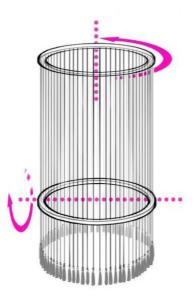
Hyperboloid

What does a single string look like when you twist the upper string holder?



Twist the upper string holder.

Watch the shape change.

Adjust the incline of the lower string holder.

Observe the red string. It is tightly stretched and straight.

Compare the hyperboloid with the exhibit "hyperbolic slot". The stick corresponds to a string of the hyperboloid. The cylinder of strings turns into a hyperboloid when it is twisted.

This curved surface actually only consists of straight lines – the stretched strings.

In architecture, this shape is used for cooling towers because it has good flow properties and is easy to construct.