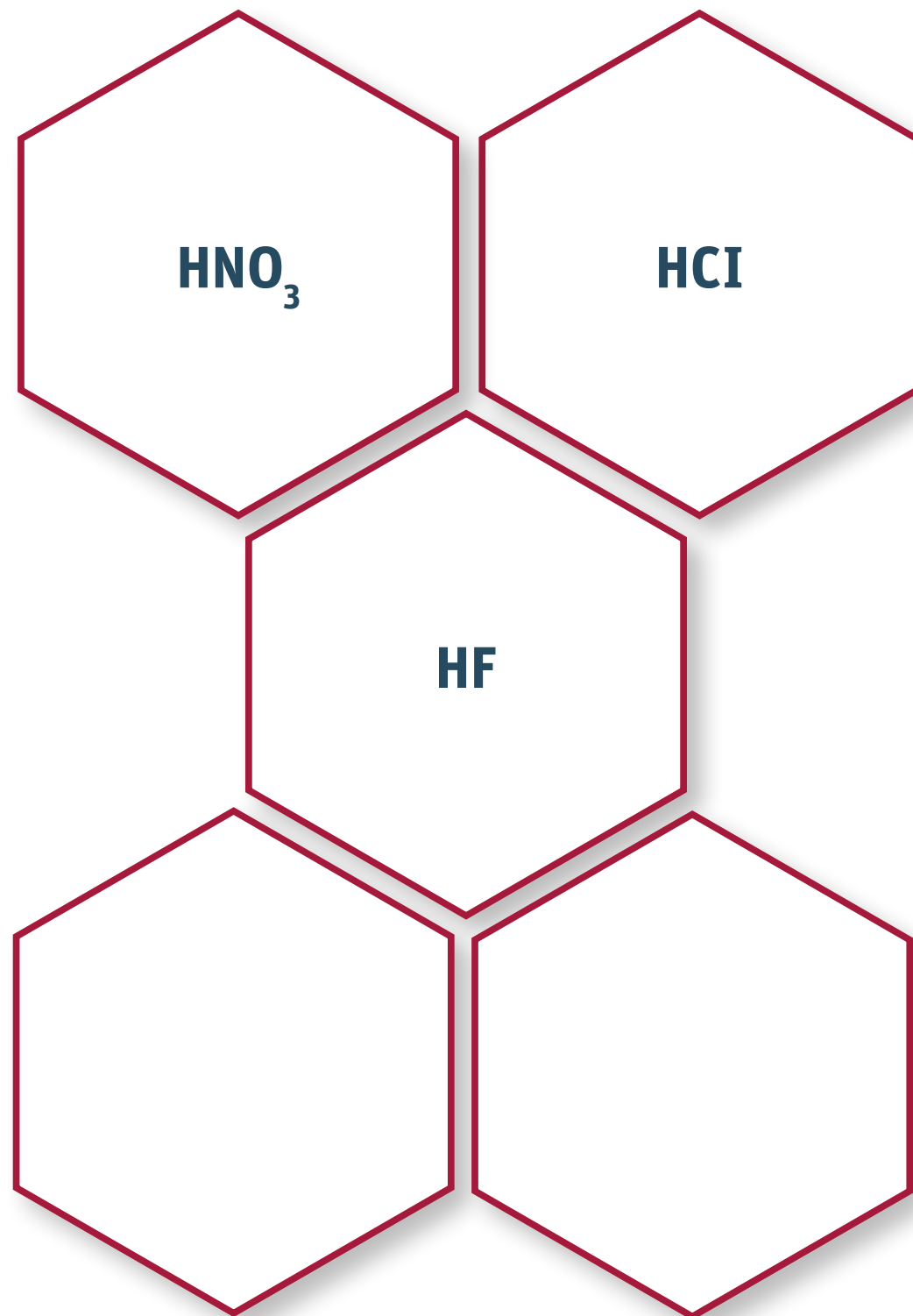


Applications



LABORATORY INSTRUMENTS

Acid purification

High purity acids permanently available



Producing your own high-purity acids or recycling them

→ This means that high-purity acids are available cost-effectively at any time

BERGHOF PRODUCTS + INSTRUMENTS LTD

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GETTING OUT OF THE COST TRAP

