

**Method for producing a composite body of a material
with a high silicic acid content**

Abstract

5 To optimize known methods for producing a composite body with a first layer of a material of a high silicic acid content with an additional component in a first concentration, connected to a second layer of a material of a high silicic acid content with an additional component in a second concentration differing from the first concentration, wherein the first and the second concentration are greater than
10 or equal to zero, in such a manner that a mechanically and thermally stable composite body can be produced at low costs and large-area bonding connections can be realized by way of welding, a method is suggested according to the invention that comprises the following method steps:

(a) preparing a first slurry layer having a free surface by using a first slurry mass
15 containing a first dispersing agent and, dispersed therein, first SiO₂ particles and the additional component in a first concentration, **(b)** providing a second slurry mass containing a second dispersing agent and, dispersed therein, second SiO₂ particles and the additional component in a second concentration that differs from the first concentration, **(c)** forming a composite-body intermediate product by
20 applying the second slurry mass to the free surface of the first slurry layer, and **(d)** heating the composite-body intermediate product while forming the composite body.

[Fig. 1]