Strojírenský zkušební ústav, s.p.
(Engineering Test Institute, Public Enterprise)
Notified Body 1015
Hudcova 424/56b, 621 00 Brno, Czech Republic

REPORT
on Initial Product Type Testing
30-11665/3

Product:	Cooker burning wood briquettes
Type designation:	SG-75
Versions:	SG-90
Customer:	Senko d.o.o. V. Nazora 22, Štefanec 40000 Čakovec Republic of Croatia
Manufacturer:	Senko d.o.o. V. Nazora 22, Štefanec 40000 Čakovec Republic of Croatia
Responsible employees:	Ing. Jiří Dvořák Ing. Petr Buzek
Report issue date:	2012-06-29
Distribution list:	1 copy to the Engineering Test Institute 1 copy to the Customer

The initial product type testing was conducted pursuant to Council Directive 89/106/EEC, as amended (hereinafter referred to as Directive 89/106/EEC), on the approximation of laws, regulations and administrative provisions of the Member States relating to construction products (the Directive concerned is implemented by Government Regulation 190/2002 Coll., as amended by Government Regulation 251/2003 Coll. and Government Regulation 128/2004 Coll., laying down the technical requirements for construction products bearing the CE marking, hereinafter referred to as Government Regulation 190/2002 Coll.).

The Engineering Test Institute, Public Enterprise, in Brno (hereinafter referred to as SZU in Brno) conducted the activity specified above based on the following documents:
- Order B-43916 of 2012-04-18
- Contract B-43916/30 of 2012-06-15

In relation to harmonized standard EN 12815:2001/A1:2004/AC:2007 (id with ČSN EN 12815:2002/A1:2005/Opr.1:2004/Opr.2:2008/Opr.3:2008/Opr.4:2008), Annex ZA, Table ZA.2 – Conformity demonstration system, cookers are subject to Conformity Demonstration System 3 - see the second option (Item ii), Section 2 of Annex III to Directive 89/106/EEC. The procedures for demonstration of conformity are specified in ČSN EN 12815:2002/A1:2005/Opr.1:2004/Opr.2:2008/Opr.3:2008/Opr.4:2008 (hereinafter referred to as ČSN EN 12815/A1:2005).

Based on the technical assessment of all the product versions, the following (the most complex) product has been selected as the representative sample, i.e.: Cooker burning wood briquettes, type SG-75.

The identical structural design of the critical parts of all the products was assessed. In particular, the following product characteristics were focused on:
- Materials used, structural design
- Control and regulation elements, regulation method
- Dimensions, surface treatment
- Design and capacity
- Emissions
- Efficiency
- Identical technological processes in manufacturing

Based on the findings specified above it may be stated that the assessed versions have no different characteristics with regard to the nature of hazard they constitute; therefore, the results of the tests performed on the selected sample may be used for evaluating the respective characteristics indicated in Table ZA.1, for all the product versions. Individual types differ only in their external dimensions and design; their internal arrangement is identical.

This system complies with the conformity assessment procedure according to Government Regulation 190/2002 Coll., Section 5 (1) (b).

I. Product specification

The cookers burning wood briquettes, types SG-75, SG-90 are intended for preparation of food on a cooking plate and in oven, for heating of the space in which the cookers are placed. The cooker construction is an assembly of stainless steel, and of ceramics. Combustion chamber is fitted with a removable, one-position grate. Primary combustion air supply is by thermostatic regulation. Secondary combustion air supply is regulated by a regulating register under the loading door. The flue can be connected laterally or from the back. These cookers are designed for intermittent operation.

Basic technical specification

(Table 1)

Cooker burning wood briquettes

Type	Main dimensions (mm)			Rated capacity (kW)	Fuel consumption (kg/hour)	Flue diameter (mm)	Operat. draught (Pa)
	Height	Width	Depth				
SG-75	850-920	750	640	7,5	2,0	118	12
SG-90	850-920	900	640	7,5	2,0	118	12

II. Sample tested

The sample indicated in the following table underwent visual inspection, tests and evaluation: (Table 2)

Type	Date	Sample serial number
SG-75	2012-06-28	Prototype

The visual inspection, tests, verifications and evaluation were performed by Mr. Josef Duchan and RNDr. Blanka Watson, at the Manufacturer's site, Senko d.o.o., Štefanec, in June 2012.

