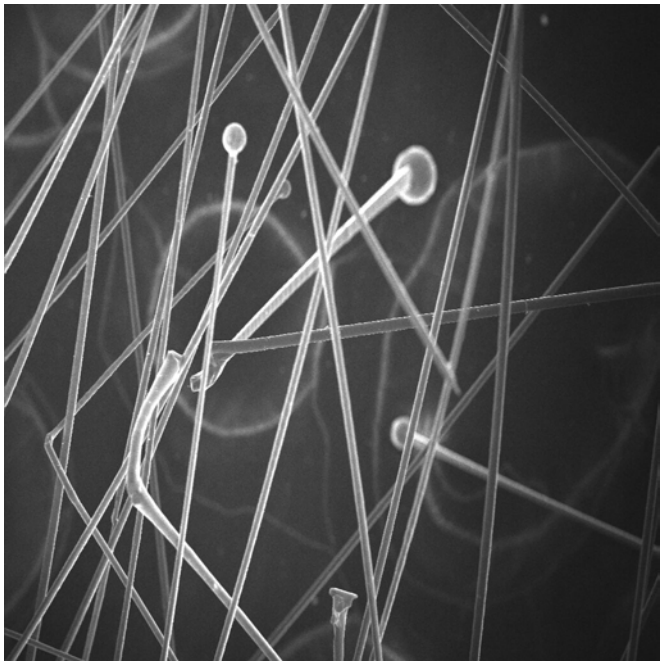
ReMaxCo Technologies, Inc. is developing a commercial microwave process for making single crystal silicon carbide Fibrils.

Fibrils are unique in the areas of high strength and high-temperature resistance (Figure 1).



Fibrils exhibit tensile strengths in excess of 2,000,000 psi and are able to withstand oxidation up to 1,600°C in the future high temperature fossil energy plants.

These Fibrils will be useful in heat exchanger tubes, reinforcing combustion wall tiles to prevent fatigue failure and in hot gas filters for combustion gases.

Figure 1

Proof-of-concept work is complete on a semi-continuous furnace.

An improved second generation furnace to produce sample quantities of Fibrils for application testing is designed and in fabrication (Figure 2).

Read more about this work.

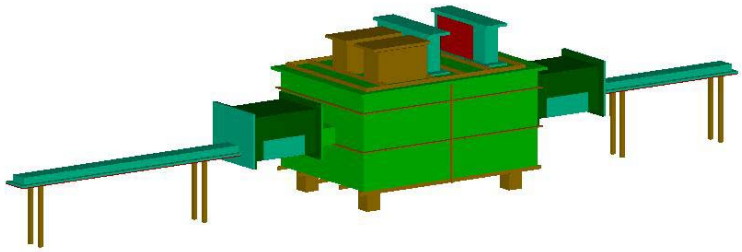


Figure 2