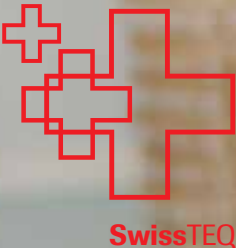


# Future-oriented laboratory technology



**renggli**

Laboratory  
Systems

# Tradition – Innovation.

### Swiss tradition with a great future

Renggli AG, founded in 1927, is an established Swiss family enterprise with international orientation in the realm of complete laboratory solutions. As one of the leading European manufacturers, Renggli designs and implements state-of-the-art laboratories for research, industry, medicine and education.

### All from one source



### Our core competences

#### Counselling Competence

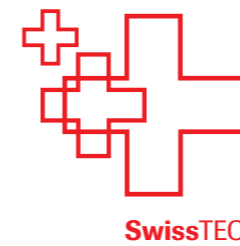
Our laboratory experts are eager to support you in all facets of laboratory technology. They will advise you accurately on all pertinent norms, legal provisions and safety aspects.

#### Planning and Engineering Competence

Our specialists are at your disposal to carry out the planning of the entire project. They even cover the engineering part, from media supply of the individual workplace all the way to interfacing with the building control systems.

#### System Competences

In addition to being a dependable supplier of laboratory installations and equipment, we are your comprehensive one-stop service for counselling, planning/engineering, production, installation and maintenance/service. This is the key and guarantee for decades of perfect performance of your laboratories.



# Laboratory glass cleaning.



**In a laboratory, every user is dependent on analyzes or mixtures being carried out with perfectly cleaned laboratory utensils. The cleanliness of the measuring or mixing vessel has a decisive influence on the result.**

## **Washing / drying**

Inexpensive and reproducible cleaning is the be-all and end-all in the laboratory. In our portfolio, we offer a wide range of washing machines, dryers and combination solutions for installation in existing laboratory fronts as well as under-counter or free-standing models.

The cleaning machines meet all requirements to solve application-specific cleaning problems in a practice-oriented manner. The possibility of programming customer-specific washing programs with various washing levels and custom trays that can be equipped independently of one another mean that the devices can be optimally modified according to customer requirements.

Excellent results are achieved in combination with our Labo-Pur cleaning agents.



# Cleaning agents.



**Clean laboratory utensils are largely responsible for an optimal result and thus a requirement in every laboratory. When choosing LaboPur cleaning agents, you are choosing a product that contains only biodegradable surfactants yet still achieves excellent cleaning results.**

The LaboPur range extends from hand soap and mild universal cleansers for hand-cleaning to highly active special cleansers and other cleaning agents for washing machines. The cleaners which are available in liquid or powder form, are suitable for the routine cleaning of medical devices as well as for specific cleaning, including the loosening of stubborn impurities and deposits on laboratory dishes. They meet all requirements in the areas of microbiology, wastewater analysis and research.

Do you need a solution for your specific cleaning needs? Our specialists will help you find the right cleaning agent. We would also be happy to design a special cleaner that meets your requirements.

Onlineshop  
[www.labopur.ch](http://www.labopur.ch)



Contact us!  
041 798 14 50

# Drying and incubation.



**Regardless if for the industrial, medical, biology, pharmaceutical or food sector: drying and incubation are decisive factors for an optimal result in many sub-steps in production or research. Quality is the top priority to achieve accurate test results in the laboratory. These are not only a question of the user's specialist knowledge but also of the reliability, quality and precision of the devices used. Our offer includes:**

#### **Heating and drying cabinets**

Short heating times and precise temperature control make them real experts for heating and drying tasks. The range extends from universal cabinets and sterilizers to vacuum drying cabinets for substances that are sensitive to oxidation and thermolabile substances. With various options, our devices can be individually adapted to your needs.

#### **Incubators**

We offer a wide range of devices for high-precision incubations in clinical, microbiological and industrial laboratories. Regardless of the amount and type of loading, our incubators, CO<sub>2</sub> incubators and cooled incubators guarantee uniform and constant temperature conditions at every point in the interior and ensure rapid and constant growth.



