



## Declaration of Performance

No. DOP: 0432- CPR-00095-110



0432

1. Unique identification code of the product types:

**Rigid liners and connecting flue pipes made of stainless steel  
for standard applications "System MKS" EN 1856-2: 2009**

2. Identification of the construction product, in accordance with Article 11 § 4:

### **System MKS**

Version 1	T450 – N1 – D – V2	– L50060 – G NM – L50080 – G NM – L50100 – G NM	DN(060- 400) DN(450- 500) DN(600- 1000)
Version 2	T450 – N1 – W – V2	– L50060 – O NM – L50080 – O NM – L50100 – O NM	DN(060- 400) DN(450- 500) DN(600- 1000)
Version 3	T450 – N1 – D – V3	– L50060 – G NM – L50080 – G NM – L50100 – G NM	DN(060- 400) DN(450- 500) DN(600- 1000)
Version 4	T450 – N1 – D – V2	– L50050 – G NM	DN(060- 250)
Version 5	T450 – N1 – W – V2	– L50050 – O NM	DN(060- 250)
Version 6	T450 – N1 – D – V2	– L99050 – G NM – L99060 – G NM – L99080 – G NM – L99100 – G NM	DN(060- 250) DN(300- 400) DN(450- 500) DN(600-1000)
Version 7	T450 – N1 – W – V2	– L99050 – O NM – L99060 – O NM – L99080 – O NM – L99100 – O NM	DN(060- 250) DN(300- 400) DN(450- 500) DN(600-1000)
Version 8	T450 – N1 – D – Vm	– L20050 – G NM – L20060 – G NM – L20080 – G NM – L20100 – G NM	DN(060- 250) DN(300- 400) DN(450- 500) DN(600-1000)
Version 9	T450 – N1 – W – Vm	– L20050 – O NM – L20060 – O NM – L20080 – O NM – L20100 – O NM	DN(060- 250) DN(300- 400) DN(450- 500) DN(600-1000)
Version 10	T450 – N1 – D – V2	– L99040 – G NM	DN(060- 200)
Version 11	T450 – N1 – W – V2	– L99040 – O NM	DN(060- 200)

*NM – not measured value means 3 x nominal diameter at least 375 mm*

3. Use or intended use of the construction product in accordance with the relevant harmonized technical specification as provided by the manufacturer:

**Evacuation of combustion products from the furnace to the outside atmosphere for standard applications (negative pressure), for gaseous fuels, heating oil and solid fuels (dry)**

4. Name, company name or trademark and contact address of the manufacturer, in accordance with Article 11 § 5:

**MK Sp. z o.o.**

ul. Wiśniowa 24

PL 68-200 Żary

Tel: +48684581919; Fax: +48684581914

e-mail: [sekretariat@mkzary.pl](mailto:sekretariat@mkzary.pl)

5. Name and contact address of the authorized representative whose mandate covers the tasks specified in Article 12 §2:

**not applicable**

6. The system or systems of assessment and verification of constancy of performance of construction product in accordance with Annex V:

**System 2+ and System 4**

7. Notified body certifying the factory production control No 0432



has carried the initial inspection of the factory and control of factory production and performs the continuous surveillance, assessment and approval of factory production control and on the 15.04.2016 has issued the compliance certificate Nr 0432-CPR-00095-110 for the factory production control.


