

Instructions for safe use of the fume hood

1. Scope of application

Model: Waldner SCALA Secuflow fume hood, connected to the extraction system, with different built-in equipment for each fume hood.

Location: All laboratories with fume hoods, except laboratories XP09, K033 and 2081, which have special purpose fume hoods.

2. Purpose of use

The function of the fume hood is:

- to prevent the formation of potentially explosive mixtures,
- to prevent dangerous quantities or concentrations of fumes, aerosols or dust from escaping into the laboratory,
- to protect the user from splashes of hazardous substances or flying particles.

The following are not permitted in the fume hood:

- carrying out the acid digestion process,
- carrying out a process which may cause damage to the equipment and installations of the fume hood,
- working with radioactive substances,
- working with micro-organisms and genetically modified organisms.

3. Protective measures and rules of conduct

- 1 When using the fume hood, the Laboratory Safety Rules for UL FKKT must be observed.
- 2 The laboratory supervisor must familiarise the users of the fume hood with these instructions before they start working independently. The annexes to these Instructions include the DESCRIPTION OF THE FUME HOOD AND ITS EQUIPMENT and the DISPLAY AND CONTROL PANEL DESCRIPTION.
- 3 Work in the fume hood must only be carried out with the ventilation turned on. Before starting work, the power switch on the control panel must be switched on (green light on) to establish the appropriate ventilation regime for the laboratory within 3 minutes.
- 4 The ventilation flow of the fume hood is determined by the keys on the control panel and the position of the vertical or horizontal sash. Data on the extract air volume are given on the intranet site.
- 5 Operation in reduced mode is only permitted when there is no release of fumes, aerosols or dust.
- 6 Any tampering with the operating systems of the fume hood with the intention of removing or reducing the operating functions of the fume hood is prohibited.
- 7 All unnecessary equipment must be removed from the worktop of the fume hood so as to have sufficient workspace.
- 8 The connection and disconnection of electrical equipment within the fume hood must always be carried out in a de-energised state: the power socket switch (position 10 or 11 in the annex) must be in the off position when connecting or disconnecting the cable to or from the socket. This prevents the formation of sparks.
- 9 The opening and closing of the vertical sash are automatic: the vertical sash is raised or lowered by gently pressing the openings in the centre of the lower edge of the vertical sash or by pushing the sash.
- 10 The vertical sash must be closed during work. The horizontal sash may only be opened if necessary. The vertical and horizontal sash must not be open at the same time.
- 11 The status of the indicator lights on the control panel must be checked during work. In the event of an alarm, close the vertical and the horizontal sash of the fume hood.
- 12 No chemicals may be stored in the fume hood.
- 13 Flammable and corrosive chemicals must be stored in labelled safety cabinets.
- 14 When opening the valves, make sure that the selected valve is opened. The colour codes and nomenclatures identifying each medium are given on the intranet site.
- 15 Water or gas connection pipes must be secured against slipping from the tapping points.
- 16 All gas and water valves must be closed and the fume hood switched off when work is finished.

4. Behaviour in case of malfunctions

- 1 Anyone who observes abnormal operation of the fume hood must immediately inform the laboratory supervisor or the head of the laboratory.
- 2 The emergency stop button, which switches off power to all sockets on the fume hood, is located on the panel under the sash of the fume hood.
- 3 An absence of the green light and a flashing red light with an acoustic alarm indicate insufficient air exhaust, in which case work in the fume hood must be stopped.
- 4 In the event of a technical gas alarm, the gas valves and windows in the room must be closed immediately, the room must be vacated and the reception must be informed on extension 8000.

5. Behaviour in case of accidents, first aid



Report all accidents immediately to reception on extension 8000.

In case of nausea, dizziness or feeling unwell, leave the room immediately and get some fresh air. Burns are cooled with water for at least 15 minutes. Even the smallest wounds are treated. The first aid kit is located on the wall in the hallway.



To extinguish an incipient fire, fire-fighting equipment is located in the hallway cupboards: hydrant, handheld CO₂ and powder fire extinguishers, and a fire blanket. The location of the fire-fighting equipment is evident from the evacuation plan.

6. Maintenance, disposal

- 1 Cleaning of the fume hood must be carried out in accordance with the Safety Instructions for Cleaning Laboratories.
- 2 All maintenance and repairs must only be carried out by a manufacturer authorised service centre.
- 3 Any malfunction or abnormal operation must be reported immediately to Mr Roman Sajovec (031/243-705), Head of the UL FKKT and UL FRI Technical Maintenance Service.
- 4 The fume hood must be inspected annually by a manufacturer authorised service centre. An inspection in accordance with the legislation on occupational safety and health should be carried out every 3 years. The inspections are carried out by the Occupational Safety and Health Department.

7. Consequences of non-compliance

Violation or non-compliance with these Instructions for Safe Use constitutes a material breach of work obligations.

These Instructions are valid as of 1 November 2024.

Validity: 3 years or until amended.

The revision is the responsibility of the Occupational Safety and Health Department.