#### **Climatic chambers**

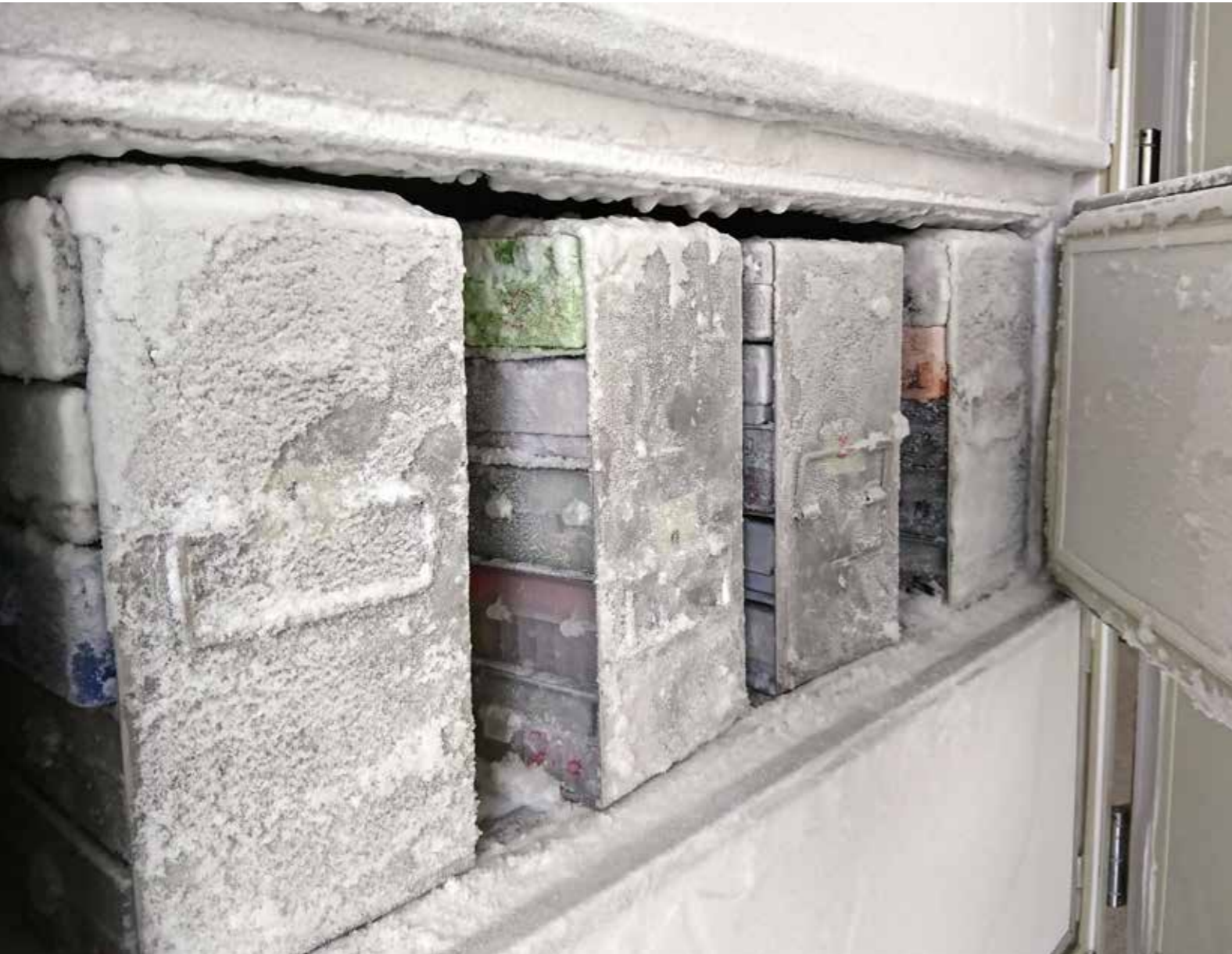
The climatic chambers are perfectly designed for the strict requirements of stability tests, conditioning, climatic testing or aging. Temperature and humidity are distributed homogeneously and stably over the entire interior and thus create the ideal climate for your application.

#### **Water and oil baths**

Comfortable, precise and safe temperature control or heating of ointments, emulsions or nutrient solutions. A large range of water and oil baths rounds off our portfolio. With many additional devices and accessories, each device can be tailored to your application.



# Cooling&freezing.



**In the medical, laboratory and industrial sectors, the highest demands are placed on the quality and safety of cooling devices. From commercial life science to scientific research, reliable, high-performance refrigerators and freezers are vital.**

Renggli AG offers a wide range of cooling devices. From laboratory refrigerators with a cooling capacity of +20 °C to -35°C to freezers down to -150°C to cold rooms. Whether plasma freezers, refrigerators for storing medicines or laboratory freezers, we have the right device for your application in our extensive range. Depending on the device, there are different options such as ATEX protection, glass doors, interiors made of stainless steel or a drive control to reduce power consumption. We can therefore offer a solution tailored to your individual needs for the cooling and storage of sensitive goods. In addition, a wide range of storage aids such as storage racks and boxes enables professional and efficient storage.

