

GALVABAU

Competent Center for Surface Treatment Equipment

High Economy with most modern Exhaust Air Technology

Airtight lid - an important component of an economical exhaust air system - in a line for galvanic treatment



Market:

GALVABAU AG, Müliweg 3, CH-6052 Hergiswil/NW

Reference:

The facilities have been successfully installed in Altdorf, Switzerland at RUAG Components.

Ask for our current reference list.

A new idea - legally patented - is a fundamental, progressive step in the exhaust-air technique.

Usage:

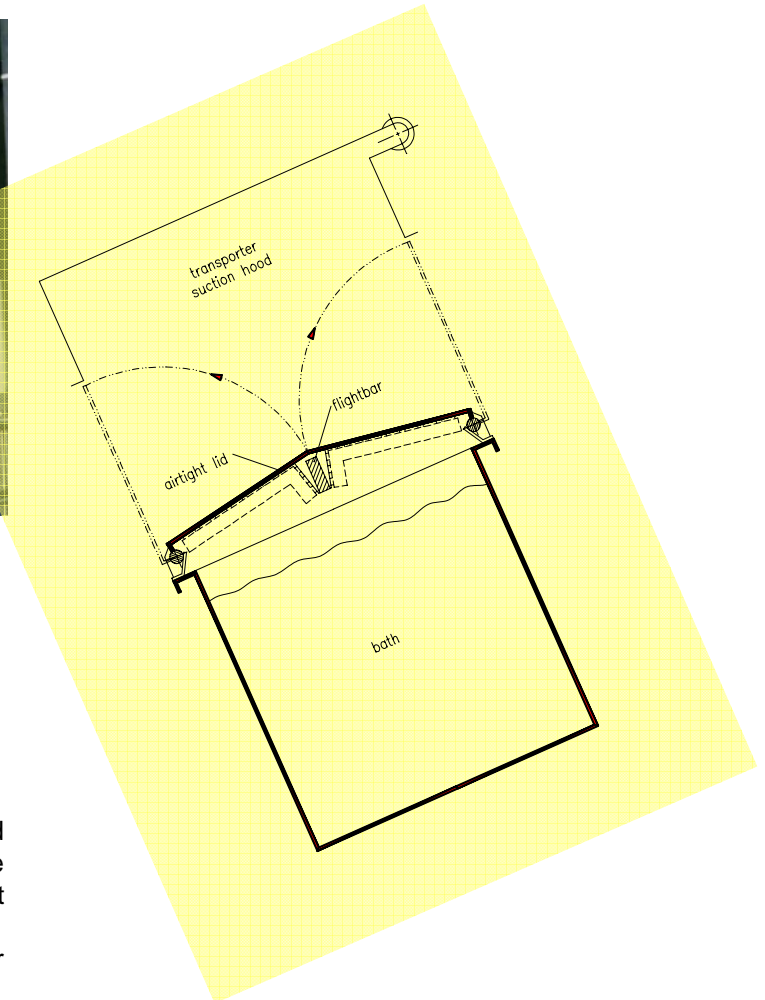
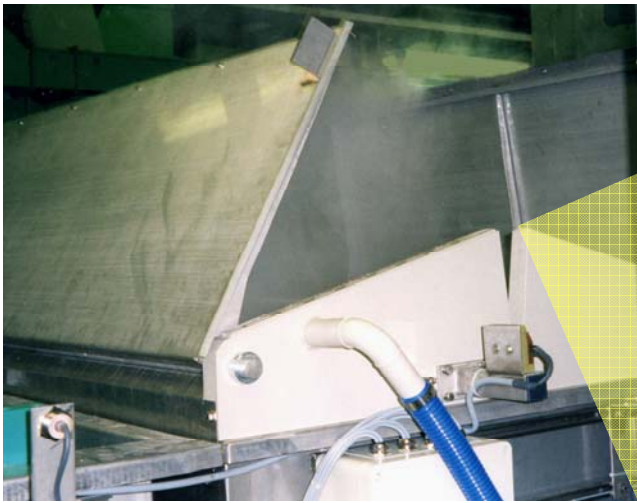
- ✓ Massive reduction in the amount of exhaust air
- ✓ Reduction of energy required
- ✓ Minimal pollution emission
- ✓ Slight investment costs

High economy through a massive reduction of the amount of exhaust air

The transporter is equipped with a suction hood which is pulled down over the rims of the bath. This results in a slight air gap in the closed area above the surface of the bath when the lid is partly opened. In the space above the hood, there is a suction connection which is docked to the counter connection in the collecting main next to the crane-way. When the transporter is in position, a motorised lid opens up in the suction connection area of the collecting main, but only, when the transporter is serving the corresponding bath and not when it is driving over it. By using this technique, the emitted steam can be easily caught where it appears most intensively, i.e. when the flight-bar leaves the bath.

Airtight lid with suction devices on the side

The construction of the lid-system is based on two lid-halves, chiefly in the form of swivelling lids, which are firmly connected to the lengthwise sides of the baths by an axis. The lengthwise axis is fitted with a sealed finish. On the front side, the lids have a wave-like finish. These construction details are responsible for the closing of the lid on the front side to the width of the entry slit. The suction device consists, among other things, of a set-up frame, which is adjusted to each of the side walls. The steam or gas is immediately sucked up through several small suction slits after escaping. The system pressure, however insignificant, is increased and evaporation is simultaneously reduced through the complete airtight lid-system. This airtight lid-system allows for an economical control of the energy balance, as fundamental savings in the heating of the baths are made possible. The position of the lid-halves are registered periodically. The depositing of material onto a closed lid is therefor impossible.



Clear savings as compared to conventional exhaust-air systems

The combination of automatic lids on the baths and drawing off exhaust on the transporter is a practice often used. However, in the conventional system it has been found that:

- the system pressure under the lid is either reduced through partial exhaust,
- or the exiting steam is drawn up through the non-airtight areas on the lid, resp. harmful substances with an exhaust hood on the bath rims

With this new technique the lid can be used, for the first time, as its own sealing system. There are definite advantages to the conventional lids:

- ✓ The system pressure under the lid is not only maintained, but is even slightly increased. In this way, the energy required for heating the baths - especially baths over 60°C- can be considerably reduced.
- ✓ The highly polluted steam, which nevertheless flows out, is captured before it can escape. This amount of exhaust is reduced by 95-99.5% as compared to conventional edge suction.

This new technique leads to the following savings:

- ✓ The washing-line for contaminated exhaust air can be considerably reduced in size. In turn, the necessary energy required is also reduced.
- ✓ The air inlet system can also be made smaller. The required energy for the ventilators is also reduced.
- ✓ The same applies to the exchange of incoming air, including the necessary energy requirements.
- ✓ By strongly reducing the pollution emitted, the threat to mankind and the environment is also reduced to a minimum.

Our new airtight lid-system will help you to spare your budget considerably.

Subject to change!

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