





DRYING TECHNOLOGY EVAPORATION TECHNOLOGY EXTRACTION TECHNOLOGY



Process engineering expertise Made in Germany





Member of the KAHL Group family owned since 1879

- Members:
 - AMANDUS KAHL
 - SCHULE MÜHLENBAU
 - DEVEX Verfahrenstechnik
 - HEINEN FREEZING
 - NEUHAUS NEOTEC
- 900 employees in total
- Turnover 250€ mio./ year









Evaporation Plants



Process Equipment



Extraction Plants



Continous Dryers



High Concentrators/ UHT





Batch Dryers



Instant Coffee Plants



Distillation Plants





Industry Sectors

Food Supplier

Refinery

Instant Coffee

Pharmaceutical

Pharma Supplier

Beverages



Process Engineering

Instant Food

Distillation

Instant Beverages

Extracts

Aroma





Extraction Plants





- -1 up to 0,5 or 3 bar
- High Pressure Extractors
- Volume 100L/ 10 m³
- Single-/ Multistage Extraction
- Pilot Extraction Plants
- Distillation
- Automatic feed/ discharge
- CE, FDA, GMP, PED





Evaporation Plants

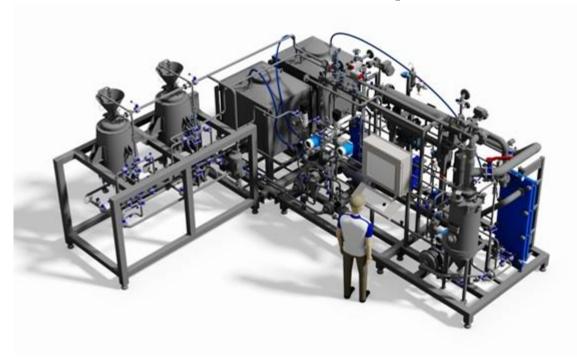
- Plate-Heat-Evaporators
- Tube-Bundle-Heat-Evaporators
- Falling Film Evaporators (MVR / TVR)
- Flash-Evaporators
- Agitator-Evaporators
- Pilot-Evaporators
- Starting from 100 liters/hour up to ...
- CE, FDA, GMP, PED







Pilot Plants: combined Extraction/Evaporation







Batch Drying











Pilot Vacuum-/ Freeze-Belt-Dryer

- Continious operation
- Batch operation
- Vacuum drying
- Freeze drying
- Liquid-freeze drying







Vacuum/ Freeze-/ Liquid Freeze-Drying

Continuous Operation



Batch Operation













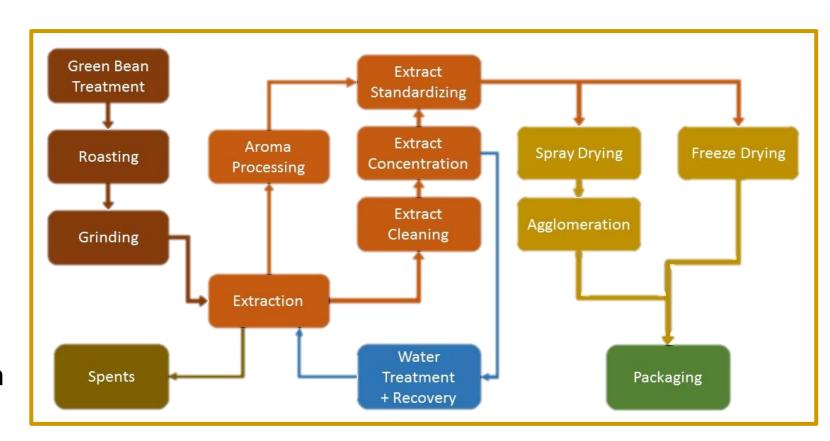






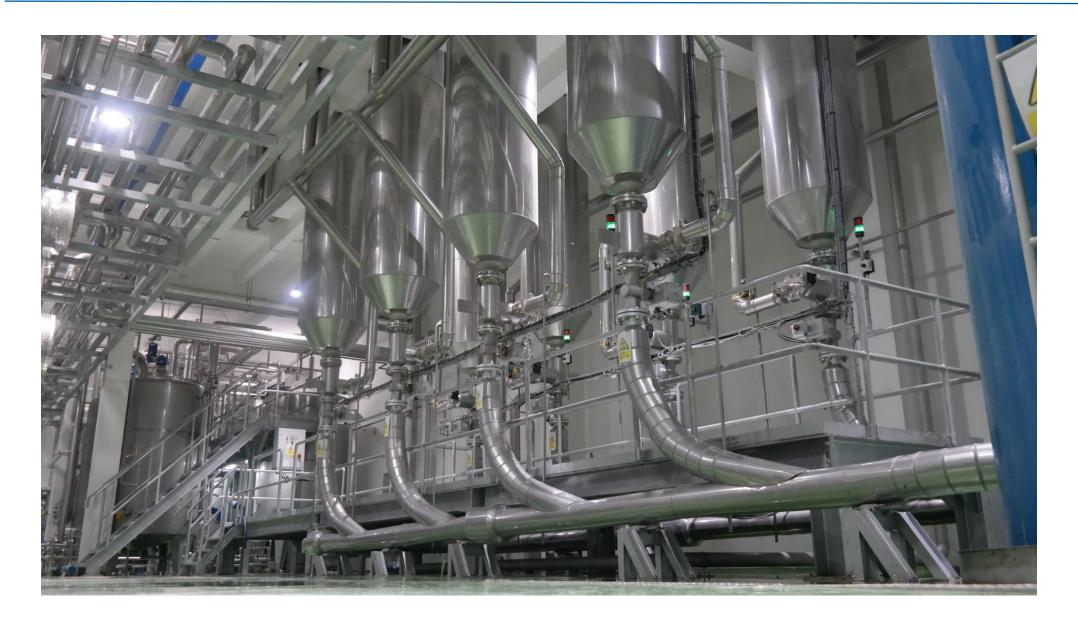
Instant Coffee Plants

- Green bean handling
- Roasting
- Extraction
- Aroma Recovery
- Evaporation/ Concentration
- Vacuum Drying
- Freeze Drying
- Spray Drying/ Agglomeration
- Vapourisation/ Steaming













DEVEX Innovation Centre

- ✓ Execute trials based on client's specification
- ✓ Product development for and together with the client
- ✓ Execute first R&D trials for new processes
- ✓ Verifying lab parameters in a first scale up
- ✓ Define process parameters for future production scale
- ✓ Easy upscaling to industrial size















DEVEX Innovation Centre – perfect for R&D and product development You are welcome to join us during trials in the Innovation Centre

Contact DEVEX: info@devex-gmbh.de - Phone: +49 2581 927230 - www.devex-gmbh.de





Thank you for your attention

- KAHL Group
- Extraction Plants
- Evaporation Plants
- Combined Pilot Plant
- Drying technology
- Pilot Vacuum-/ Freeze-Belt-Dryer
- Instant Coffee Plants