- The products fall within the group of products for which Commission Decision 1999/471/EC was issued, as amended by Commission Decision 2002/592/EC.

III. List of submitted technical documents

(Table 3)

	Submitted documentation:
1.	Drawing documentation of cookers, types SG-75, SG-90
2.	Instructions for installation and maintenance of cookers, types SG-75, SG-90
3.	List of replacement parts for cookers SG-75, SG-90

IV. Characteristics indicated in Table ZA.1, tested and evaluated by the Notified Body (Testing Laboratory)

(Table 4)

Characteristics of Table ZA.1		Standard or technical regulation applied	Results - Report page	Evaluation *)
1.	**Fire safety**	See clauses 1.1 ÷ 1.12		
1.1	General design requirements	ČSN EN 12815/A1:2005 Art. 4.2	7	+
1.2	Ash-pan drawer and removal of ash	ČSN EN 12815/A1:2005 Art. 4.8	8	+
1.3	Loading door and closing door	ČSN EN 12815/A1:2005 Art. 4.9	8	+
1.4	Combustion product exhaust branch	ČSN EN 12815/A1:2005 Art. 4.11	8	+
1.5	Combustion air supply	ČSN EN 12815/A1:2005 Art. 4.14	9	+
1.6	Front partitions	ČSN EN 12815/A1:2005 Art. 4.16	9	+
1.7	Grate	ČSN EN 12815/A1:2005 Art. 4.19	10	+
1.8	Cleaning of the appliance heat transfer surfaces, heater and flue	ČSN EN 12815/A1:2005 Art. 4.21	10	+

Characteristics of Table ZA.1		Standard or technical regulation applied	Results - Report page	Evaluation *)
1.9	Temperature in the built-in fuel container	ČSN EN 12815/A1:2005 Art. 5.1	-	0
1.10	Temperature of adjacent flammable materials	ČSN EN 12815/A1:2005 Art. 5.2	14	+
1.11	Oven baking capability	ČSN EN 12815/A1:2005 Art. 6.7	12	+
1.12	Appliances with alternative grate positions	ČSN EN 12815/A1:2005 Art. 6.10	-	0
2.1	**Combustion product emissions**	See clauses 2.1.1 ÷ 2.1.14		
2.1.1	General design requirements	ČSN EN 12815/A1:2005 Art. 4.2	7	+
2.1.2	Ash-pan drawer and removal of ash	ČSN EN 12815/A1:2005 Art. 4.8	8	+
2.1.3	Loading door and closing door	ČSN EN 12815/A1:2005 Art. 4.9	8	+
2.1.4	Combustion product exhaust branch	ČSN EN 12815/A1:2005 Art. 4.11	8	+
2.1.5	Exhaust damper	ČSN EN 12815/A1:2005 Art. 4.12	8	+
2.1.6	Combustion product flow regulation	ČSN EN 12815/A1:2005 Art. 4.13	-	0
2.1.7	Combustion air supply	ČSN EN 12815/A1:2005 Art. 4.14	9	+
2.1.8	Combustion product ducts	ČSN EN 12815/A1:2005 Art. 4.15	9	+
2.1.9	Grate	ČSN EN 12815/A1:2005 Art. 4.19	10	+
2.1.10	Ash-pan drawer and cover/door of ash-pan drawer	ČSN EN 12815/A1:2005 Art. 4.20	10	+
2.1.11	Cleaning of the appliance heat transfer surfaces, heater and flue	ČSN EN 12815/A1:2005 Art. 4.21	10	+
2.1.12	Natural draught operation safety test	ČSN EN 12815/A1:2005 Art. 5.4	-	0
2.1.13	Combustion product temperature	ČSN EN 12815/A1:2005 Art. 6.2	11-14	+
2.1.14	Carbon monoxide emissions	ČSN EN 12815/A1:2005 Art. 6.3	11	+
3.	**Leakage of hazardous substances**	**ČSN EN 12815/A1:2005 ZA 1**	7	+
4.	**Surface temperature**	See clauses 4.1 ÷ 4.5		
4.1	General design requirements	ČSN EN 12815/A1:2005 Art. 4.2	7	+
4.2	Temperature in built-in fuel container	ČSN EN 12815/A1:2005 Art. 5.1	-	0
4.3	Temperature of adjacent flammable materials	ČSN EN 12815/A1:2005 Art. 5.2	14	+
4.4	Service tools	ČSN EN 12815/A1:2005 Art. 5.3	13	+
4.5	Appliances with alternative grate positions	ČSN EN 12815/A1:2005 Art. 6.10	-	0

