

Materials Performance in Black Liquor Gasification Systems*

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Abstract

Combined cycle black liquor gasification offers the potential to recover an increased amount of energy from black liquor which is a "green fuel" that is available in significant quantities in North America. There are two distinctly different gasification processes that are being implemented; a low-temperature process for which the temperature is kept below the melting point of the salts, and a high-temperature process that operates well above the salt melting point. In both gasifier types, containment materials are formidable obstacles to the successful deployment of these systems. Laboratory studies and in-plant tests are providing information to guide selection of materials for these systems.

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