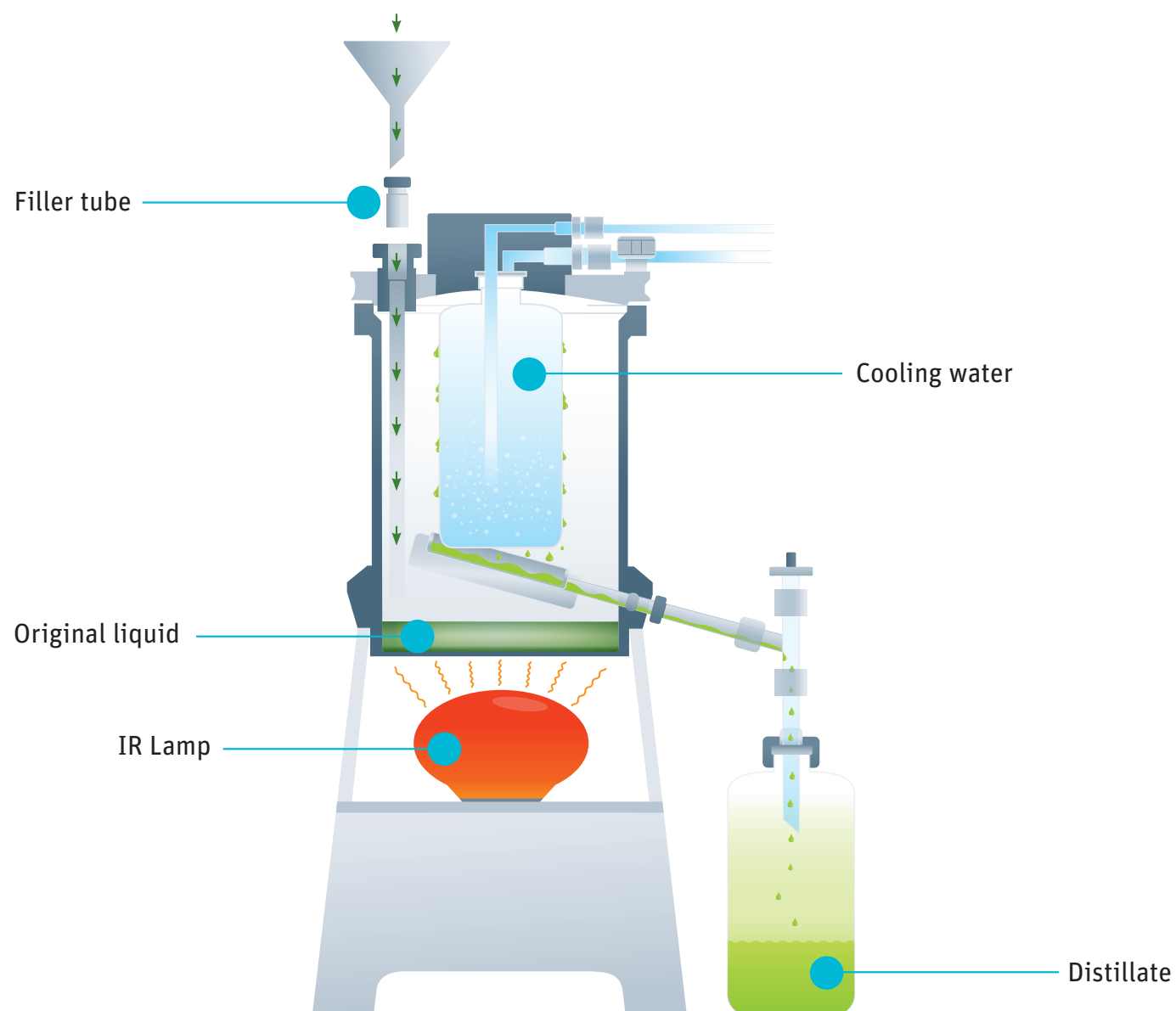
On the one hand, modern analytical laboratories have to perform high-quality analyses in the ultratrace range, but on the other hand they also have to minimize the costs for chemicals and consumables. The Berghof subboiling apparatus produces quality and pays for itself quickly. As a user, you benefit from absolutely pure acids at the lowest possible operating costs.

SUBBOILING-PRINCIPLE:

The subboiling apparatus is used to produce high-purity acids for ultratrace analysis. Via infrared heating, it distills the acid at temperatures of 10-20°C below the boiling point very carefully. This prevents the formation of droplets and aerosols and ensures a uniquely efficient purification.

→ Fields of application: HNO₃, HCL, HF und H₂O

→ Distillation volumes: **Less is more** – lower distillation volumes mean higher purity of the acid yielded.
In 24 h, approximately 1.2 L HNO₃, 1.1 L HCL, 1.0 L HF or 1.8 L H₂O are gained.



Distillacid

PURITY LEVELS



Unmatched purity

- Starting from p.a. qualities, high-purity acids with contaminations in the sub-ppb range are obtained
- **Multiple-Subboiling**
Leads to even purer acids at sup-ppt level
- **Cost-effective**
The system pays for itself within one year
- **High durability**
The system consists solely of high-purity materials such as TFM™-PTFE, PTFE and PP

Concentrations in ng/g (=ppb)		Concentrations in ng/g (=ppb)	
Ag	<0,05	In	<0,05
AL	0,2	K	0,6
As	<0,05	Li	<0,05
Au	<0,05	Mg	0,08
Ba	<0,05	Mn	<0,0 5
Be	0,1	Mo	<0,05
Bi	<0,05	Na	0,6
Ca	0,1	Ni	0,3
Cd	<0,05	Pb	<0,05
Co	<0,05	Sb	<0,05
Cr	<0,05	Sn	<0,05
Cu	<0,05	Sr	<0,05
Fe	0,25	Ti	0,1
Ga	<0,05	V	<0,05
Ge	0,4	Za	<0,05