Characteristics of Table ZA.1		Standard or technical regulation applied	Results - Report page	Evaluation *)
5.	**Heat capacity / energy efficiency**	See clauses 5.1 ÷ 5.7		
5.1	Chimney draught	ČSN EN 12815/A1:2005 Art. 6.1	11-14	+
5.2	Efficiency	ČSN EN 12815/A1:2005 Art. 6.4	11	+
5.3	Fuel supply intervals at rated heat capacity	ČSN EN 12815/A1:2005 Art. 6.5	11	+
5.4	Rated heat capacity	ČSN EN 12815/A1:2005 Art. 6.6	11	+
5.5	Heat stability and combustion process restoration	ČSN EN 12815/A1:2005 Art. 6.8	-	0
5.6	Test of the cooking plate heating-up period	ČSN EN 12815/A1:2005 Art. 6.9	12	+
5.7	Appliances with alternative grate positions	ČSN EN 12815/A1:2005 Art. 6.10	-	0

*) Evaluation: + ... Requirement fulfilled. 0 ... Requirement does not apply to the product concerned.

V. Conclusion

It ensues from examination of the submitted technical documentation and from verifications, tests and evaluations performed that the products

Cookers burning wood briquettes type SG-75 (version: SG-90)

meet the respective characteristics indicated in Table ZA.1, tested and evaluated by the Notified Body (Testing Laboratory).

Measuring and test equipment:

No.	Name	Serial (inventory) number:	Calibration valid until:	Accuracy
1.	Barometer	112541	11.2013	see Calibration Sheet 6013-KL-K011-08
2.	Thermometer, humidity meter – type A2690-8	H08080274	08.2012	see Calibration Sheet 27.08.2008
3.	Weighing machine, Ohaus CH30R11	0020742-6CH	06.2013	see Calibration Sheet 2009-100-01
4.	Chronometer	990806	10.2012	see Calibration Sheet 1816E-02
5.	Agilent measuring centre	MY 41022529	06.2014	see Calibration Sheet 1-0036 / 09-06
6.	Flow meter	65341271	05.2014	see Calibration Sheet 95000151168
7.	Calliper	115884	04.2013	see Calibration Sheet KL-D-702/05/07
8.	Combustion product analyser, type Nova 2000 (incl. measurement of temperature and draught)	010277	10.2014	see KL 24.10.08
9.	Manometer	LPM-02-07	09.2013	see Calibration Sheet 2-0111 / 09-10
10.	Elemental analyser, type PE 2400 CHNS	022107	x	+

Note: ×... Verified using calibration standards prior to measurement
+ ... ± 5% of the values measured

Measurement uncertainty

Parameter measured	Measurement uncertainty
Combustion product analysis	
CO	up to 6% of the measured value
CO_2	up to 2% of the measured value
Temperature	
of combustion products	up to 5 K
of ambient in the room	up to 1.5 K
of surface	up to 2 K
of parts making contact	up to 2 K
Weight	
of fuel consumption	± 20 g
of solid combustion residues	± 5 g
of fuel supply ≤ 7.5 kg	± 5 g
> 7.5 kg	± 10 g

"The above-specified extended measurement uncertainties are calculated as a factor of the measurement uncertainty and the extension coefficient, k=2, corresponding to the coverage certainty of 95% for standard classification. The uncertainties do not reflect the impact of sample taking and lack of homogeneity. The standard uncertainty was determined in accordance with Document EA 4/02."

