



# „ITEM Consult” Ltd

Sofia 1220, 8, Istorica Slavianobulgarska Blvd., Bulgaria

CERTIFICATION, TESTING, SUPERVISION OF DEVICES WITH INCREASED RISK

№ДИ-202/23.06.2023

## ASSURANCE

Type Pyrolysis solid fuel boiler with manual loading  
Manufacturer „Mareli Systems” Ltd  
Sofia, Lyulin district, bl. 821, ap.1  
Model **LCG 40**  
Procedure Testing EN 303-5:2012  
Requirements EN 303-5:2012 Class 5

### TEST RESULTS

Stoking Method: Fuel: Seasonal beech wood  
boiler with manual loading

The test was conducted with seasonal beech wood (Test report for the fuel No. 10648/31.08.2022) and the following results were obtained:

Measurement		Unit	Limits
<b>Nominal output</b>	<b>40.18</b>	<b>kW</b>	
CO /10% O <sub>2</sub> /	140.19	mg/Nm <sup>3</sup>	700
Dust /10% O <sub>2</sub> /	5.42	mg/Nm <sup>3</sup>	60
OGC /10% O <sub>2</sub> /	3.07	mg/Nm <sup>3</sup>	30
NOx /10% O <sub>2</sub> /	192.16	mg/Nm <sup>3</sup>	-
Efficiency	93.07	%	88.60
<b>Reduced output</b>	<b>19.76</b>	<b>kW</b>	
CO /10% O <sub>2</sub> /	176.89	mg/Nm <sup>3</sup>	700
Dust /10% O <sub>2</sub> /	7.44	mg/Nm <sup>3</sup>	60
OGC /10% O <sub>2</sub> /	7.66	mg/Nm <sup>3</sup>	30
NOx /10% O <sub>2</sub> /	187.38	mg/Nm <sup>3</sup>	-
Efficiency	94.52	%	88.30

**CONCLUSION:** Heating device „Pyrolysis solid fuel boiler with manual loading **LCG 40**” MEETS THE REQUIREMENTS OF BDS EN 303-5:2012 for CLASS 5 for the tested parameters.

The present Assurance has been issued on the basis of Test Report № 039/10.04.2023, issued by the Testing laboratory of Item Consult LTD with Certificate BSA №: 124-LI/11.02.2022 and Public Works of the Republic of Bulgaria in accordance with BS EN ISO / IEC 17025.

2023-06-23

Manager:.....

  
/M. Sc. L. Vasilev /  
София