

Algorithm for the calculation of heat recovery in the air pre-heaters of a tubular furnace

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Abstract The present work describes the calculation sequence of the heat recovery in the air pre-heaters of a tubular furnace. The original part of the calculation consists on determining the parameters of the equations describing the variation of fuel gases caloric capacity, with great accuracy; these equations could serve at computational calculations of the burning process. Also, this work proves the efficiency of the burning process with heat recovery, in a case study.

Keywords: heat regeneration, heat recovery, temperature of stack gas, heat efficiency.
