OVER 30 YEARS OF ENVIRONMENTAL TECHNOLOGY
FOR YOUR SUSTAINABLE PRODUCTION

WE HAVE GOT USED TO THE DIVERSITY OF THIS WORLD, HAVE LEARNED TO TAKE AND TO USE, TO CREATE AND ENJOY.

THE TIME COMES NOW WHEN THE SUSTAINABILITY OF OUR ACTIONS FINALLY HAS PRIORITY. NATIONAL AND INTERNATIONAL ENVIRONMENTAL REGULATIONS FORCE US TO TAKE ENVIRONMENTAL PROTECTION SERIOUSLY. OK THEN! SO THAT IT WILL STILL BE POSSIBLE TO LIVE ON FOR MANY CENTURIES OF PLEASURE AND DIVERSITY.

SO SIMPLE & EFFECTIVE. HF ABSORB SUPPORTS THE SUSTAINABILITY OF YOUR PRODUCTION. WE OFFER YOU A UNIQUE SYSTEM FOR GAS CLEANING OF HYDROGEN-FLUORIDE CONTAINING EXHAUST GASES, PATENTED BY STEULER INDUSTRIEWERKE.

BÜROMEDAU / HF ABSORB TAKES OVER THE PRODUCTION, INSTALLATION AND SERVICE WITH HF MODULES, FOR THE CONTINUOUS OPERATION OF YOUR HF REACTORS.







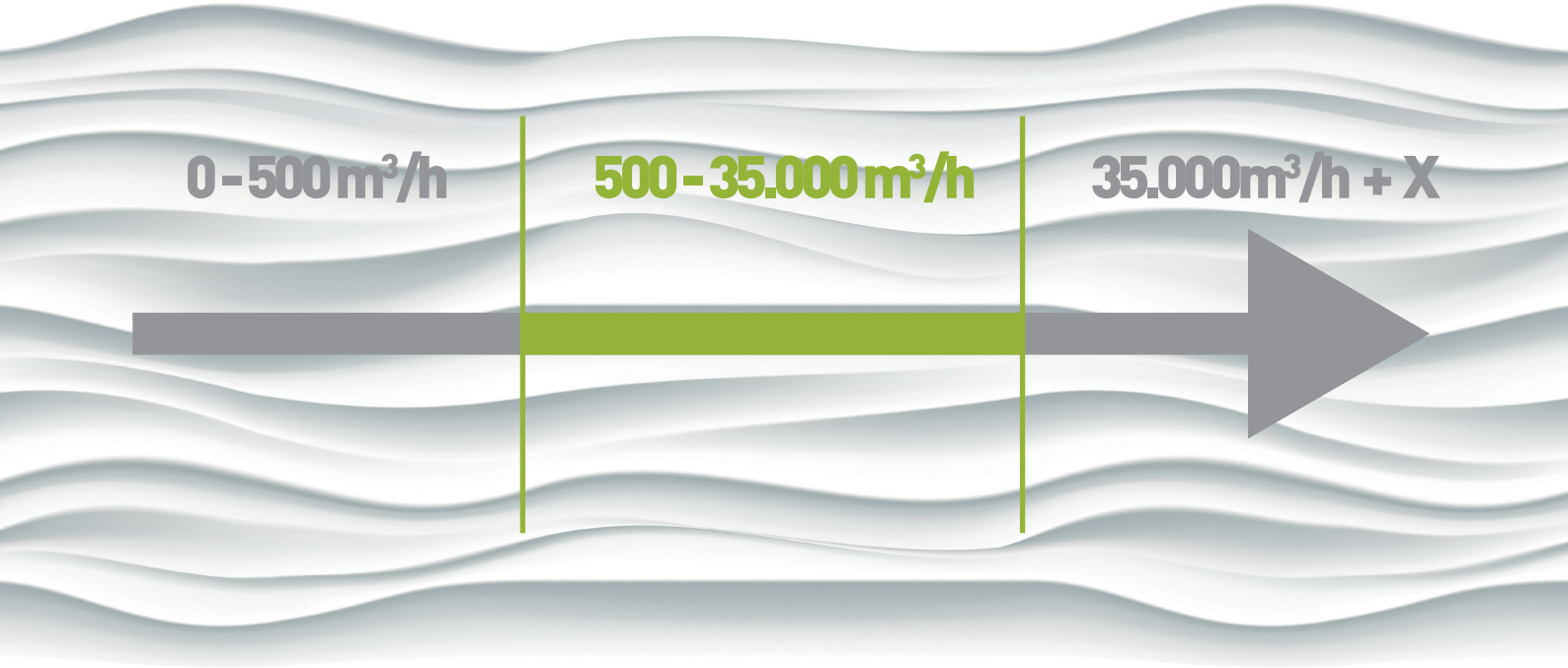


APPLICATION AREAS

The HF dry sorption process
cleans the exhaust air containing hydrogen fluoride
for following companies

