

Fume cupboard with wall jets

Abstract

The present invention relates to a fume cupboard 1 for a laboratory, which fume cupboard has a housing 60 in which a work area is located, delimited in the front by a front sash 30, at the bottom by a bottom plate 34 and on each side by a side wall 36. The fume cupboard 1 further comprises a first hollow profile 10, 10' disposed on a frontal end face of each side wall 36, wherein each first hollow profile 10, 10' contains a first pressure chamber 10b, 10b' which is in fluid communication with a multiplicity of first openings 10d, 10d', from which air jets in the form of wall jets 100 consisting of compressed air may be output into the work area along the respective side wall 36. The fume cupboard is characterized in that the size of the first openings 10d, 10d' and the air pressure that prevails in the first pressure chamber 10b, 10b' during proper user of the fume cupboard are selected such that the first pressure chamber 10b, 10b' can be connected fluidically to a compressed air system 74 installed in the building without causing airflow delamination of the wall jets 100 from the side wall 36 in a region extending from a front side of the work area at least as far as 25% of the depth of the work area.

The present invention further relates to a fume cupboard in which a hollow profile 20, 20' of such kind is disposed on a front frontal end face of the bottom plate 34.

Fig. 1