Evaluated requirement: **Structural safety**
Requirement specification: ČSN EN 12815/A1:2005 Art. 4 ÷ 4.21
Sample evaluated: **Cookers burning wood briquettes type: SG-75 (version: SG-90)**
Evaluation results: see Table below

Required product properties	Requirement specification	Result of evaluation	Note
ČSN EN 12815 CHANGE A1:2005 Art. :			
Materials, construction and design	4		
General design requirements			
In compliance with the corresponding tests, the shape and dimensions of the individual components and fittings and the manner of design and manufacture (in the event of on-site installation, also the manner of assembly and installation) must ensure operability of the appliance, must be resistant to the corresponding mechanical, chemical and thermal stress, and must operate in a reliable and safe manner so that combustion products harmful to health cannot escape under normal operating conditions into space in which the appliance is placed. The glowing fuel must not fall out of the appliance.		+	
Components, e.g. covers, control elements, safety devices and electric fittings must be arranged in a way ensuring that the temperature of their surfaces, under test conditions described in A.4.9, shall not exceed the temperature determined either by the manufacturer or by the applicable standard for the component.		+	
No part of the appliance shall be made of asbestos nor shall it contain asbestos. Solders containing cadmium may not be used in 1 brazing.		+	
If thermal insulation is used, it must be made of inflammable material and in the given position, it must provide protection of health.	4.2	+	Mineral wool, type BS-15, Knauf Isulation d.o.o; sealing rope, 10 mm dia., Bipas-System
NOTE Thermal insulation shall be resistant to standard thermal and mechanical stresses.		+	
The parts requiring regular replacement and/or removal must be designed or marked in a way precluding incorrect assembly.		+	
Parts with sealing surfaces must be assembled in a safe manner (e.g. using bolts, seals or welds) in order to prevent the possibility of entry or escape of air, water or combustion products.		+	
If the sealing is made by means of refractory cement, this cement must be strengthened by the adjacent sealing metal surfaces.		+	Type, Fobet FB-4/S, Kremen d.d.
If the appliance is fitted with a heater, the heater body and its structural materials must meet the requirements for the materials, construction and intended use, according to Art. 4.3 to 4.6.		0	
Heater, if used, must be operable and safe under the max. permissible operating pressure of water specified by the manufacturer, and it must meet the requirements specified in Art. 5.5.		0	

Required product properties	Requirement specification	Result of evaluation	Note
Ash-pan drawer and removal of ash Service tools for removal of solid combustion residues from the appliance must be provided. If an ash-pan drawer is used, its volume must be min. 0.75 dm^3 per one kW of rated capacity in the case of the appliances without a heater, and 0.3 per one kW of rated capacity in the case of appliances with a heater. Sufficient space above this drawer must be preserved in order not to hinder the required flow of the primary combustion air through the grate or through the fuel layer. Whenever the ash-pan drawer is placed in the appliance, it must be positioned so as not to hinder free flow of the primary combustion air and so as not to hinder the regulation of the primary combustion air supply. NOTE: The ash-pan drawer must be designed and made in such a way, that it catches effectively the solid combustion residues falling through the grate, and that easy and safe removal, transport and emptying while hot, using the service tools supplied, without undesirable spillage of the solid combustion residues is ensured.	4.8	+	
Loading door and closing door The loading and closing doors must be designed in a way ensuring their reliable tightness when closed. The door sealing must be either metal-to-metal, or it must be made of a resilient non-flammable material. Devices ensuring that the closure of the door sealed with resilient non-flammable material must be provided. Door in open position must not reduce the opening for stoking and it must be possible to open the door to an angle more than 90°. If the loading door is fitted in the cooking plate, the door must be removable or it must be possible to open it to angle more than 90°. NOTE: Designing the air supply openings near the door is permitted.	4.9	+	
Combustion product exhaust branch The combustion-product exhaust branch must be designed to ensure gas-tight joint between the flue and the appliance. If the flue is slid over the combustion-product exhaust branch, the overlap must be min. 40 mm. If the flue is inserted into the combustion-product exhaust branch, the overlap must be min. 25 mm. NOTE: As a precaution, it is recommended to seal the flue inserted into the combustion product exhaust with heat-resistant sealing rope and/or sealing compound.	4.11	+	Laterally or at the back Ø 118 mm Length 100 mm
Exhaust damper Any built-in exhaust damper must retain each of its set positions and it must not close off the combustion chamber from the combustion-product exhaust branch. If a removable exhaust damper is designed, it must be designed or marked in a way precluding its incorrect installation. Any type of setting control of exhaust damper must be marked legibly and indelibly, so that the operator can clearly see the position of the exhaust damper.	4.12	+	Firing-up function Drawbar with a catch

