

Optimizing Operating Cost

The new pyramid safety concept yields economic benefits. The LabAirTec system represents lasting exhaust air volume rate reduction and thus positively affects the level of operating cost. The higher the configuration level, the higher the savings in operating costs.

Example:

Table Fume Hood 1500	Air volume in m ³ /h	Operating Cost in CHF	Operating Cost in %
S4	275	1072.00	45
S3	320	1248.00	55
S2	440	1716.00	75
S1	600	2340.00	100

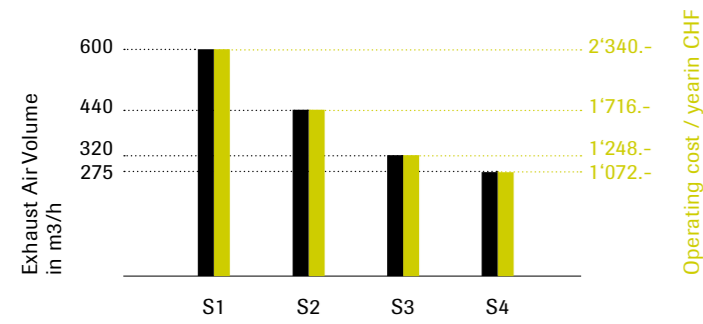


Table Fume Hood 1500
Annual Operating Cost
Operating Hours: 2600 hours/year
Cost per 1000 m³: CHF 1.50



LabAirTec – The High Tech Fume Hood featuring the new Pyramid Safety Concept.

The LabAirTec fume hood system from Renggli brings an elevated level of safety and dependability while affording more comfort at work. The new four step pyramid safety concept is the result of close design and engineering cooperation with aerodynamic and air exhaust specialists (Tintschl and ThyssenKrupp). The system effectively protects the health of laboratory operators. Each added level in this pyramid increases safety at work!

The LabAirTec fume hood system features a newly developed air intake system (Bypass) and a unique air exhaust system (exhaust modules). The air volume is being specifically reduced and the intake power is increased. This results in a significant increase in terms of operator safety while considerably decreasing operating cost.

The LabAirTec fume hood system permits post fitting preinstalled modular components, thus facilitating installation while keeping down cost. Decontamination is straightforward through simple removal of air carrying components for cleaning and easy reinstallation.

Scientific tests netted best notes for the LabAirTec fume hood, both in terms of technical as well as economic aspects. All norm parameters as well as recommendations issued by the German BG-Chemie are being significantly undercut.

Provides enhanced operational safety and comfort

Simplifies operational procedures

Resolves decontamination problems

Consists of retrofit building block modules

Significantly reduces operating cost

Delivered in preassembled fashion

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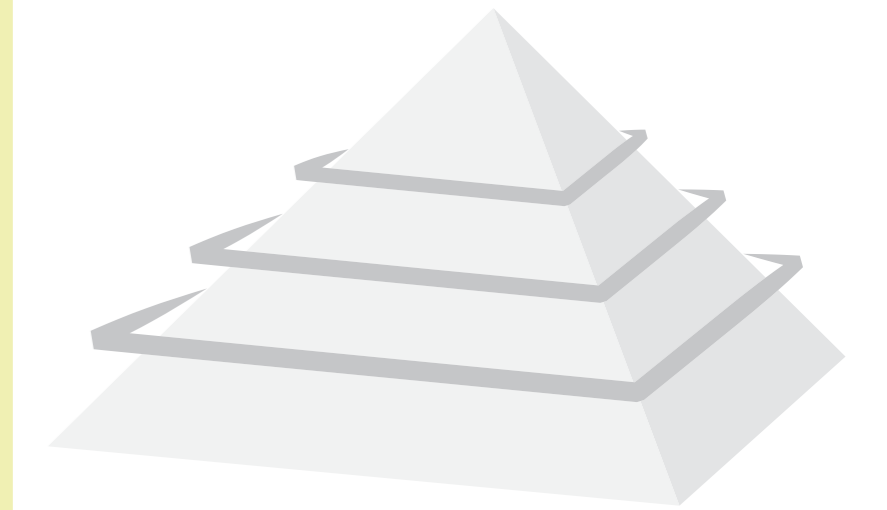
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Laboratory
Systems

