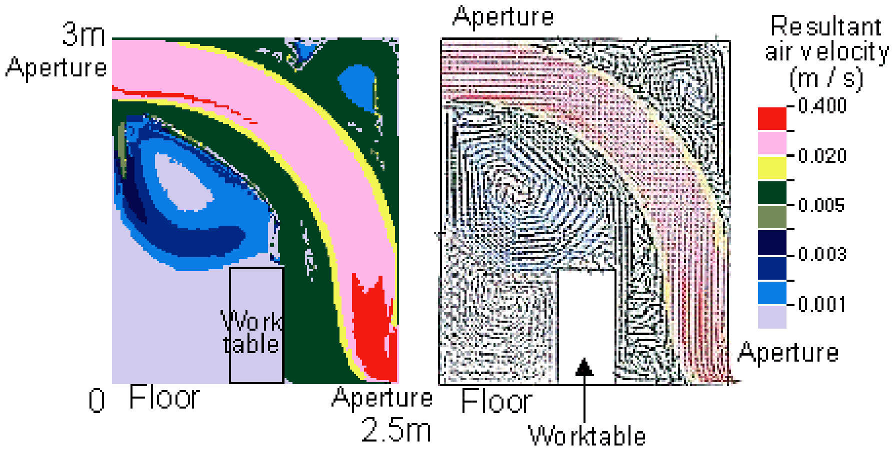
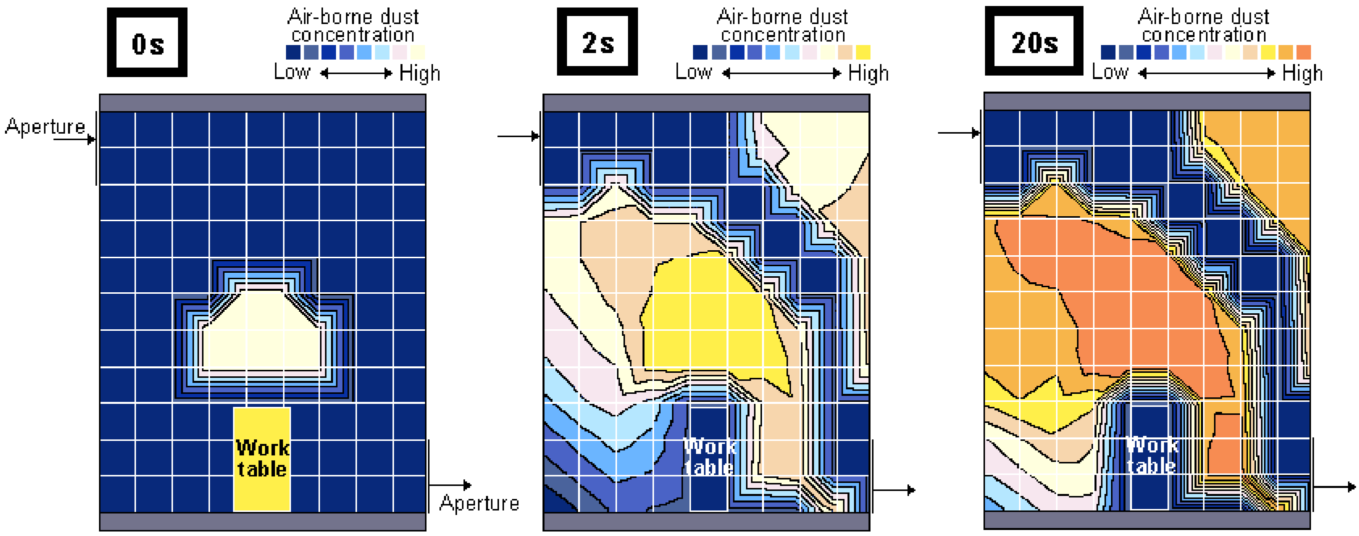
Prediction of Air-borne Dust Concentration (A.D.C.)in Woodworking Chamber

—Application of FE-Analysis of Air-flow to Simulate A.D.C Distribution—

The state of the airflow in a chamber was analyzed using the finite element method (FEM), and the distribution of the airborne dust concentration was predicted using a numerical method.





Upper : Distribution of speed vector of airflow (contour(left) and vector arrow(right)) estimated by finite element method.

lower : Initial distribution of airborne dust concentration caused by sanding.