Required product properties	Requirement specification	Result of evaluation	Note
Combustion product flow regulation If an exhaust damper is used, it must be of a design preventing the closing of the entire flue cross section. The exhaust damper must be easily regulable, and must feature an opening of at least 20 sq. cm or 3% of its cross-section area, whichever is greater. The setting of the position of the exhaust damper must be evident to the operator. If a draught stabilizer is used, the requirement for the smallest cross-section area does not necessarily apply, but the equipment must be easily accessible for cleaning.	4.13	0	
Combustion air supply	4.14		
Primary combustion air supply regulator The appliance must be provided with thermostatically controlled regulation of primary combustion air supply, or with manual regulation of primary combustion air supply. Manual regulation of the primary air supply is permissible only in appliances with the capacity of up to 7.5 kW. The setting control must be clearly visible and must be marked in a durable manner so that its operation is easily understandable.	4.14.1	+	Thermostatic. regulator, type SAL, Rathgeber
The design must ensure that in standard operating conditions of the appliance, ash or unburned fuel cannot obstruct the movement or closing of the combustion air supply regulator.		+	
The "cold" position of the primary combustion air supply must be clearly visible and the adjustment must be described in the operating instructions.		+	
The temperature regulator must be equipped with variable temperature range and must be designed to fit into the hot-water section directly or indirectly (well). The reservoir must be positioned so that the regulator reads the temperature of the outlet water.		0	
Secondary combustion air supply regulation If the regulation of the secondary combustion air supply is used, the point of entry of the air must be designed so as not to obstruct the airflow provided the fireplace is filled up with the volume of fuel recommended by the manufacturer.	4.14.2	+	Manual regulation by regulating register
Combustion product ducts	4.15		
It must be possible to clean the combustion product ducts of the appliance completely, using readily available tools or brushes unless the manufacturer of the appliance has delivered service cleaning tools or brushes.		+	
The smallest dimension of the combustion product duct must be 30 mm except when it is permitted to reduce the duct to a minimum of 15 mm in appliances designed to burn only fuel other than black coal and peat briquettes, and when access openings for cleaning of the combustion product ducts are provided.		+	

Required product properties	Requirement specification	Result of evaluation	Note
Front partitions If the appliance is equipped with removable front partitions, these must be designed to prevent incorrect re-installation and accidental shifting. NOTE: The front partitions must be designed to catch burning fuel or ash during standard operation of the appliance, and, especially, when fuel is added or ash removed.	4.16	+	
Grate Grate, excepting the grate with water-cooled grate bars, must be readily removable and it must be designed or marked to ensure correct installation. The appliance must be fitted with a device for removal of ash if the fuel other than wood is burned. During removal of ash, the grate must not change its position.	4.19	+	Cast iron grate
NOTE 1: Preferably, the design should enable the removal of ash with the ash-pan and the loading doors closed. The operations performed in order to remove ash must not require excessive effort.		0	
NOTE 2: If it is necessary to remove the loading door or the ash-pan cover, when removing ash from fireplace, the appliance must be designed so, as to prevent undesirable spillage of ash or falling of the fuel out of the appliance.		0	
Ash-pan drawer and cover/door of ash-pan drawer Ash-pan drawer must be designed and located so as not to limit the flow of primary combustion air. Ash-pan drawer cover/door must be designed so, as to – preclude the solid combustion residues preventing its being closed; – prevent its unintentional unfastening; – allow its safe control with service tools under higher temperatures; – ensure the sufficient size of the ash-pan drawer to allow placement of an ash pan.	4.20	+	
Cleaning of heat transfer surfaces, heater and flue All heat transfer surfaces must be accessible from the combustion product side for the purpose of inspection and cleaning. Service tools for cleaning of combustion-product exhaust branch and of the flue must be supplied. The procedure and cleaning method must be described in operating instructions.	4.21	+	

*) Result of evaluation:
+.... Requirement fulfilled.
0.... Requirement does not apply to the product concerned.
-.... Requirement not fulfilled.
x.... Requirement not assessed.