As a specialist in the field of laboratory refrigeration, we plan and implement cold rooms. Refrigerators with a capacity of up to 730 litres are another option for storing demanding refrigerated goods. The largest cooling units, therefore, represent a real alternative to cold cells.

Energy efficiency and ecology are important to us. We only use natural refrigerants so that our devices do not have any harmful effects on the ozone layer and the associated greenhouse effect.



# Personal protection.



**Our personal protection devices are designed to protect people during applications with chemical products in the laboratory. The filtration of vapors and chemical particles from the air not only protects the user from inhalation risks but also prevents emission of pollutants into the atmosphere and thus actively contributes to environmental protection.**

#### **Filtration fume hood**

When working with dangerous vapors, gases and particles, the fume hood protect the user from inhaling dangerous substances. Thanks to the modular structure of the filtration columns, both filtration technologies, molecular and particle filtration, can be combined in a single device. The fume hoods are adapted to the protection requirements of your laboratory and individually equipped according to your wishes.

#### **Weighing workstations**

The weighing workstations are used in the laboratory for demanding work with powders such as working with precision scales or processing pellets, capsules or tablets. The laminar airflow and the particle filters ensure optimal user protection. The low-vibration construction of the devices enables high-precision weighing work.

#### **Chemical storage**

Chemical cabinets are used to reduce the inhalation risks caused by high concentrations of vapors in the laboratory air. They are suitable for storing numerous bottles and other containers from the laboratory and contain toxic and odorous vapors that come from the containers of the chemical products. The molecular and particle filters prevent the emission of pollutants into the atmosphere. The air circulation is also used to clean the laboratory air.



# Personal & product protection.



**With our devices in the area of personal and product protection, you reliably protect your employees, products and the environment. Our devices are suitable for example, for microbiological or genetic engineering and for working with cell cultures. They are used in the fields of pharmacy, chemistry, the food industry, cosmetics, medical technology, electronics and by research institutes and laboratories.**

#### **Laminar-Flow**

The laminar flow is a workbench for product protection. It is available in two versions, either with vertical or horizontal airflow. The particle filtration creates a sterile, particle-free working environment and guarantees excellent product protection. Harmless preparations, cell cultures or other products are thus protected from harmful influences from the work environment.

#### **Bio Safety workbenches**

The safety workbenches according to DIN EN 12469 are mainly used for working with biological substances. The airflow and the particle filters prevent cross-contamination and the escape of microorganisms and aerosols and thus ensure protection for people, products and the environment.

#### **Cytostatic workbenches**

With the so-called cytostatic workbench according to DIN 12980, an additional HEPA pre-filter unit is integrated in the footwell of the work area. This can be changed without contamination while the workbench is in operation. In contrast to the normal safety workbench, which is mainly designed for working with biological substances, cytostatic workbenches are used for working with highly active substances.





# Vacuum technology.



**Vacuum has now become an integral part of research in chemistry, biology and physics. It is also indispensable in important industrial processes. With our vacuum pumps, the entire spectrum can be covered, from stand-alone solutions to internal laboratory vacuum networks.**

The requirements for the vacuum technology used depend on the area in which the vacuum is used. We offer vacuum pumps for all possible branches of vacuum production. Regardless of whether it is a rotary vane pump, oil-free diaphragm pump, a complete vacuum pumping station or a vacuum network, the low-maintenance vacuum pumps are characterized by their longevity and last but not least, impress with their maximum delivery rate.

The modular vacuum systems are designed to be user friendly. They meet both the technical and economic requirements for ecological and economic vacuum generation. In many systems it is even possible to recover solvents.



# Water treatment.



Contact us!  
041 798 14 50

**Scientists face many challenges today. They have to deliver first-class scientific results whilst under time pressure, in compliance with a steadily increasing number of quality standards and official regulations and often in laboratories with limited space.**

Different water qualities are required for different applications. We offer various water treatment systems for the production of different water qualities for all critical processes and areas of application. Renggli AG systems offer a unique combination of optimized water treatment and monitoring technologies. Our portfolio includes various systems such as ion exchangers, pure and ultra pure water systems, water softening, reverse osmosis systems with electro-deionization cells and filter cartridges.

Pure (type 2) and ultrapure water (type 1) can be produced directly from tap water. Pure water is generated using a bactericidal UV lamp. The pure water is then stored for example, in a polyethylene tank that maintains the purity of the stored water. Via a distributor pump, it can either be used to supply devices such as laboratory dishwashers or by killing organic molecules by photooxidation for further processing into ultrapure water. Special filters remove the remaining ionic and organic impurities down to the trace level. The result of this two-stage treatment is ultrapure water, free of particles, bacteria, pyrogens, nucleases, proteases, VOC endocrine disrupting substances and organic compounds.



