

ECOLOGICAL BOILER FOR SOLID FUELS

CLASS „A”


Certificate no 934

Customer: ZAKŁAD METALOWO-KOTLARSKI „SAS”
28-100 Busko-Zdrój, Owczary, ul. Przemysłowa 3

Construction: Heating boiler with automatic fuel feeding system

Type of boiler: „SAS AGRO-ECO” output range 15 ÷ 100 kW

Fuel: Biomass (pellets)

Boiler energy and emission characteristic (tested output range)

	Parameter	Unit	Achieved values	Criteria
THERMAL EFFICIENCY	Relative thermal load (with respect to nominal output)	%	100±8	-
	Boiler energy efficiency	%	87,7 ÷ 88,8	≥ 80
EMISSION INDICES	CO	mg/m ³	255 ÷ 580	≤ 1200
	NO ₂	mg/m ³	210 ÷ 245	≤ 400
	Dust	mg/m ³	50 ÷ 75	≤ 125
	TOCs	mg/m ³	55 ÷ 60	≤ 75
	16 PAHs acc. to EPA inc. B(a)P	mg/m ³ µg/m ³	0,1 ÷ 0,2 2,1 ÷ 14,6	≤ 5 ≤ 75


FINAL STATEMENT:

Tested boilers fulfill IChPW criteria for „ecological safety sign” for solid fuels boilers in class „A”

Energy and emission indices were elaborated acc. to standard PN-EN 303-5:2002 chapter 5.7-5.10 and technical procedures of IChPW Laboratory of Combustion no. Q/ZS/P/15/01/B and Q/ZS/P/15/02/B


Certificate loses its validity in case of changes in the production phase which can have influence on emission indices or boiler energy efficiency.

DIRECTOR OF CIT


Jarosław Zuwała PhD

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DIRECTOR OF INSTITUTE


Marek Ściażko PhD



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AB 081



GROUP OF ICHPW LABORATORIES
CERTIFICATE of ACCREDITATION PCA No AB 081
in range of energy and emission testing of solid fuels and boilers

Certificate of testing for „ecological safety sign”