WORKS FOR MANUFACTURING / PRODUCTION PLANTS OF:

REFRACTORY / ACID RESISTANT BRICKWORKS
POTTERY / HANDICRAFTS
CERAMIC FACTORIES
TILES & SLAB WORKS
PORCELAIN FACTORIES
SANITARY WARE
HIGH-TECH CERAMICS
ENAMELLING PLANTS
STEEL FINISHING


0 - 500 m³/h
500 - 35.000 m³/h
35.000 m³/h + X

OPTIMAL SYSTEM SIZE

Due to the more stringent requirements of the TA-Luft for all types of emissions with pollutant content, the requirements for the ceramic industry have been and will be changed significantly. The process engineering for pollutant reduction face this new challenge.

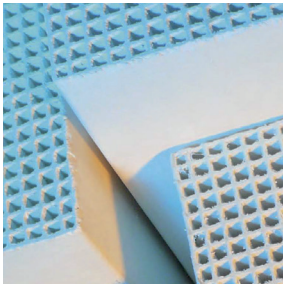
Our concept, decentralized HF absorption in the immediate vicinity of the ceramic furnace, allows the shortest possible routes for the exhaust air. The process does not require any additional permanent energy costs to operate the system.

The HF-containing flue gases are cleaned of HF by means of dry sorption as they flow through so-called absorber modules. The entire system works without moving parts.

The exhaust gas containing hydrogen fluoride normally enters the reactor from underneath and flows through the modules with the honeycomb-shaped channels. In these channels the fluorine is converted into fluorspar.

In the area of exhaust air quantities greater than 35,000m³ / h, well-known suppliers have brought well-functioning absorption systems onto the market, which are usually used in larger companies as central pollutant sorption systems.
However, "central systems" sometimes require long cable routes with larger fans, and sometimes also intermediate fans. Such lines and their careful insulation to avoid falling below the dew point on the way to the exhaust chimney increase the investment costs considerably.

With these systems, which mostly work according to the bulk bed filter or injection process, the not insignificant energy costs for operation (fan, granulate conveyance, dust filter, etc.) as well as the maintenance and control costs must also be taken into account.



SYSTEM

The plant consists of a simply constructed steel reactor without moving parts, which is equipped with several layers of honeycomb bodies made of a calcium compound. The exhaust gas containing hydrogen fluoride flows through the reactor built into the exhaust pipe, where the fluorine is chemically bonded by the calcium compounds present in the honeycomb bodies. The clean gas is discharged via the gas outlet line.

The dimensions of the reactor can be optimally calculated depending on the required service life of the modules and adapted to the respective operating conditions. The service life of the modules is determined according to the operating time of the systems, the exhaust gas volume flow and the raw gas concentration of the HF. When the modules are exhausted, they are exchanged for new ones.

To reduce module change times and to make handling easier, the modules are combined in stackable pallets.

The used modules essentially consist of non-toxic fluorspar (CaF2) and can be disposed of without any problems. The supply of fresh modules is provided by the BÜROMEDAU - HF ABSORB.

ADVANTAGES

- INCREASED SUSTAINABILITY OF YOUR PRODUCTION
- LOW INVESTMENT AND OPERATING COSTS
- TEMPERATURE RANGE PEAKING AT MAX. 350°C
- LOW PRESSURE LOSS AND THEREFORE LOW ENERGY COSTS
- NO LOAD ON EXISTING FILTER SYSTEMS THROUGH REACTION PRODUCTS
- NO MOVING PARTS I.E. NO COMPLICATED CHARGING AND PULLING EQUIPMENT (DAMPERS, WORM CONVEYORS, PEELERS, FILTERELEMENTS ETC.)
- PRACTICALLY MAINTAINANCE-FREE OPERATION THANKS TO SIMPLICITY OF DESIGN
- NO ABSORBENT PROCESSING NECESSARY
- HIGH ESTABLISHED ABSORBENT UTILIZATION FACTOR
- EASY RETROFITTING
- MODEST SPACE REQUIREMENT
- MODULAR CONSTRUCTION FOR GOOD ADAPTIVITY TO EXISTING OPERATING CONDITIONS

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