

DATWYLER PHARMA PACKAGING INDIA PRIVATE LIMITED VILLAGE KESURDI, INDIA



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THE TASK

The company Datwyler is extending the facility at the Kesurdi Village, India for the production of packaging materials for medical purposes and is committed to protect the environment and to make sure that no polluted exhaust air is emitted at any time.

Therefore, exhaust air is, at a low oxidation temperature, to be cleaned to the fixed emission limit values before it is discharged into the environment.

THE SOLUTION

Therefore, a catalytic exhaust air cleaning system for safe and environmentally friendly removal of volatile organic compounds will be installed.

By the use of a catalyst, the required oxidation temperature for the conversion of the organic compounds is lower than with thermal oxidation. The catalytic reaction releases thermal energy during oxidation. By using a highly efficient heat exchanger, autothermic operation is already possible at low VOC concentrations. Heat recovery takes place recuperatively in order to ensure safe and reliable separation of exhaust air and clean air. The optimized controls ensure operation in a large turn-down range and at various VOC concentrations without supplementary energy.

With the suggested process and the quality standards applied, all of the customer-specific demands can be met, including calorific efficiency and availability.

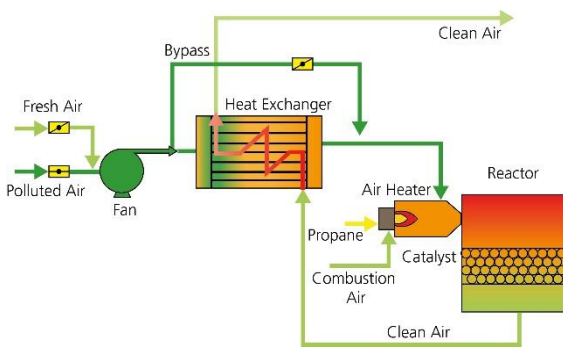
SCOPE OF SUPPLY

- VOC Concentration Monitoring and Control Provided at Unit Inlet
- Fan for Conveying the Exhaust Air Stream
- Reactor with Catalyst Material
- Heat Exchangers for Recuperative Preheating of the Exhaust Air Stream
- Heating Equipment Designed as Burners
- Instrumentation and Plant Control System

ENGINEERING SERVICES

- Engineering
- Production and Delivery
- Commissioning

Exhaust Air Volume Flow Rate	6700 Nm ³ /h
Exhaust Air Temperature	20 - 60°C
Pollutant Freight (VOC)	Max. 60 kg/h
Pollutants (VOC)	MIBK, Acetone
Clean Gas Value	≤ 20 mg/Nm ³ VOC
Auto-thermal Operation from a VOC Concentration of	3 g/Nm ³
Installed Burner Output	350 kW
Service Pressure	Atmospheric
Operating Mode	Continuous



Catalytic exhaust air cleaning plant with recuperative heat recovery