



# Get the right answer for operation, service and about us.

## **Operation CCU-010**

#### How good is the pumping performance of the high vacuum unit?

Thanks to the excellent vacuum design and the use of high-quality components (turbo pump from Pfeiffer, gauges from Inficon, etc.), the high vacuum unit **CCU-010HV** reaches the vacuum of  $5e^{-5}$ mbar within 5 minutes. We guarantee an ultimate vacuum of  $2e^{-6}$ mbar.

#### Can I also coat over time or only by measuring the coating thickness?

Our coating instruments are delivered with a film thickness monitor as standard. However, this sensor may be covered when using large samples. You can always define whether you want to coat over time or over film thickness.

#### Is the safematic system completely oil-free?

The safematic coating devices are available in two versions. On the one hand the low vacuum system **CCU-010LV**, this is normally operated with an external rotary pump, and the high vacuum device **CCU-010HV**, which has an integrated pumping system. The **CCU-010HV** instrument uses a turbo pump in combination with a diaphragm pump. The system is therefore completely oil-free and achieves the best coating results. As an additional benefit, you can store your samples under vacuum.

#### Do I need two separate devices to evaporate carbon and to sputter metal?

No, with our modular concept, you only need one base unit. We have separate process heads for the individual processes, which you can simply plug onto our base unit. The change is very simple and fast. The base unit recognises the corresponding process head and provides the appropriate functions for coating.

# How can cross contamination be prevented when using the carbon thread head and sputter head with one device?

Cross-contamination can be largely prevented by using a separate glass cylinder and standard sample table. A tip: Label one glass cylinder with "Carbon" and the other with "Metal".

#### Do I need to set the tooling factor separately for each Target material?

No, the tooling factor remains the same for all materials. When selecting the target material, the appropriate settings are made automatically. The tooling factor only changes when the film thickness sensor is positioned from the centre to the edge.

#### Is it possible to sputter challenging materials such as ITO, Al, Ni, Fe with your system?

Yes, this is possible. With the **SP-011** we have developed a special sputter head which allows us to sputter exactly these materials. Of course, the **SP-011** can be added later and simply used in addition. Our modular concept makes it possible!





#### Is the unit suitable for a multi-user environment?

Many customers trust our products and use them in multi-user environments. Thanks to the simple operation and programming of recipes, the devices can be operated and used by different users without any problems.

#### Can I upgrade the unit at a later stage, e.g. a sputtering unit with carbon evaporation?

When we started development a few years ago, our main focus was on the modularity of the device. Our vision was to have a device that can be configured in a modular way. Our customers should not have to decide at the beginning which configuration they want. The requirements can change during the product life cycle. We designed our device accordingly and the modularity was taken into account from the beginning.

### Service CCU-010

#### How easy is it to clean the carbon evaporation head CT-010?

As the carbon evaporation process is a dirty process by nature, we have designed our unit to be very easy to clean. The head can be disassembled in a few easy steps to ensure good accessibility for cleaning. A complete disassembly with cleaning takes about 15 minutes. We offer special cleaning pads which are ideal for abrasive cleaning. For the finish, we recommend alcohol such as isopropanol.

#### How often does the coating system need to be serviced?

Cleaning is the be-all and end-all. We mostly use standard components such as DN100 ISO-KF centering rings, which are easy to clean and inexpensive to replace. O-rings should be checked periodically and replaced if necessary. In the high vacuum system, the usual wearing parts are the diaphragm and valves of the diaphragm pump and the operating fluid reservoir of the turbo pump. Contact your sales partner for details on maintenance.

#### What does the safematic service concept look like?

First and foremost, our service partners are there to provide you with competent support if you have questions about our product or problems in the operation of your product. As a backup, we are available from Switzerland and can provide you with additional support. We have the possibility to access your devices remotely via TeamViewer and can thus quickly and easily make initial diagnoses. Thanks to our modular concept, individual system components can be replaced with little effort. As a way to avoid high servicing costs, we propose that you exchange replacement parts by mail.





# Company

#### How many people work for safematic?

There are currently seven people working at safematic at the main location in Switzerland (as of 2021). Our highly qualified, experienced employees develop products with Swiss precision. Thanks to the valued cooperation with over 25 sales and service partners worldwide, we ensure that you have a contact person on site. Of course, you can also contact us directly at any time and, thanks to our size, you can expect short response times.

#### Where are the safematic products manufactured?

Our products are manufactured in-house in Switzerland. Due to the near production, we always have 100% control of the production process and can guarantee high quality and short delivery time.

#### What is safematic's tradition?

Our company is rooted in the tradition of the Vacuum Valley, nestled along the Rhine in Switzerland, with its long history of innovation in vacuum and coating technology. We are Swiss made, guaranteeing quality and a deep understanding of your needs and how to meet them.