Evaluation drafted by:	Josef Duchan, RNDr. Blanka Watson	Date:	2012-06-29	Signed:
Reviewed by:	Ing. Stanislav Buchta	Date:	2012-06-29	Signed:

Accredited test number:	**1029 Test title: Heat capacity and calorific efficiency test** **1030 Test of oven temperature rise and of oven baking capability** **1032 Combustion efficiency test**
Test method:	ČSN EN 12815/A1:2005 Art. A.4.4, A.4.5, A.4.6, A.4.7, A.4.8, A.4.9, A.4.10, A.4.11
Sample tested:	**Cooker burning wood briquettes type: SG-75 (version: SG-90C)**
Measuring equipment:	Nos. 1 ÷ 10, see Table – Measuring and test equipment

Date of testing:	2012-06-28	t_{ok} = see Tab.	^{0}C	r.v. = 45	%	p_a = 101	kPa
Place of testing:	At SZU ☐	At Manufacturer's	x	At Customer's ☐		*Other:*	

Variables measured and calculated: Rated capacity	**Unit**	**Tests**			**Limit according to:**	**Note**
		1	**2**	**Average**	**ČSN EN 12815**	
Fuel used: Eco briquettes	mm	93 x 153 x 65				
Caloric value	MJ/kg	17,768				
Water content	%	7,61				
CO_2 max	%	20,05				
Combustion air setup – primary/secondary	%	aut. / 100				
Fuel consumption	kg/hour	2,05	2,09	2,07		
Achieved input	kW	10,12	10,32	10,22		
Ambient temperature in the room and combustion air temperature	°C	30	31	31		
Chimney draught	Pa	12	12	12		
Combustion product average temperature	°C	269	255	262		
CO_2	%	6,93	5,98	6,45		
CO – measured	%	0,17	0,11	0,14		
CO – at O2 = 13%	%	0,1833	0,1362	0,1615	≤1.0	
Chimney loss	%	25,07	27,01	25,97		
Loss of gas underburning	%	1,59	1,19	1,41		
Loss of solid underburning	%	0,50	0,50	0,50		
Efficiency	%	72,84	71,30	72,12	≥60%	
Total heat capacity achieved	kW	7,37	7,35	7,37		
Rated heat capacity (water)	kW	7,5				
Mass flow rate of dry combustion products	g/s	9,8	11,6	10,6		

Variables measured and calculated: Rated capacity	Unit	Value measured	Limit according to ČSN EN 12815	Note
Test of cooking plate heating time				
Warming-up of water in a cooking pot	°C	75		
Heating period on cooking plate	min	12	max. 15	
Oven temperature				
Average temperature at the oven geometrical centre	°C	244	230 ± 30 °C	
Maximum temperature at the oven geometrical centre	°C	259		
Course of baking: Oven pre-heating period approx. 120 min Stabilization of oven temperature to 230°C Baking tray with pastry placed at the second position from the bottom. First side baking time approx.8 min., then baking tray turned by 180°, and the other side was baked for approx.3 min. Total baking time 11 min.				
Oven baking capability:	After 11 minutes, the pastry was baked OPTIMALLY according to the scale.			

