



The structure of The Tornado Tower

Structurally, the Tornado tower is a stable structure which is comprised of a central vertical cylindrical frame made of stainless steel. This cylindrical frame, as shown in the figure, holds some funnel-shaped steel lattices which form the funnel-shaped tower elements. The plates covering these elements are made up of aluminum which makes the funnels light enough to be handled by the frame.

The space between funnels is segregated by partition walls which help both stabilize the structure and lead the air stream towards the turbine. Owing to the fact that the diameter of funnels' crater increases in height, the deployment of partition walls is planned differently along the shell. This means that in lower parts of the shell, partition walls are at 90 degree angle (4 walls in each entrance); whereas in middle and upper parts of the shell, they are at 60 and 45 degree angle respectively (6 and 8 walls in each entrance respectively).