# Thermostat.



**Chemical processes can only run in a targeted and controlled manner when a gas, liquid or solid has the correct temperature. There are three methods of temperature control: gas temperature control, if air or another gas is used as a heat transfer medium (e.g. in a heating cabinet), transfer of heat via liquid (liquid temperature control) or solid temperature control, if e.g. B. metal block thermostats can be used as heat transfer media.**

To achieve reliable results, choosing the right device is crucial. Thanks to high-performance partners, Renggli AG can competently and comprehensively offer all areas of temperature control. We supply devices from leading manufacturers of high-precision temperature control solutions for research and industry. The products are suitable for precise temperature control in laboratories and production processes for all temperature control tasks from -125 °C to +425 °C.

Our thermostats are predestined for applications in process engineering such as the temperature control of reactors, autoclaves, reaction blocks and calorimeters. The temperature control systems impress with their unique thermodynamics for highly accurate and reproducible results. The devices guarantee short heating and cooling times as well as a wide temperature range without changing the fluid. The thermal fluid is protected by the lack of direct contact with the oxygen in the atmosphere.



# Autoclave.



**Autoclaves are used in medical, food and laboratory technology as well as in biotechnology. They are used to sterilize waste, harden materials or compress fiber composite materials.**

Autoclaving causes the disinfection of substances to increase occupational safety and health protection as well as increasing environmental and product safety. Renggli AG offers autoclaves from leading manufacturers. The various devices are tailored to the needs of the customer and the respective range of applications. Many years of experience in the field of autoclaves make us a qualified partner when it comes to safe, reproducible and validatable sterilization.

The compact design of the devices leads to a small footprint and thus provides a decisive advantage when there is a lack of space in the laboratory. An extensive range with different chamber volumes enables almost tailor-made solutions.

Thanks to the resistant and long-lasting media sensors, maintenance and repair costs are low. The highly efficient exhaust air filters with their own temperature monitoring can also be exchanged easily and without the need for a technician. The spiral-wound chamber makes a further contribution to energy savings. Thanks to the highly efficient cooling with tap water, a shorter cooling time is achieved and expensive treated demineralized water can be dispensed with.



# Centrifuges & shakers.



**Separation and mixing substances are among the most important basic operations in everyday laboratory work. In the field of centrifugation and shaking, we offer you a variety of devices that reliably support you every day in your quality-related work.**

## Centrifuges

The centrifugal force, which comes about through the uniform circular movement of the material to be centrifuged, is used to separate the material. Due to the different densities of the individual components, a centrifuge can, for example, separate the components of suspensions, emulsions or gas mixtures. Our models are characterized by their performance and their wide range of possible uses. Equipped with efficient microprocessors, all devices are easy to control and some can be used in the high-speed range.

## Shakers

The mixing of substances in the laboratory or in industry, e.g. to prepare a solution of a certain concentration, is very often done by shaking. Our shakers are extremely quiet and versatile. There are different types of movement, such as circular, to-and-fro, tumbling or rocking movements, both for the gentle movement of liquids and vigorous mixing. The devices are characterized by the fact that almost all shapes of standard laboratory containers can be easily attached to the shaker thanks to a variety of additional devices.



# Environmental safety.



**The safe storage of hazardous substances is an important issue in every laboratory. Various regulations must be followed so that chemicals are protected from fire in the event of a fire.**

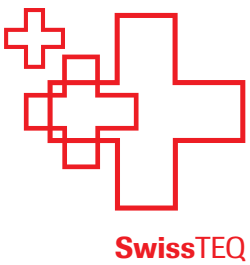
So that you can safely store your dangerous substances, we offer you fireproof safety, gas cylinder, chemical and acid-base cabinets. The chemical vapors generated during storage can either be absorbed with a ventilation module or removed with the exhaust air.

Our partners' selection includes over 100 different models. With various accessories, each cabinet is individually tailored to customer needs. The chemical cabinets are fireproof for up to 90 minutes. The optionally available automatic opening and closing of the door already reduces the risk when transporting hazardous substances and makes work much easier. We would be happy to support you individually in choosing the right storage method and to work with you to determine the best solution.

Environmental protection is very important to us. With us, your products and the environment are safely protected!



Renggli AG  
Birkenstrasse 31  
CH-6343 Rotkreuz  
Schweiz  
[www.renggli.com](http://www.renggli.com)



**renggli**

Laboratory  
Systems