only general-purpose tools?	Yes	No
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The term „general-purpose tool“ stands for conventional commercial tools. Exempted are connections where mandatory provisions have an influence on the choice of connection technology.

# CONTRACT

No.  
on the Award of the Environmental Label

RAL gGmbH as label awarding agency and the  
firm of

(Distributor)

as applicant conclude the following  
Contract on the Use of the Environmental Label:

S P E C I M E N

1. Under the following conditions the applicant shall be entitled to use the Environmental Label forming the basis of this Contract for the labelling of the product / product group / project:  
„Wood Pellet and Wood Chip Boilers“ for  
**"Brand/Trade Name"**.  
  
This shall not include the right to use the Environmental Label as part of a brand. Unless otherwise agreed, the Environmental Label shall only be used in the above given shape and colour and shall be marked at the bottom "Jury Umweltzeichen" (Environmental Label Jury). The entire inner surrounding text shall always be identical as regards font size, form, thickness and colour and it shall be easy to read.
2. The Environmental Label according to para. 1 may only be used for the above-mentioned product / product group / project.
3. If the Environmental Label is used for advertising purposes or other applicant activities the applicant shall make sure that it is exclusively used in connection with the above-named product / product group / project for which the use of the Environmental Label has been granted and settled under this contract. The applicant shall be solely responsible for the way the label is used, above all, in advertising.
4. During the entire period of label use the product / product group / project to be labelled shall comply with all requirements and conditions for the use of the label as specified in the "Grundlage für Umweltzeichen-Vergabe RAL-UZ 112" (Basic Criteria for Award of the Environmental Label RAL-UZ 112), as amended. This shall also apply to the reproduction of the Environmental Label (including surrounding text). Claims for damages against RAL gGmbH, especially on the grounds of third party objections to applicant's use of the label and the accompanying advertising shall be ruled out.
5. If the "Basic Criteria for Award of the Environmental Label" provide for checks by third parties the applicant shall bear the costs accruing in connection therewith.
6. Should the applicant himself or third parties find out that the applicant does not comply with the conditions as stipulated in paras. 2-5 the applicant shall be liable to inform RAL gGmbH and stop the use of the Environmental Label until the conditions are complied with again. Should the applicant be incapable of restoring the state required for the use of the label immediately or should the applicant seriously offend against this contract RAL gGmbH may, if necessary, withdraw the Environmental Label and prohibit the applicant from using the label any longer. Claims for damages against RAL gGmbH because of the withdrawal of the label shall be ruled out.
7. The Contract on the Use of the Environmental Label may be terminated for good reason.  
Examples of good reasons are:  
- unpaid contributions  
- substantiated risk of injury and death.  
In such case, applicant's continued use of the Environmental Label shall be prohibited. The applicant shall not be entitled to bring a claim for damages against RAL gGmbH (see above: paragraph 6, sentence 3).
8. The applicant undertakes to pay RAL gGmbH an amount according to the "Entgeltordnung für das Umweltzeichen" (Schedule of Fees for the Environmental Label), as amended, for the period of use.
9. According to the Basic Criteria for Award of the Environmental Label RAL-UZ 112 this contract will run until **December 31, 2016**. It shall be extended by periods of one year each, unless terminated in writing by **March 31, 2016** or by March 31 of the respective year of extension. After the expiry of the contract the Environmental Label may neither be used for labelling nor for advertising purposes. This regulation shall not affect the products being still in the market.
10. Products / projects marked with the Environmental Label and the advertising for these products / projects may reach the consumer only when naming the company of the  
**(Applicant)**.

Sankt Augustin, this ..... day of .....20..

Place, Date

RAL gGmbH  
Management

(Signature of authorized person  
and company stamp)

