Claims

1. A heat transfer tube comprising a twisted baffle arranged on an inner wall of the tube, said twisted baffle extending spirally along an axial direction of the heat transfer tube~~.~~, wherein

~~2. The heat transfer tube according to claim 1, characterized in that~~ the twisted baffle is provided with a plurality of holes~~.~~ and the ratio of the sum area of the plurality of holes to the area of the twisted baffle is in a range from 0.05:1 to 0.95:1.

~~3~~2. The heat transfer tube according to claim ~~2~~1, characterized in that the ratio of the sum area of the plurality of holes to the area of the twisted baffle is in a range ~~from 0.05:1 to 0.95:1, preferably~~ from 0.6:1 to 0.8:1.

~~4~~ 3. The heat transfer tube according to claim ~~2~~1, characterized in that the ratio of an axial distance between the centerlines of two adjacent holes to an axial length of the twisted baffle ranges from 0.2:1 to 0.8:1.

~~5~~4. The heat transfer tube according to claim ~~2~~1, characterized in that the twisted baffle has a twist angle of between 90° to 1080°, preferably between 120° to 360°.

~~6~~5. The heat transfer tube according to claim ~~5~~4, characterized in that one single region of the heat transfer tube is provided with a plurality of twisted baffles parallel to one another, which define an enclosed circle viewed from one end of the heat transfer tube.

~~7~~6. The heat transfer tube according to claim ~~6~~5, characterized in that the diameter ratio of the circle to the heat transfer tube falls within a range from 0.05:1 to 0.95:1, preferably from 0.6:1 to 0.8:1.

~~8~~7. The heat transfer tube according to claim ~~6~~5, characterized in that along the trajectory of the circle a casing is arranged, which is fixedly connected to a radial inner end of the twisted baffle.

~~9~~8. The heat transfer tube according to claim ~~6~~5, characterized in that the ratio of the axial length of the twisted baffle to an inner diameter of the heat transfer tube is a range from 1:1 to 10:1, preferably from 2:1 to 4:1.

~~10~~9. A cracking furnace having a radiant coil, characterized in that the radiant coil comprises at least one, preferably 2 to 10 heat transfer tubes according to claim 1.

~~11~~10. The cracking furnace according to claim ~~10~~9, characterized in that the plurality of heat transfer tubes are arranged in the radiant coil along an axial direction thereof in a manner of being spaced from each other, the ratio of a spacing distance to the diameter of the heat transfer tube is in a range from 15:1 to 75:1, preferably from 25:1 to 50:1.