

Fluidization bed Chemical Vapour Deposition (F-CVD) Process for Simultaneous Coating of Alumina on outer and inner surfaces of pipe.

F-CVD process has been successfully deployed for simultaneous coating of alumina on inner and outer surfaces of multiple numbers of SS and MS pipes/tubes of size ranging from 12.5 mm to 38 mm. The experimental results were gravimetrically analyzed and characterized by SEM-EDS. Uniform coating thickness of 20 μm was achieved. Based on the experimental results, a DPM-FDM model has been developed to determine deposition of alumina on inner and outer substrate surfaces.



Alumina coating on SS 304 tubular substrate