

DGE-Standard series DGE-SCAT for catalytic plants for exhaust air decontamination

DGE-SCAT are plants for the catalytic exhaust air decontamination. For the catalytic conversion, bulk material catalysts are used. These catalysts distinguish on the high temperature resistance. 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 bulk material catalysts is made in cylindrical reactors.

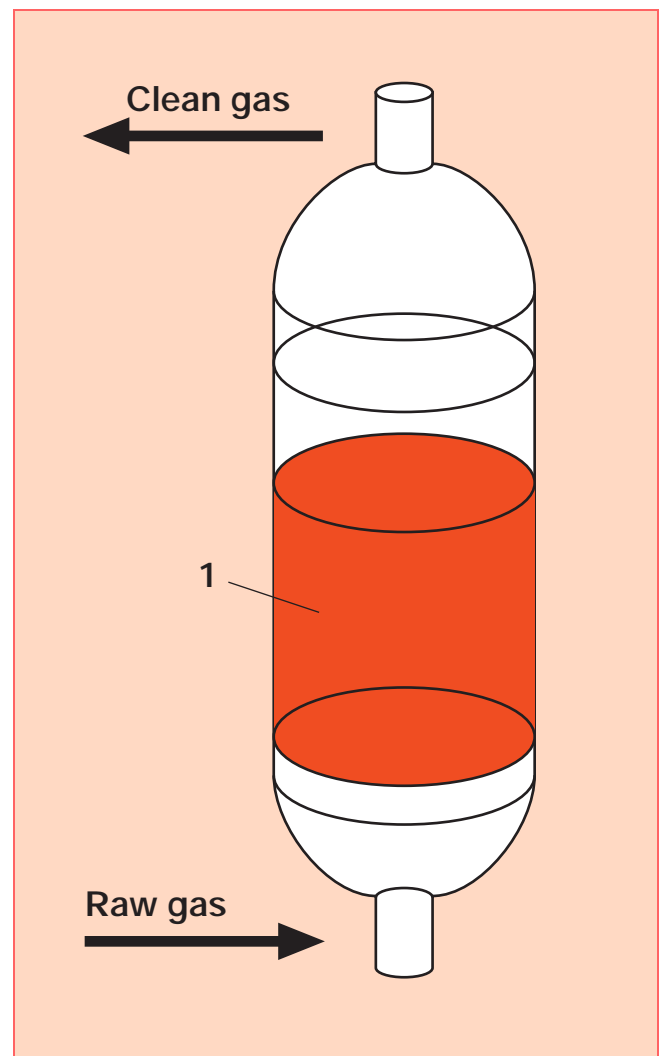
DGE-SCAT-plants are suitable for the exhaust air contamination of process flows with a small concentration in the following fields of application:

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

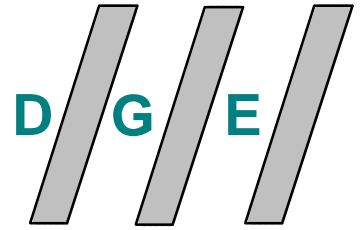


**DGE-Catalytic oxidation plants
Model serie DGE-SCAT**

1 – Bulk material catalyst bed



Environmental Protection Process Engineering Plant Engineering



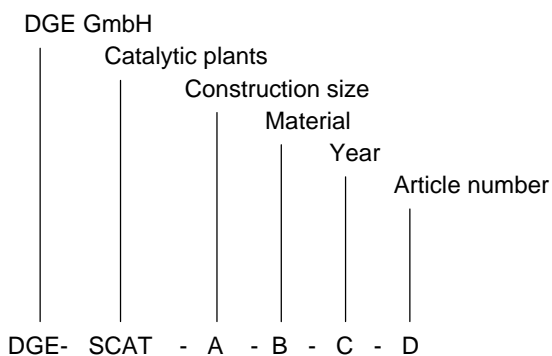
Dr.-Ing. Günther Engineering GmbH

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

Unit	Length mm	Width mm	Height mm	Exhaust air quantity m ³ /h
DGE-SCAT-	500	300	300	1000
DGE-SCAT-	1000	300	600	1000
DGE-SCAT-	5000	1000	1000	2000
DGE-SCAT-	10000	1000	2000	2000
DGE-SCAT-	20000	2000	2000	2000
DGE-SCAT-	30000	3000	2000	2000
DGE-SCAT-	40000	4000	2000	2000
DGE-SCAT-	50000	5000	2000	2000
DGE-SCAT-	60000	5000	2000	2000
DGE-SCAT-	70000	5000	3000	2000
DGE-SCAT-	80000	5000	3000	2000
DGE-SCAT-	90000	5000	4000	2000
DGE-SCAT-	100000	5000	4000	2000

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-SCAT:



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-SCAT-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.