

ABSTRACT

The present invention relates to the field of fluid heat transfer, and discloses a heat transfer enhancement pipe as well as a cracking furnace and an atmospheric and vacuum heating furnace including the same. The heat transfer enhancement pipe (1) includes a pipe body (10) of tubular shape having an inlet (100) for entering of a fluid and an outlet (101) for said fluid to flow out; internal wall of the pipe body (10) is provided with a fin (11) protruding towards interior of the pipe body (10), the fin (11) spirally extends in an axial direction of the pipe body (10), wherein a height of the fin (11) gradually increases from one end in at least a part extension of the fin. The heat transfer enhancement pipe can reduce thermal stress of itself, thereby increasing service life of the heat transfer enhancement pipe.

15

Fig. 1