

## Renewable Heat Incentive

**Non-domestic Renewable Heat Incentive Emissions Certificate** 



This certificate provides evidence that the tested boiler meets the air quality requirements of the non-domestic Renewable Heat Incentive (RHI) – Reg 5A(3) and Schedule A1. It must be issued by a testing laboratory. Applicants applying for the RHI with biomass boilers must submit a certificate with their application, or alternatively, an environmental permit.

1. TEST HOUSE	
a) name and address of testing laboratory	The Engineering Test Institute, Public Enterprise Hudcova 424/56b, 621 00 Brno, Czech Republic tel.: 00420 541 120 330 e-mail.: holomek@szutest.cz web: www.szutest.cz
b) name and signature of the person authorised by the testing laboratory to issue the certificate	Name: Mr. Milan Holomek Head of Heat and Environment-Friendly Equipment Test Station Signature:
c) date of issue of this certificate together with certificate reference number *Please see Note A	Date: 08/09/2015  Ref: SZUBR178
d) if testing laboratory is accredited to BS EN ISO/IEC 17025:2005, date of accreditation and accreditation number	Date: 16/06/2015
(note: if testing conducted after 24 September 2013, the testing laboratory <b>must be</b> BS EN ISO/IEC 17025:2005 accredited)	Accreditation number: 447/2015

2. PLANT	
Please see Note B	
a) name of the plant tested	HAMONT (USV,USZI) – (S1)
b) model of the plant tested	HAMONT 150 USZI – (S1) HAMONT 250 USZI – (S1) HAMONT 300 USZI – (S1) HAMONT 500 USZI – (S1)
c) manufacturer of the plant tested	CSTfire s.r.o. Výstavní 2937/132A 703 00 Ostrava-Vítkovice Czech Republic

d) installation capacity* of the <b>tested</b> plant in kilowatts (kW) *defined in the RHI Regulations as the total installed peak heat output capacity of the plant	HAMONT 150 (USV,USZI) – (S1) – 150 kW HAMONT 250 (USV,USZI) – (S1) – 250 kW HAMONT 300 (USV,USZI) – (S1) – 300 kW HAMONT 500 (USV,USZI) – (S1) – 500 kW
e) is the plant a <u>manually stoked, natural draught</u> plant? (that is, without a fan providing forced or induced draught)	No, automatic
f) (i) the date the plant was tested*  (ii) please confirm that NOx and PM have been tested on the same occasion  *This is in reference to the emissions testing for PM and NOx, not any wider range of tests. A specific date is required.	Date: 20/09/2013 yes
g) list of all the plants in the type-testing range* of plants to which the certificate applies, if any¹ Please include the <b>installation capacity</b> of each model. *This must follow the ratio rules:  If the smallest plant in the range is 500kW or less, the largest plant in the range can't be more than double the smallest.  If the smallest plant in the range is over 500kW, the largest plant in the range can't be more than 500kW greater than the smallest.	HAMONT 150 (USV,USZI) – (S1) – 150 kW HAMONT 180 (USV,USZI) – (S1) – 180 kW HAMONT 199 (USV,USZI) – (S1) – 199 kW HAMONT 220 (USV,USZI) – (S1) – 220 kW HAMONT 250 (USV,USZI) – (S1) – 250 kW HAMONT 300 (USV,USZI) – (S1) – 300 kW HAMONT 350 (USV,USZI) – (S1) – 350 kW HAMONT 400 (USV,USZI) – (S1) – 400 kW HAMONT 450 (USV,USZI) – (S1) – 450 kW HAMONT 499 (USV,USZI) – (S1) – 499 kW HAMONT 500 (USV,USZI) – (S1) – 500 kW

a) types of fuels used when testing	Wood pellets, Wood chips
b) based on the testing, list the range of fuels that can be used in	Wood pellets
compliance with the emission limits of 30 grams per gigajoule	according to
(g/GJ) net heat input for particulate matter (PM), and 150 g/GJ net heat input for oxides of nitrogen (NOx)	EN 303-5:2012: C1
(based if relevant on classifications from EN14961 or EN303-5)	Wood chips
	according to
	EN 303-5:2012: B1
c) moisture content of the fuel used during testing	Wood pellets – 6.92 %
	Wood chips - 19.48 %
d) maximum moisture content of the fuel which can be used with	Wood pellets – 12 %
the certified plant(s) so as to ensure that the RHI emission limits are not exceeded.	Wood chips - 35 %

<sup>&</sup>lt;sup>1</sup> The type-testing approach enables testing laboratories to provide assurance that all boilers in a given range meet the air quality requirements, without needing to specifically test each boiler.

