

Water phenomena in the Gelsenkirchen cooling tower



A transparent platform for spectators. The use of light and water is carefully calculated, and here the individual phenomena and phases are being staged. Suddenly the old wooden gutters under the platform are flooded.

Veils of mist and vapour in the light. Here we are able to see the relationship between the ways in which air and water move.



Natural processes are repeated daily without our knowing exactly what is happening. Do we have a sudden moment of insight when looking at the morning mist or a rainbow, do we know why a drop falls of a leaf at a particular time, and not a moment earlier or later? Unfortunately, being uncertain does not always trigger a thirst for knowledge. Even the most watery problem can sometimes seem too dry, and the chemistry and physics that could explain it are much too complicated. People like to have answers to their questions, but please make them easy to understand and ideally demonstrated in three dimensions.

When Herbert Dreiseitl demonstrated phenomena involving water in the Ruhr city of Gelsenkirchen as part of the Federal Horticultural show in 1997, his intention was to engage and fascinate easy-going people of this kind as well. He found the ideal setting for his experiment in showing water in all its states in a cooling tower that had been left standing at the Nordstern pit. After a 15 minute introduction a fine film of water had formed on the spectators' hair and clothes – a perfectly harmless way of acquiring the feeling of being in the middle of a rain-cloud. What had happened? The spectators stood on a glass mezzanine floor, and the development from mist to a cloudburst was played out before their eyes, with every step in the process accompanied by gigantic slide projections. Every sense was working overtime as first of all there was nothing to be seen in the dark interior of the cooling tower, and then only indirect light, with a bank of mist moving ponderously into position in front of it. Turbulence on the periphery made shining droplets form dancing figures. Slides of foggy landscape thrust into this moving image. Then a circular eddy 1 metre wide rose out of the sea of mist, rather like the smoke-rings blown out by a cigar-smoker in its shape and



The old cooling tower, a relic of the former Nordstern pit in Gelsenkirchen, was the scene for a unique presentation of water-related phenomena for over two years.



The magic world of water vapour in an experiment in the old cooling tower



Spectators' stand, slatted frame and the fittings involved in this magical installation