

Fire tornado

How does a fire tornado form?



The fire-tornado demonstration takes place every hour on the hour.

Watch the shape of the flames.

The flames form a tornado – a spinning column of air.

Inside the exhibit, fans make an updraught and a rotating air flow, resulting in a tornado. The tornado meanders because of draughts in the room.

It is extremely hot in the fire tornado - up to 600°C (Fig. 1)!

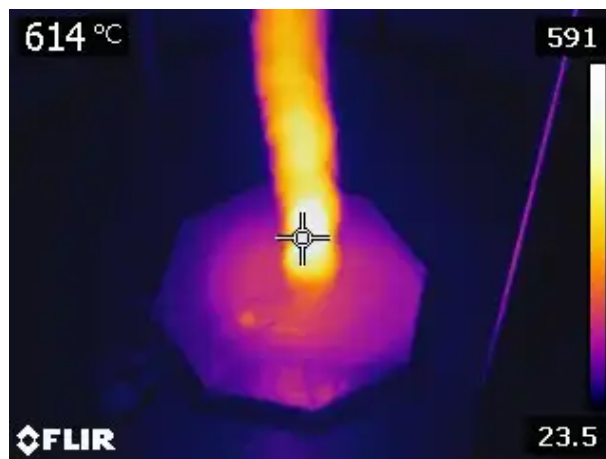


Fig. 1: Fire-tornado temperatures recorded with an IR camera. The colours depict the temperatures in °C.

In a real tornado, there is a strong updraught of air and highly destructive winds circulating around the outside. Right in the centre of the tornado, however, it is calm.