8. **Declared performance in accordance with EN 1856-2:2009, annex ZA**

Essential characteristics	Performance	Comments
<b>Materials and sheet thicknesses</b>		
<b>Exhaust pipe</b>	<b>Version 1, 2 and 3</b> DN (60-400) 1.4404; 1.4571 from 0,6 mm (minimum 0,54 mm) DN (450 – 500) 1.4404; 1.4571 from 0,8 mm (minimum 0,72 mm) DN (600 – 1000) 1.4404; 1.4571 from 1,0 mm (minimum 0,90 mm) <b>Version 4 and 5,</b> DN (60-250) 1.4404; 1.4571 0,5 mm (minimum 0,45 mm) <b>Version 6 and 7</b> DN (60-250) 1.4521 0,5 mm (minimum 0,45 mm) DN (300-400) 1.4521 0,6 mm (minimum 0,54 mm) DN (450-500) 1.4521 0,8 mm (minimum 0,72 mm) DN (600-1000) 1.4521 1,0 mm (minimum 0,90 mm) <b>Version 8 and 9</b> DN (60-250) 1.4301 0,5 mm (minimum 0,45 mm) DN (300-400) 1.4301 0,6 mm (minimum 0,54 mm) DN (450-500) 1.4301 0,8 mm (minimum 0,72 mm) DN (600-1000) 1.4301 1,0 mm (minimum 0,90 mm) <b>Version 10 and 11</b> DN (60-200) 1.4521 0,4 mm (minimum 0,36 mm)	
<b>Thermal insulation</b>	<b>Version 3</b> <b>30 mm</b> pipe section insulation [density: (120 -/+15) kg/m <sup>3</sup> ]	
<b>Mechanical strength</b>		
<b>Compressive strength</b>	<b>Version 1 - 11</b> DN (60-250): to 30 m DN (300-500): to 20 m DN (600-1000): to 15 m	For more information, see the manual
Segments of the chimney, fittings and supports		
<b>Non-vertical installation</b>	<b>Version 1 - 11</b> 3 m at 45°	The maximum distance between two supports
<b>Fire resistance</b>	<b>Version 1, 3, 4, 6, 8, 10: YES</b> DN (060-1000) : to T450 – G NM 3 x DN , at least 375 mm <b>Version 2, 5, 7, 9, 11: NOT</b> DN (060-1000) : to T450 – O NM 3 x DN , at least 375 mm	NM – not measured

<b>Tightness</b>	N1	Working in negative pressure
<b>Flow resistance</b> Fittings and terminals	According to EN 13384-1, R = 1 mm	Normative value: see the method of calculation
<b>Thermal resistance</b>	Version 3 0,56 m <sup>2</sup> K/W	Specified at 200 °C
<b>Resistance to thermal shock</b>		
<b>Heat load at nominal temperature</b>	T450	Test temperature 550°C
<b>Sootfire resistance</b>	Version 1, 3, 4, 6, 8, 10: YES (designation G)	Tested at 1000°C (30 min.)
	Version 2, 5, 7, 9, 11: NOT (designation O)	Test temperature 550°C
<b>Durability</b>		
<b>Water vapor diffusion and water resistance</b>	Version 2, 5, 7, 9, 11 YES	
<b>Condensate penetration resistance</b>	Version 2, 5, 7, 9, 11 YES	
<b>Corrosion resistance</b>	Version 3: V3	For gas, fuel oil and solid fuels (dry running)
	Version 1, 2, 4, 5, 6, 7, 10, 11: V2	For gas, fuel oil and wood (open furnace)
	Version 8, 9: Vm	For gas
<b>Freeze-thaw resistance</b>	YES	
<b>Additional information</b>		
<b>Carrying away of condensate</b>	(D) M251 instruction of Sewage Disposal Methods Association	Necessary neutralization of sewage
<b>Storage conditions</b>	Do not store in corrosive environment	
<b>Methods of cleaning</b>	Do not use the tools of black steel	
<b>Position of cleaning openings</b>	(D): According to DIN 18 160	Observe the national regulations
<b>Identification of flue systems</b>	(D): According to DIN 18 160 Durable plate, mounted on installation, housing or casing	Observe the national regulations
<b>Protection against contact</b>	Labeling or spacers at temperatures ≥ 70 °C	EN 1856-1
<b>Direction of flow</b>	Core pipe female socket upwards	
<b>Installation and assembly</b>	Follow the instructions	

9. The performance of the product identified in points 1 and 2 is consistent with the declared performance in point 8.  
This declaration of performance is issued under the sole responsibility of the manufacturer mentioned in point 4.

On behalf of the manufacturer signed:

  
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Kinga Pachnik – Managing Director

  
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Ireneusz Koman – Plant Director

Żary 09-05-2016