

ABSTRACT

A unit for injecting a coke-deposition inhibitor solution into tubular furnaces for hydrocarbon pyrolysis including a straight run (1) of a coil with pipe (4) for supplying a feedstock, an inhibitor atomizer, a tube (6) for supplying an inhibitor to atomizer and surrounding it an additional tube (7) are positioned coaxially. Elimination of coil burns-outs in the zone of inhibitor solution injection is reached that that injection unit is provided with a vortex gate concentrically located within a straight run (1) of a coil in the zone of inhibitor solution injection. Preferred vortex gate consists of radial plates (9), which attached symmetrically to the additional tube (7), and of cylindrical rings (10, 11, 12, 13), which attached to the radial plates (9) coaxially with the additional tube (7) and formed inner passage, which expand stepwise on the direction of flow of feedstock.

20 5 Claims, 1 Drawing Sheet