



1992 **Title:** **Recovery Boiler Fireside Capacity: An Update of Theory and Practice**

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Presented: 1992 TAPPI Engineering Conference
TAPPI Journal, Vol. 76, No. 9, September 1993

Ref. No.: TP1992C

ABSTRACT:

Increases in recovery boiler firing capacity can often be obtained through upgrade of the air and liquor delivery systems to achieve improved combustion. These increases can be achieved without pressure part modifications of the convective sections of the boiler. Reduced water wash frequency, less total reduced sulfur (TRS) emissions, and improved reduction efficiency are other benefits that result from combustion improvements. The means of accomplishing improved combustion in recovery boilers has been an area of intense interest over the past few years as recovery boiler capacity has limited mill expansion efforts.

This paper describes the limitations to recovery boiler capacity upgrades, discusses how improved combustion can allow an increase in solids firing capacity, describes the means of achieving combustion improvements, and provides a summary of upgrade efforts as examples of previous successes.