

## **DGE-Standard series DGE-RGCAT for catalytic plants for exhaust air decontamination**

**DGE-RGCAT** 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 a cylindrical sieve cage.

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

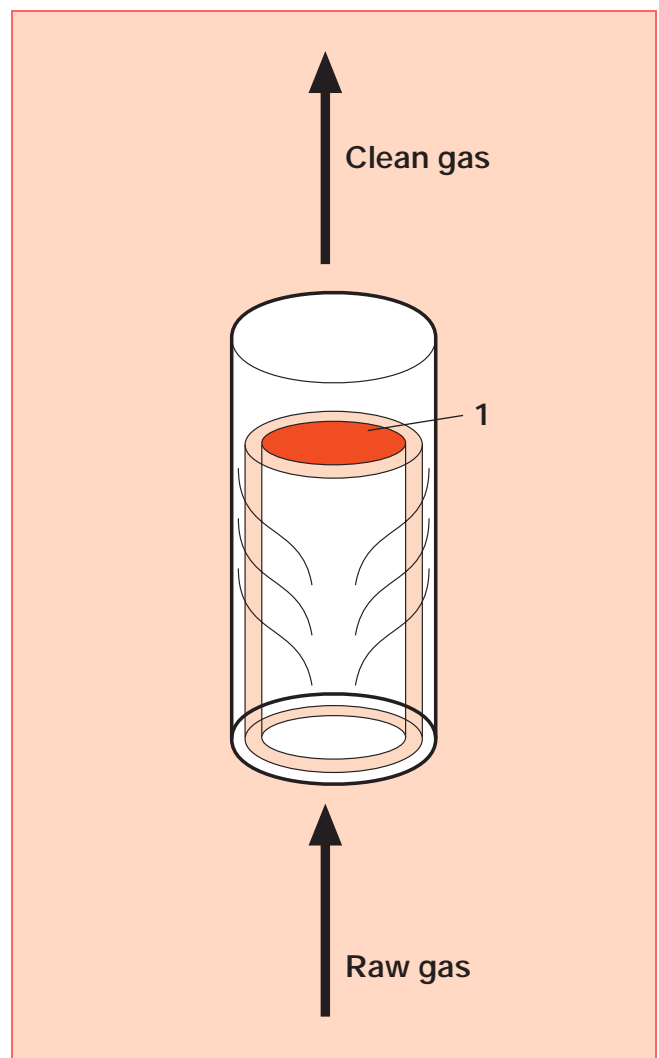
- Removal of odours
- Oxidation of organic components
- Reduction of NO<sub>x</sub>
- Removal of dioxides

The **DGE-RGCAT-plants** can be used only for waste gases with low concentration because of the small catalyst bed height.

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

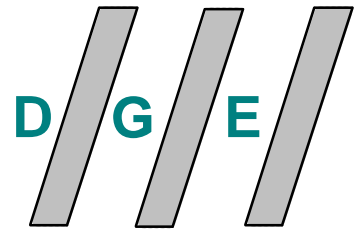


**DGE-Catalytic oxidation plants  
Model serie DGE-RGCAT**

**1 – Bulk material catalyst bed**



# Environmental Protection Process Engineering Plant Engineering



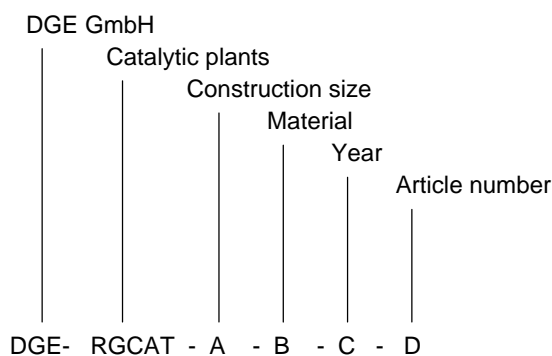
Dr.-Ing. Günther Engineering GmbH

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

Unit	DN1 mm	DN2 mm	Length mm	Exhaust air quantity m <sup>3</sup> /h		
DGE-RGCAT- 500	400	750	500	100	-	500
DGE-RGCAT- 1000	400	750	1000	500	-	1200
DGE-RGCAT- 2000	400	750	1500	1200	-	2000
DGE-RGCAT- 4000	750	1200	1500	2000	-	4000
DGE-RGCAT- 6000	1000	1500	1500	4000	-	6000
DGE-RGCAT- 8000	1000	1500	2000	6000	-	8000
DGE-RGCAT- 10000	1000	1500	3000	8000	-	10000
DGE-RGCAT- 12000	1400	2000	2000	10000	-	12000
DGE-RGCAT- 18000	1400	2000	3000	12000	-	18000
DGE-RGCAT- 22000	1400	2000	4000	16000	-	22000
DGE-RGCAT- 28000	1800	2500	3000	18000	-	28000
DGE-RGCAT- 36000	1800	2500	4000	20000	-	36000
DGE-RGCAT- 45000	1800	2500	5000	28000	-	45000

The indicated dimensions relate to the standard design. Other designs can be made on enquiry.

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



**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-RGCAT-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.