

**LABORATORY TESTS OF HIGH-TEMPERATURE
CORROSION OF STEELS B-407,
X8CrNiNb1613 AND X8CrNiMoNb1616
UNDER IMPACT OF ASH FORMED
AT PULVERIZED FIRING OF OIL SHALE**

H. TALLERMO*, I. KLEVTSOV
T. BOJARINOVA, A. DEDOV

Department of Thermal Engineering
Tallinn University of Technology
116 Kopli St., Tallinn 11712, Estonia

High-temperature corrosion of three austenitic boiler steels, B-407, X8CrNiNb1613 and X8CrNiMoNb1616, was tested experimentally in laboratory in conditions of superheater of oil shale boiler in the presence of chlorine-containing external deposits. The empirical kinetic equations for calculation of corrosion depth depending on operational time and temperature were established. The best corrosion resistance was shown by steel X8CrNiMoNb1616.

* Corresponding author: e-mail harrit@sti.ttu.ee