Fuel analysis

Fuel type	Wood briquettes			
Analytical indicator	**Symbol**	**Unit**	**Value**	**Uncertainty**
Caloric value	Q_i	[$MJ.kg^{-1}$]	17.77	0.14
All water in original condition	W^r_t	[% by weight]	7.61	0.01
Ash	A	[% by weight]	0.36	0.02
Carbon	C	[% by weight]	49.59	0.25
Hydrogen	H	[% by weight]	5.81	0.10
Nitrogen	N	[% by weight]	0.15	0.10
Sulphur	S	[% by weight]	0	0.01
Chlorine	Cl	[% by weight]	0.013	0.01
Oxygen - calculation for 100%	O	[% by weight]	36.47	
CO_2 max	$CO_{2\,max}$	[% vol.]	20.10	

Note: Sample in original condition

Tested by: Josef Duchan, RNDr. Blanka Watson Date: 2012-06-29 Signed:

Reviewed by: Ing. Stanislav Buchta Date: 2012-06-29 Signed:

Accredited test number: **1028** **Test title: Combustion products and surface temperatures**

Test method: ČSN EN 12815/A2:2005 Art. A.4.9, A.4.16

Sample tested: **Cooker burning wood briquettes type: SG-75 (version: SG-90C)**

Measuring equipment: Nos.1 ÷ 5, 8, see Table – Measuring and test equipment

Test results:

Date of testing: 2012-06-28	t_{ok} = see Tab. ^{0}C	r.v. = 45 %	p_a = 101 kPa
Place of testing: At SZU ☐	At Manufacturer's x	At Customer's ☐	*Other:*

Measured point	**Material**	**Temperature rise (K)**	
		Measured	**Limit acc. to ČSN EN**
Loading door handle	Metal	28	35
Ash-pan drawer door handle	Metal	16	35
Oven door handle	Metal	5	60
Primary air regulation	Plastic	4	35
Starting shutter drawbar	Metal	14	35

Average temperature of combustion products after exhaust branch	°C	277	-

*) The space underneath the cooker may not be utilized as fuel storage without additional insulation of the cooker bottom to temperature rise value of 65 K max.
A glove is used for manipulation with regulation elements ("cold hand").

Tested by: Josef Duchan, RNDr. Blanka Watson Date: 2012-06-29 Signed:

Reviewed by: Ing. Stanislav Buchta Date: 2012-06-29 Signed:

Accredited test number: **1035** **Test title: Overload test - Temperature rise of adjacent flammable materials**

Test method: ČSN EN 12815/A2:2005 Art. A.4.9 a A.4.16

Sample tested: **Cooker burning wood briquettes type: SG-75 (version: SG-90C)**

Measuring equipment: Nos.1 ÷ 5, 8, see Table – Measuring and test equipment

Test results:

Date of testing:	2012-06-28		t_{ok} = see Tab. ^{0}C		r.v. = 45 %	p_a = 101	kPa
Place of testing:	At SZU	☐	At Manufacturer's	x	At Customer's ☐	*Other:*	

Rated capacity test (A.4.7)

Test	Ambient temperature	Draught in chimney	Maximum temperature rise			Fuel quantity	Note
			Test corner	Floor	Limit		
-	°C	Pa	K			kg/hour	
1	31	12	22	20	65	2,07	

Thermal overload test (A.4.9.1)

Test	Ambient temperature	Draught in chimney	Maximum temperature rise			Fuel quantity	Note
			Test corner	Floor	Limit		
-	°C	Pa	K			kg	
1.	31	15	25	26	65	2,41	Appliance without any permanent deformations or damage

NOTE: Test corner was placed 200 mm behind the appliance and next to it.
The tables give maximum measured values.

Tested by: Josef Duchan, RNDr. Blanka Watson Date: 2012-06-29 Signed:

Reviewed by: Ing. Stanislav Buchta Date: 2012-06-29 Signed:

VI. List of referenced documentation

- Order B-43916 of 2012-04-18
- Contract B-43916/30 of 2012-06-15
- Source materials mentioned in Table 3 herein
- ČSN EN 12815:2002/A1:2005 – Residential cookers fired by solid fuel - Requirements and test methods
- Directive 89/106/EEC, as amended
- Government Regulation 190/2002 Coll., as amended

The persons stated below are accountable for the accuracy of the above-specified data:

NOTIFIED BODY 1015 STROJÍRENSKÝ ZKUŠEBNÍ ÚSTAV, S.P. CZ

Ing. Alois Randýsek
Director for Certification

Ing. Aleš Onderek
Director for Testing