Autor(en) des Beitrags: Dias, P.; Becher, V.; Goanta, A.; Spliethoff, H.

Titel des Beitrags: Oxyfuel boiler design with Controlled Staging with Non-Stoichiometric Burners concept.

Abstract: In the context of CCS technologies, the oxyfuel provides a promising option. One drawback is the large necessary amount of recirculation of cold flue gases into the boiler to avoid high flame temperatures. This paper presents the boiler design with a new oxyfuel concept. The new concept of "Controlled Staging with Non-stoichiometric Burners (CSNB)" enables the reduction of the recirculation rate, while keeping the temperature inside the boiler at feasible levels. Two boiler designs will be compared, one for the new CSNB concept and one for a conventional oxyfuel boiler with high recirculation rates. A recirculation rate of 57

Kongress- / Buchtitel: 9th European Conference on Industrial Furnaces and Boilers (INFUB-9)

Jahr: 2011

Occurences: Einrichtungen > Fakultäten > Fakultät für Maschinenwesen > Institut für Energietechnik > Lehrstuhl für Energiesysteme (Prof. Spliethoff) > Publikationen > 2011