

## DGE-Standard series DGE-HCAT for catalytic plants for exhaust air decontamination

**DGE-HCAT** are plants for the catalytic exhaust air decontamination. For the catalytic conversion, honeycomb catalysts are used. These catalysts distinguish on the high temperature resistance and low pressure losses. Aluminium silicates, iron, copper and others are suitable as material. The structure and the design of the catalysts, which are to be used, go by the respective application. Generally rare metal catalysts, consisting of aluminium silicate, as leading material or mixed catalysts are installed.

The arrangement of the honeycomb catalysts is made in rectangular reactors.

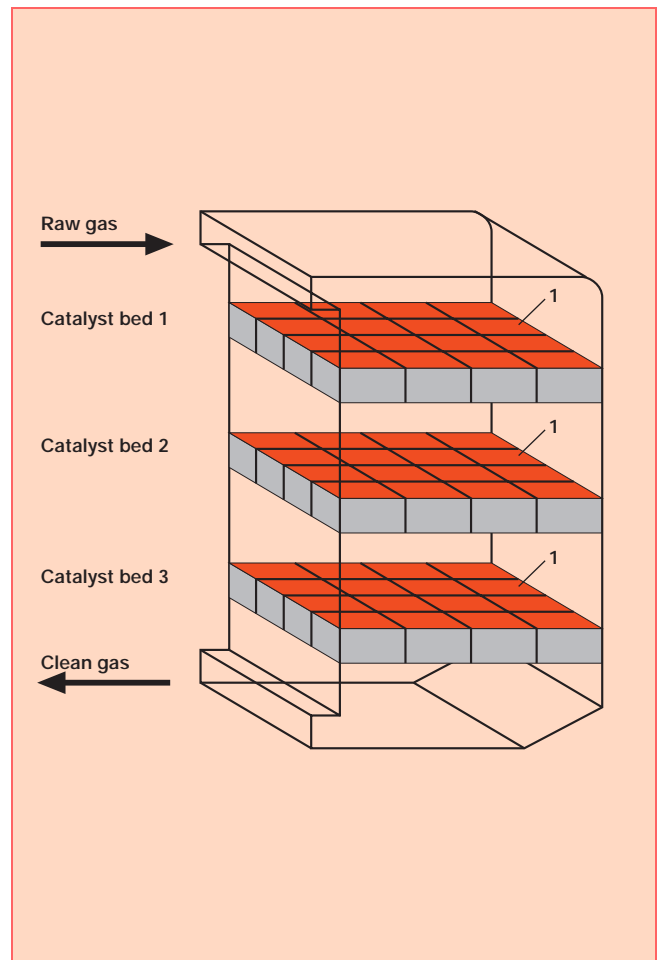
**DGE-HCAT-plants** are suitable for the exhaust air contamination of process flows with a small concentration in the following fields of application:

- Removal of odours
- Oxidation of organic components
- Reduction of NOx
- Removal of dioxides

At most of the catalytic oxidations, huge quantities of energy are released and can lead to a great warming up. This heat has to be taken away from the process. For that gas/gas-heat exchanger are suitable, which are used for the warming up of the treated waste gas flow. Additionally, for every task the necessary catalyst starting temperature has to be observed.

For the operation of every catalytic plant it is necessary to prepare separate safety views, which take into consideration all disturbances.

**DGE-HCAT-plants** are made of steel, high-quality-steel. The used steels correspond to the temperature demands. Apparatus and piping systems are isolated.

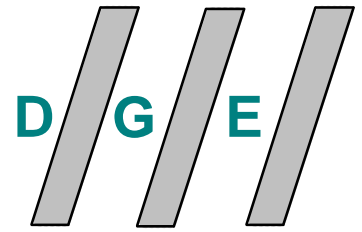


**DGE-Catalytic oxidation plants  
Model serie DGE-HCAT**

**1 – Honeycomb catalyst bed**



# Environmental Protection Process Engineering Plant Engineering



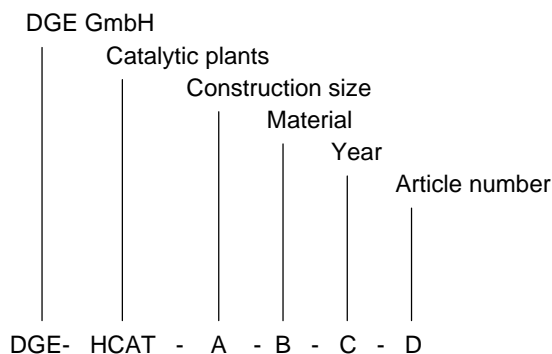
Dr.-Ing. Günther Engineering GmbH

There are the following standard subassemblies for using DGE-HCAT-plants for exhaust air decontamination

Unit	Lenght mm	Width mm	Height mm	Exhaust air quantity m³/h		
DGE-HCAT-	500	300	300	1000	200 -	500
DGE-HCAT-	750	600	300	1000	400 -	750
DGE-HCAT-	1500	600	600	1000	800 -	1500
DGE-HCAT-	3000	1000	600	1000	1500 -	3000
DGE-HCAT-	6000	1000	1000	1000	3000 -	6000
DGE-HCAT-	13000	2000	1000	1000	6000 -	13000
DGE-HCAT-	26000	2000	2000	1000	12000 -	26000
DGE-HCAT-	38000	2000	3000	1000	20000 -	38000
DGE-HCAT-	52000	2000	4000	1000	30000 -	52000
DGE-HCAT-	75000	2000	5000	1000	40000 -	75000
DGE-HCAT-	90000	2000	6000	1000	50000 -	90000

The indicated dimensions relate to the standard design with one catalyst bed. The height and the quantity of the catalyst beds can be modified. In a lot of cases, up to three catalyst beds are arranged. Other designs can be made on enquiry.

## Model designation for DGE-Catalytic plants Type DGE-HCAT:



**DGE testing plants** may be used for the piloting of complicated tasks. Our mobile testing plants allow you to get the information you need for laying out your process within the shortest period of time.

If required, we can supplement our testing plants with scrubbers and acclimatisation plants. Furthermore, we can integrate measuring and analysis equipment for ascertaining the decontamination performance. The readings are stored on evaluateable files.

**DGE-HCAT-plants** are products made by our own. All filter accessories like:

- Catalysts
- Sealing systems
- Safety systems
- Heat exchanger
- Ventilators

can be delivered after enquiry.

For special applications in waste gas cleaning **DGE** has its own cleaning techniques, long year's expertise and a large number of references.

As a system solution provider we provide consultancy services and together with our customers we develop the most efficient concept for the job to be done. We optimise utility consumption and cut disposal costs. In doing so, we particularly investigate possibilities of running the processes as a closed material cycle.

We offer our customer a service for especially sensitive plant systems with our **mobility guarantee** and repair guarantee within 24 hours.