

**AVTOVO COMBINED HEAT AND POWER PLANT
(CHP-PLANT-15)
BRANCH OF «NEVSKY» OJSC «TGC-1»
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«Northern Interindustry Company
«The Alternative» Ltd
For the attention of
Deputy Director General for Development
A.E. Lebedev

About the results of operation

I forward you the information about CMKA® heat exchange elements efficiency and operation results of TGM-84Б boiler unit No.7 of power plant-15, Nevsky branch, «TGC-1» OJSC in year 2011.

Enclosure: List of main parameters.

Chief Engineer

I.V. Stupakov

List of main parameters of boiler functioning (ТГМ-84Б No.7)

No.	Parameter	Dimension	Until repair	After repair with the installation of CMKA [®] heat exchange elements into RAH
			April, 2011	December, 2011
1.	Type of RAH – ПБП-54			
2.	Steam capacity	tons/hour	329	329
3.	Type of fuel	gas/ mazut	gas	gas
	Fuel consumption	m ³ /h	28500	35700
	Calorie content of fuel	kcal/m ³	7988	8065
4.	Air leakage into furnace	%	18	18
	Coefficient of excess air at furnace outlet		1.11	1.12
	Coefficient of excess air before RAH		1.26	–
	Coefficient of excess air after RAH		1.66	1.48
5.	Gas temperature at RAH inlet	°C	–	–
	Air temperature at RAH inlet	°C	47	40
	Gas temperature at RAH outlet	°C	–	–
	Air temperature at RAH outlet	°C	219	213
6.	RAH resistance by gas	mm of water column	80/82	91/77
	RAH resistance by air	mm of water column	46/105	95/90
7.	Temperature of flue gases	°C	137	122
	Heat loss with flue gases	%	6.88	6.53
	Boiler gross efficiency	%	92.35	93.58

Last name Alexeeva

Position Engineer