Confirm which requirements the emissions of NOx and PM have be	een lested in accordance with. <b>Either 4a</b>
4b should be confirmed, the other should be 'not applicable'	
a) if the testing was carried out in accordance with the	<b>50 5</b> 1
provisions relevant to emissions of PM and NOx in either BS	BS EN 303-5:2012
EN 303-5:1999 or BS EN 303-5:2012 <sup>2</sup> , please confirm:	(ČSN EN 303-5:2013)
- the test was conducted to whichever standard was current at	
the time of testing.	Yes
b) if the testing was carried out in accordance with the	
following requirements, please confirm:	
(i) testing was carried out in accordance with:	
- EN 14792:2005 in respect of NOx emissions, and;	
- EN 13284-1:2002 or ISO 9096:2003 in respect of PM	
emissions <sup>3</sup> ; and	
(ii) emissions of PM represent the average of at least three	not applicable
measurements of emissions of PM, each of at least 30 minutes	
duration; and	
	not applicable
(iii) the value for NOx emissions is derived from the average of	
measurements made throughout the PM emission tests.	
c) please confirm the plant was tested at ≥85% of the installation	
capacity of the plant	yes
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d) please confirm the test shows that emissions from the plant	
were no greater than 30 g/GJ PM and 150 g/GJ NOx	yes
e) measured* emissions of PM in g/GJ net heat input	Wood pellets:
*this value should be from the test confirmed in 4c. Results from	HAMONT 150 (USV,USZI) - (S1) - 12 g
partial load tests are not required.	HAMONT 250 (USV,USZI) - (S1) - 12 g
This value must be in the specified units.	HAMONT 300 (USV,USZI) - (S1) - 10 g
This value must be in the specified units.	HAMONT 500 (USV,USZI)
	<b>Wood chips:</b>
	HAMONT 150 (USV,USZI) – (S1) - 21 g
	HAMONT 250 (USV,USZI) = (31) - 21 g
	HAMONT 300 (USV,USZI) – (S1) - 13 g
	HAMONT 500 (USV,USZI) - (S1) - 10 g
f) measured* emissions of NOx in <b>g/GJ</b> net heat input	Wood pellets:
*this value should be from the test confirmed in 4c. Results from	HAMONT 150 (USV,USZI) - (S1) - 64 g
partial load tests are not required.	HAMONT 250 (USV,USZI) – (S1) - 71 g
This value must be in the specified units.	HAMONT 300 (USV,USZI) – (S1) - 61 g
	HAMONT 500 (USV,USZI) – (S1) - 64 g
	Wood chips:
	HAMONT 150 (USV,USZI) (S1) - 75 g
	HAMONT 250 (USV,USZI) – (S1) - 80 g
	HAMONT 300 (USV,USZI) – (S1) - 77 g
i	HAMONT 500 (USV,USZI) - (S1) - 85 g

Note A: If details from a previously issued certificate are being transferred to this RHI emission certificate template, please note that this document must be issued by the testing laboratory as a separate certificate. So the issue date and certificate reference number should be in relation to this certificate using the RHI template, not the issue date and reference number of the original certificate.

Note B: If you are including multiple tested plants on one certificate, please ensure that all sections are completed for each tested plant, and are laid out such that it is clear which details relate to which tested plant. If a type-testing range is included as well, please show clearly which type-testing range relates to which tested plant(s), following the type-testing range ratio rules outlined in 2g.

<sup>2</sup> BS EN303-5:1999 and 2012 explain what should be measured and when.
<sup>3</sup> These standards explain how to make the PM and NOx measurements.