Claims:

1. Use of a self-supporting moulded insulation body as insulation material in cracking tubes of a tubular reactor for performing a steam reforming process for generating synthesis gas, wherein the self-supporting moulded insulation body is made from a ceramic material comprising SiO_2 fibres and Al_2O_3 fibres, and is obtained comprising the following steps:

(a) providing a flowable mixture comprising SiO_2 fibres and Al_2O_3 fibres and also an Al_2O_3 sol as a binder,

(b) producing a preform by filling, in particular pouring or pressing, the mixture obtained in (a) into a hollow mould having a circular arc shape,

(c) kilning the preform obtained in step (b) at a temperature of at least 800 °C.

2. Use of a self-supporting moulded insulation body according to Claim 1, wherein the shape is preferably in a half shell or quarter shell, or is cylindrical.

3. Use of a self-supporting moulded insulation body according to Claim 1 or 2, characterized in that in the cracking tube of a tubular reactor, the inlet for the reactants and the outlet for the products are arranged at opposite ends of the cracking tube which project out of the heating space of the tubular reactor, wherein the inlet region and/or the outlet region of the cracking tube are fitted with internal moulded insulation bodies having a circular arc profile.

4. Use of a self-supporting moulded insulation body according to Claim 1 or 2, characterized in that in the cracking tube of a tubular reactor, the inlet for the reactants and the outlet for the products are arranged at the same end of the cracking tube which projects out of the heating space of the tubular reactor and in that at the opposite end of the cracking tube a free interior space is present which serves to deflect the product gas flow leaving the catalyst bed in the cracking tube into a heat exchanger tube arranged inside the catalyst bed, wherein the inlet region and/or the outlet region of the cracking tube are fitted with internal moulded insulation bodies having a circular arc profile and the free interior space is fitted with an internal moulded insulation body which is cylindrical.

5. Process for fitting a cracking tube of a tubular reactor for performing a steam reforming process for generating synthesis gas with at least one moulded insulation body according to Claim 1 or 2, characterized in that the moulded insulation bodies are introduced into the region of the cracking tube to be insulated.