

Abstract

This invention relates to a tubular cracking furnace, especially an ethylene cracking furnace, which comprises a convection section and a or dual radiant section(s), at least one heat transfer intensifying member arranged in at least one pass each radiant tube in said radiant section, said at least one heat transfer intensifying member comprises a first heat transfer intensifying member, which is arranged at a location between $10D$ and $25D$ upstream of the extreme point of said at least one pass radiant tube metal temperature, wherein D is the inner diameter of the radiant tube having heat transfer intensifying members. The present invention could achieve the best enhanced heat transfer result with given number of heat transfer intensifying member, by optimizing the locations of heat transfer intensifying members in the radiant tube.