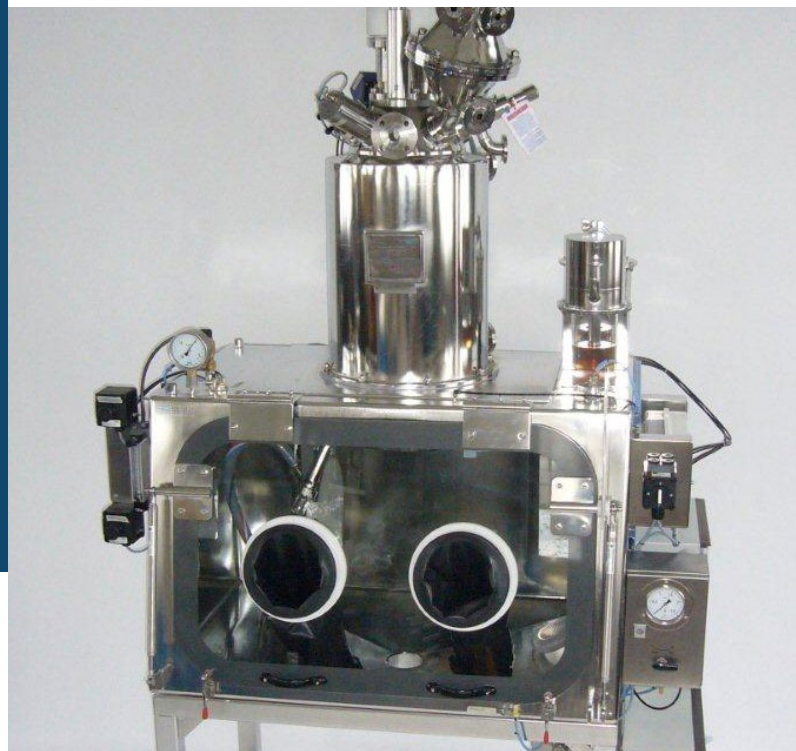


Nutsche filter, nutsche dryer Terra

KASAGTerra®

Terra® nutsche filter, nutsche dryers are sterilisable and intermittently working pressure filters. They allow for the combination of different consecutive process steps in one system. Suitable for well filterable suspensions with a high solid content.



Benefits of the Terra® nutsche filter

- Additional process steps like extraction, washing out, blowing out, steaming, vacuum or hot-gas drying, solution and sublimation, discharging the solid
- Closed filter system with a height-adjustable agitator for washing, spreading, drying and discharging the filter cake
- High quality and performance reliability, at the same time ensuring processing that treats the products with care
- Expandable with measuring, open-loop and closed-loop control systems, circulation heating or cooling, reaction vessels, heat exchanger, vacuum and compressed air aggregates
- Processing of toxic or oxygen-sensitive substances possible
- Highest standards with regard to production reliability are met
- Variable operation comfort of manual control to computer-assisted automation with video surveillance and process visualisation
- Production of the whole system from one single source
- A lowerable, extendable base part makes it possible to replace the filter element, filter cloth or metal compound fabric outside the device
- Materials: Austenitic stainless steel (1.4307, 1.4571, ...), fully austenitic stainless steel (1.4539, 1.4828, ...), duplex (1.4462, 1.4410, ...), NiCrFeMo alloys with Ni > 40% (Inconel, Hastelloy, ...)

Technical details

Depending on your demand of specific process steps, we design various variants of Terra® suction filter, strainer dryers.

Design sizes	EFR 30 to EFR 180
Filter surface	0.06 m ² to 2.5 m ²
Effective volume	30 to 2'300 litres
Solid volume	16 to 1'000 litres

Design variants

- Filter apparatus with heating and cooling jacket at the filter top and base
- Heatable agitator for improving the drying performance
- Drying of the filter cake under vacuum or with hot air or inert gas
- Solid discharge at the sides on the cylindrical vessel frame or centrally in the vessel base
- Agitator with double shaft seal
- Metallically sealing discharge valve
- Sterile mode of operation and discharge
- Discharge via glovebox

Our 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 our existing manufacturing approvals, we are able to perform the respective approval procedures for almost every country around the world (e.g. Singapore, Japan, Malaysia, Canada, etc.).



The process filter which combines several process steps



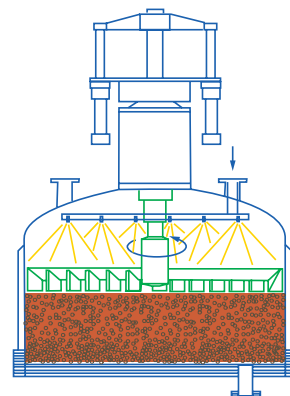
Terra® nutsche filter, nutsche dryer

Application

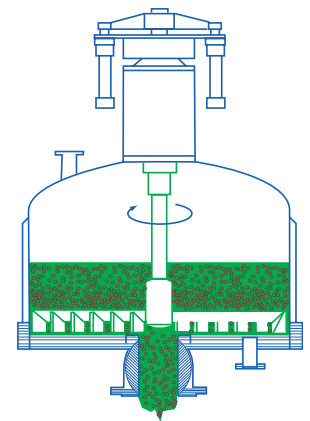
Suitable for suspensions that can be filtered well, with a high solid content, allowing for filter cake heights of 300–400 mm and more. Additional process steps like extraction, washing out, blowing out, steaming, pre-drying, open up a broad field of application for working with solvents and toxic substances - the closed system providing for protection of the personnel and offering environmental protection and avoiding product contaminations, e.g. in the following fields:

- Chemical process engineering
- Pharmaceutical industry, biotechnology
- Foodstuff industry
- Plant protection/agricultural chemistry
- Hydrometallurgy

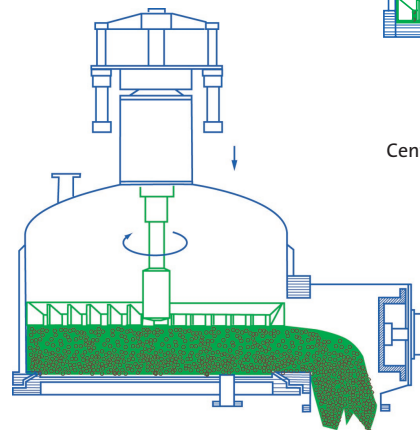
e.g. for alkaloids, antibiotics, anthraquinones, barium salts, calcium phosphate, quinidine sulphate, caffeine, diamine, EDTA, dyes, dyestuff intermediates, fine chemicals, fungicides, gypsum, hexachlorobenzene, hexamine, iodine, cobalt salts, lactose, lanthanide, nickel salts, PAS, penicillin, pharmaceuticals, pharmaceutical intermediates, pigments, polyether, roentgen contrast medium, heavy-metal compounds, rare earths, sorbic acid, stabilizers for plastics, sweeteners, tetrachlorobenzene, zinc salts, citric acid.



Suspension or displacement
washing or extraction



Central discharge of solids



Side discharge of solids