

KASAG



Filtration technology

Experts for design, engineering and welding

We provide clarity **globally**

Filtration technology in Swiss quality to be used all around the world

You are part of an environment in which filtration technology is used and which requires high standards and reliability. In the business sector of filtration technology, we offer a comprehensive KASAG product range to customers from the fields of pharmaceutical, chemical, biotechnological and cosmetics industry as well as further industrial sectors such as the food and beverage industry.

Filter technology and plants of KASAG Swiss AG are designed individually in compliance with our customers' specifications and requests. They can be used specifically:

If the filtrate or the solids must not come into contact with the environment, like in the case of toxic, flammable, or sterile suspensions.

If the suspension acts highly aggressive with regard to common materials and is difficult to filter.

If a high degree of automation is required, no residual volume must remain and if maximum cleanability of the filter is required.

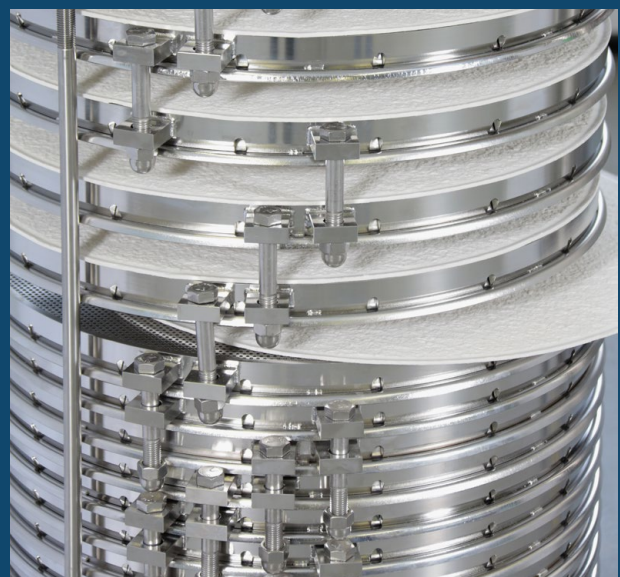
If additional process steps such as washing out and drying of the filter cake, extraction or solving are required.

If the suspension must be filtered or heated/cooled at high temperatures.

Basics of filtration technology

The filtration technology and processes contain both separation of solids/liquids and clarification/sterile filtration. In this process, a solid phase is separated from a liquid phase by means of a medium. The filter apparatuses are used in the field of particle filtration, i.e. the solid phase consists of particles of a size of approx. 1 μm to approx. 1 mm.

The separating medium can hold back the particles on its surface (so-called surface filtration) or in its depth (so-called depth filtration). In the case of depth filtration, the medium can also consist of the particles to be separated, i.e. a medium holds back the larger particles by surface filtration, during the process of which a filter cake forms. This filter cake then holds back all particles by means of depth filtration.





We offer a comprehensive range of products and services

Filtration tasks

The filtration tasks to be solved are manifold. In certain cases, the filtrate is the product, and in other cases it is the solid. In some cases, it is both. The batch size can range from one litre or even several tons per hour. These are typical tasks:

Separation of activated carbon

Activated carbon is used to clarify liquids or as carrier of catalysts.

Separation of crystallised products

Here, often the solid is washed out.

Clarifying filtration of foodstuffs

Such as cooking oils, cocoa butter, honey, vinegar, etc.

Filtration under sterile conditions

Such as infusion solutions, insulin, albumin, antibiotics, alginate, etc.

Filtration of toxic substances

Such as photo chemicals, galvanic baths, electrolytic baths, chromic acid, fungicides, dichlorobenzene, etc.

Merkur® pressure nutsche, press filter

Single-sheet filter with filter layer, filter cloth or metal compound fabric

Orion®/Taurus® multi-sheet filter

With square filter elements, vertical

Radium® horizontal plate filter

With round filter elements, horizontal

Suction filter, nutsche dryer Terra®

Pressure filtration product, wash, suspend, displace, dry under vacuum. Stir with lift.

Wega® filter dryer

Multi-purpose plant: Reaction, precipitation, crystallisation, filtration as well as washing and drying in one system

Certifications, manufacturer approvals

ISO 9001 / ISO 3834-2

PED (EN13445 / AD-2000)

ASME (U-Stamp, Code Section VIII Div. 1)

China Stamp (A1), China License

TP TC 032/2013 (EAC), Customs Union

In addition to the existing manufacturing approvals, we are experienced to perform the respective approval procedures for almost all the countries in the world (e.g. Singapore, Japan, Malaysia, Canada, etc.).

«Demanding customers are our challenge.
We implement your individual requests in the field
of filtration technology with great commitment.»



Process engineering/ filtration tests

There is an almost infinite number of filtration tasks and therefore also a large variety of designs and sizes of filtration apparatus. This requires competent advice. On the basis of the filtration task, we can design the suitable filtration apparatus in the corresponding size.

The filtration response of many suspensions is unknown and often filtration tests are required. The tests are usually performed at the customer's site. Various test filters and filtration media are provided. Together with you, we'll establish a concept for the overall system, elaborate flow charts for each filtration process, document and program the process operations.

🔍 Do you have any questions?

If you have any general questions regarding our filtration technology, our experts will be glad to assist you:

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 www.kasag.com/en/plants-apparatus-pressure-vessels-construction-filtration-technology/



«The KASAG experts are your contact partners in the fields of process engineering, design, engineering, and the construction of apparatuses and plants for filtration technology.»

Materials, surface treatment

Austenitic stainless steel (1.4307, 1.4571, 1.4435, ...)
Fully austenitic, stainless steel (1.4539, 1.4828, ...)
Duplex (1.4462, 1.4410, ...)
NiCrFeMo alloys with Ni > 40% (Inconel, Hastelloy, ...)
Pickling, passivation, grinding, brushing, electrolytic polishing

Implementation of the ATEX guidelines

The implementation is carried out in compliance with the specifications laid down by the 2014/34/EU, EN 13463 Directive for the avoidance of ignition sources. We'll be pleased to advise you with regard to the determination of explosion hazards during operation and the substance data relevant to explosion protection. We'll also define corresponding organisational and technical measures. In addition to electrical devices, also the mechanical subsystems are evaluated in the context of the risk analysis (EN14121-1). Documents and concepts with regard to explosion protection are listed in the operating instructions.

Qualification

We support you with regard to GMP (Good Manufacturing Practice) requirements for the validation/qualification of filtration technology (DQ, IQ, OQ, PQ) produced by us.

This also includes the approval of our machines in the form of an FAT (factory acceptance test) in our plant or at the operator's site in the form of an SAT (site acceptance test).



For technical exclusivity worldwide

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