Creatfactory



Trend setting
Laboratory
Technology

LabAirTec
Headstart Through Innovation



renggli
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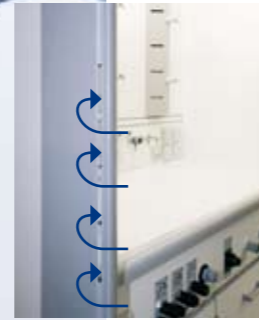


LabAirTec – Enhanced Safety and reduced Operating Cost.

S1

Bypass System

The newly designed bypass system features air intake openings at table edge, at front slide and laterally at the front frame. These intake openings are designed such as to provide laminar airflow and constant rate aeration of the fume cupboard. **Without air turbulence, the emission removal efficiency is conspicuously enhanced.**



Air Exhaust Module (patented)

The patented system has significant advantages: in contrast to standard emission removal designs, the optimized profiles of our exhaust modules enhance the airflow performance thus increasing the emission removal rate. These modules are easily removable, thus facilitating access for decontamination purposes.



The newly designed and patented air exhaust modules afford optimal, laminar airflow.

Front Frame

All control and monitoring functions, the interface as well as the complete bypass devices are integrated in the frame. Installation and maintenance are made extremely easy and smooth.



The aluminium front frame is characterized by top design and construction.

Media Drawer

The media drawer provides top grade installation safety. It contains all control valves and supply connections. The drawer may be removed and reinstalled in its entirety, e.g. for retrofitting. The interface points are precisely predefined. **Consequent separation of aerodynamic and installation related components.**



Proper maintenance and qualifying warrant safe and economic laboratory operation.

For lasting lab operator safety and to keep downtime at minimum, we strongly recommend periodic system checks.

Annual function testing by our qualified service technicians are documented based on a detailed test protocol. Statutory guidelines are thus easily met.



Monitoring and Control

The exceedingly user friendly monitoring and control system represents a main component of our safety concept.

Safety through easy, self explanatory operation.

S2

Air Volume Flow Control

The volume stream remains at save level at all times. The flow rate is automatically adjusted to maintain the preset air removal volume flow rate.

Superior safety, significantly reduced operating cost.



S3

Automatic Front Slash

Volume flow control is governed by front slider position monitoring. This, combined with automatic slider closure perceptively reduces operating cost. The added investment is paid off within four years. **Networking functions result in cost reduction. Optimized operation results in some 45% of running cost reduction.**



S4

Active Air Intake

At open front slash, emission flow is directed toward the air exhaust modules. Thus, the exhaust air volume is reduced, operating cost are being released. Active air intake may be retrofitted. **= optimized safety.**



LabAirTec – the Pyramid Safety Concept

LabAirTec – Safety in Perfection

Design target of the LabAirTec fume hood system was to afford the market a technically mature, safe and easy to operate unit that warrants a risk-free and comfortable work environment. The DIN EN 14175 norm for example sets limits for breakout, retention and air replacement performance. The LabAirTec unit performance benchmarks are far superior to the statutory requirements.

S1 Standard Version

Bypass system: warrants laminar airflow

Air exhaust modules: optimized air flow profiles enhance output performance.

Monitoring: safety through simple and comfortable operation.

Media drawer: smooth, trouble-free media installation.

S2

+ Exhaust air volume control in reference to front slash position. Air volume control rate dependent from operational conditions enhances the safety level.

S3

+ Automatic front slash closure for augmented safety and systematic operation cost reduction.

S4

+ Active air intake. Maximum safety in attained.

