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ANALYSIS OF EXPERIMENTAL RESULTS OF SONIC CLEANING SYSTEM IN OIL SHALE BOILER

V. BOROVIKOV[*(a)], J. KLEESMAA[**(b)], T. TIIKMA[(c)]

[(a)] Enprima Estivo Ltd.
8-303 Väike-Ameerika St., 10129 Tallinn, Estonia [**]
[(b)] Pentagra Ltd.
16B Kastani St., 10912 Tallinn, Estonia
[(c)] Department of Thermal Engineering
Tallinn University of Technology
116 Kopli St., 11217 Tallinn, Estonia

The technology of sonic cleaning underwent an extensive development during the last 10-15 years. That technology belongs to the cleaning methods of weak (soft) effect on the boiler construction. It prevents the formation of friable ash deposits. When using sonic cleaning, the sintering properties of ash deposits must be taken into account. The paper deals with some experience of using sonic cleaning system in oil shale-fired power plants of Estonia and explains some theoretical aspects of operating of the sonic cleaning system. The corresponding experiments and calculations were performed or supervised by Department of Thermal Engineering of TUT with co-operation of Narva Power Plants, Ahtme Power Plant, Pentagra Ltd. and Kockum Sonics AB (Sweden).

[*] Corresponding author: e-mail *vitali.borovikov@enprima.com*
[**] E-mail *pentagra@datanet.ee*