DESCRIPTION OF THE FUME HOOD AND ITS EQUIPMENT



Key

DVIŽNO OKNO	1	VERTICAL SASH
VODORAVNO DRSNOKNO	2	HORIZONTAL SASH
ZGORNJE OKNO	3	UPPER SASH
KONTROLNA PLOŠČA Z INDIKATORSKIMI LUČMI	4	CONTROL PANEL
SENZOR GIBANJA	5	MOVEMENT DETECTOR
SENZOR OVIRE	6	BARRIER DETECTOR
FID STIKALO	7	RESIDUAL CURRENT CIRCUIT BREAKERS
TIPKA ZA IZKLOP V SILI	8	EMERGENCY STOP BUTTON
VTIČNICE	9	SOCKETS
STIKALO NAPAJANJA 3-FAZNIH VTIČNIC V DIGESTORIJU	10	3 PHASE POWER SOCKET SWITCH
STIKALO NAPAJANJA VTIČNIC V DIGESTORIJU	11	POWER SOCKET SWITCH
VENTIL ZA ZEMELJSKI PLIN (rumene barve)	12	NATURAL GAS VALVE (yellow)
VENTIL ZA TEHNIČNI PLIN Z MANOMETROM	13	TECHNICAL GAS VALVE WITH MANOMETER
REGULATOR PRETOKA TEHNIČNEGA PLINA	14	TECHNICAL GAS FLOW REGULATOR
VENTIL ZA VODO (zelene barve)	15	WATER VALVE (green)
VARNOSTNA OMARA ZA VNETHJIVE KEMIHALIJE	16	SAFETY CABINETS FOR FLAMMABLE LIQUIDS
VARNOSTNA OMARA ZA JEDKE KEMIHALIJE	17	SAFETY CABINETS FOR ACIDS AND LYES
NAVADNA OMARA	18	UNDERBENCH

Note: the layout and number of connections vary depending on the design of each fume hood.

DISPLAY AND CONTROL PANEL DESCRIPTION

Elektro / RLT-Legende
Electrics / Air Systems - Legend

Waldner Laborerichtungen GmbH
Postfach 1962, D-85231 Wengen
Telefon 07922 986-0, Fax -280

Projekt: UNI Ljubljana FKKT, MTI Pavlio
Comm.No.: 300_04764_111-120








name: HalderR.
date: 08.06.2014



Digestoriji WALDNER Scala, Projekt Univerza v Ljubljani, FKKT

Kratek opis delovanja digestorjev - pomen svetlobnih in akustičnih signalov

SCALA AC3 - opis zalona in kontrolne plošče SCALA AC3 display and control panel description

<p><u>AC3 izklopljen / Standby</u> <i>Fume cupboard Controller off (Standby)</i></p>  <p>Luč vklop/izklop Light on/off</p> <p>Napetost prisotna, loputa zaprta Power supply present, damper shut</p>	<p><u>Režim normalnega delovanja</u> <i>normal mode</i></p>  <p>Luč vklop/izklop Light on/off</p> <p>Dršno okno odprto med 50 in 500 mm sash open between 50 and 500 mm</p> <p>Sveti zelena luč nadzor pretoka zraka je aktiven zadosten odvod zraka green light on airflow indication active extract air sufficient</p>	
<p><u>Alarm za nizek pretok zraka</u> <i>Low airflow alarm</i></p>  <p>Luč vklop/izklop Light on/off</p> <p>Utripa rdeča luč + zvočni alarm red light flashing plus acoustic alarm</p> <p>Nadzor pretoka zraka je aktiven zelena luč se izklopi nezadosten odvod zraka airflow indication active green light goes off extract air insufficient</p>	<p><u>ServiceAlarm</u> <i>Service Alarm</i></p>  <p>Luč vklop/izklop Light on/off</p> <p>Utripa rdeča luč + zvočni alarm red light flashing plus acoustic alarm</p> <p>Utripa zelena luč Pri tem alarmu prosimo pokličite Waldnerjevega serviserja. green light flashing With this alarm please contact Waldner Service</p>	
<p><u>Dršno okno odprto avtomatsko (> 500mm)</u> <i>maximum sash opening exceeded (>500mm)</i></p>  <p>Luč vklop/izklop Light on/off</p> <p>Utripa oranžna luč + zvočni alarm orange light flashing plus acoustic alarm</p> <p>Sveti zelena luč nadzor pretoka zraka je aktiven zadosten odvod zraka airflow indication active green light on extract air sufficient</p>	<p><u>Režim povečanega delovanja</u> <i>increased mode</i></p>  <p>Luč vklop/izklop Light on/off</p> <p>Sveti oranžna luč orange light on</p> <p>Sveti zelena luč nadzor pretoka zraka je aktiven zadosten odvod zraka airflow indication active green light on extract air sufficient</p>	<p><u>Režim zmanjšane delavnosti</u> <i>decreased mode (low airflow)</i></p>  <p>Luč vklop/izklop Light on/off</p> <p>Sveti oranžna luč orange light on nadzor pretoka zraka je aktiven Digestorji ni v delujočem režimu zelena luč ne gor zadosten odvod zraka airflow indication active Not in operational mode green light off extract air sufficient</p>