

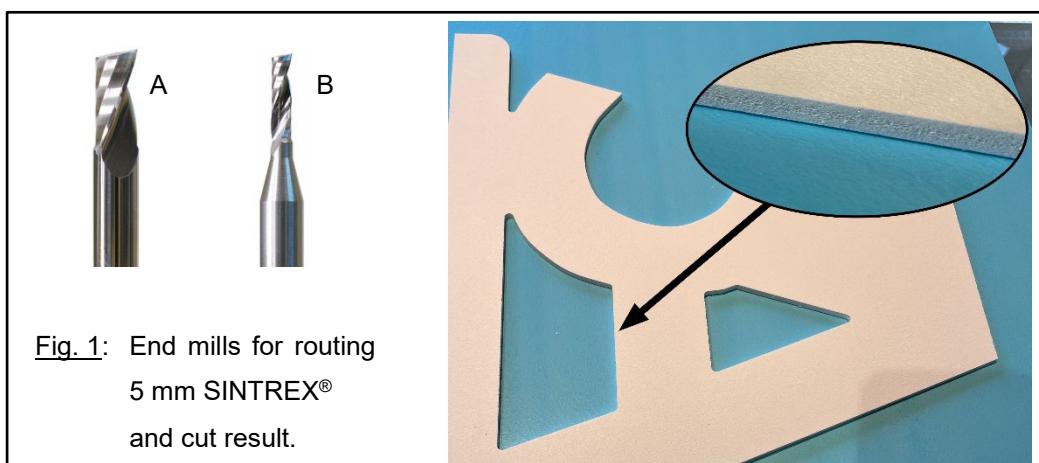
## ROUTING

SINTREX® sheets are best processed using modern CNC portal milling machines. These should allow for a high tool speed of 60,000 rpm in order to achieve high-grade milled edges.

The single-edge end mills proposed by machine manufacturers are particularly recommended as they permit the removal of fairly large quantities of chips without overheating.

Routing of SINTREX® panels in 5 mm:

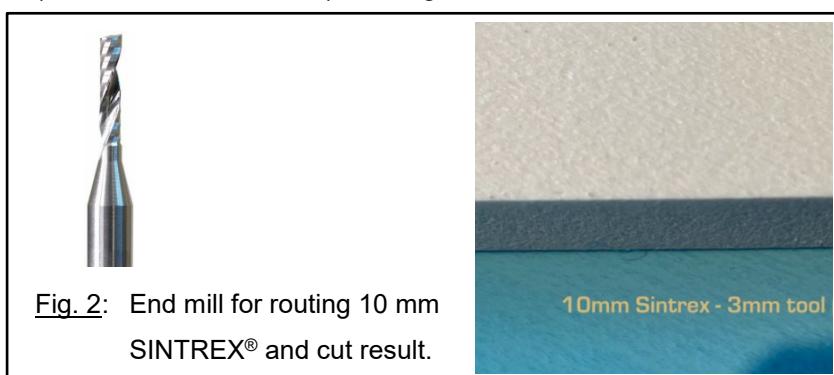
- For routing simple shapes after the material has been printed on, i.e., squares and rectangles, it is recommended using end mills of 6 mm diameter and appropriate length of cut (> 10 mm recommended), see Fig. 1A.
- For routing more intricate shapes such as letters, a 3 mm tool with appropriate length of cut (> 10 mm recommended) will be suitable, see Fig. 1B.



- To prevent movement while cutting, it is recommended to ensure very good fixation of panels; best vacuum and non-slip base should be used, i.e., foamed mat made of polyurethane (PUR).

Routing of SINTREX® panels in 10 mm:

- SINTREX® panels in 10 mm cut well using end mills of 3 mm diameter and appropriate length of cut (> 13 mm recommended), see Fig. 2.



- It is recommended to route the panels in two steps: The first cut to a depth of 9.5 mm with a second cut at 10 mm. Depending on the extraction system, the second pass removes the majority of the chips trapped in the channel after the first cut.