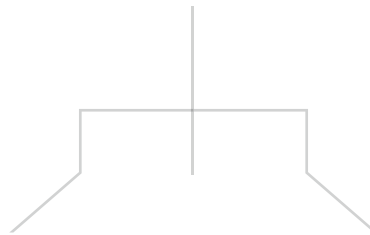


BIOCAT-DUO-Scrubber
with BIOCAT-reactor
for cycle water treatment



BIOCAT-DUO-Scrubber

Your advantages:



SEPARATION OF DUST, FORMALDEHYDE, VOC AND ODOURS IN A COMPACT SCRUBBER UNIT

MINIMUM SPACE REQUIREMENT BY INTEGRATION OF DUST AND BIO SCRUBBER IN ONE SYSTEM

RESISTANT TO BLOCKINGS

LOW OPERATIONAL COSTS BY ENERGY-EFFICIENT EXECUTION WITH MINIMISED PRESSURE LOSS

ECONOMICAL AT SECURE OBSERVANCE OF CLEAN GAS VALUES

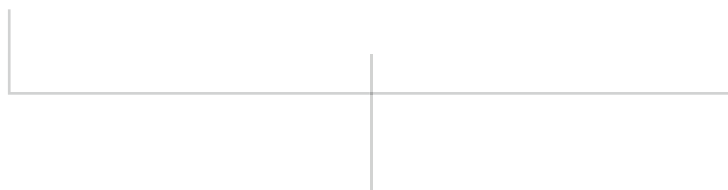
LOW INVESTMENT COSTS

LOW-MAINTENANCE OPERATION BY HIGH-QUALITY COMPONENTS AND MATERIALS
(STAINLESS STEEL OR SYNTHETIC MATERIAL)

NO SYSTEM-RELATED FIRE HAZARD

EFFICIENT MICROBIOLOGICAL POLLUTANT DEGRADATION, ALSO AT CHANGING CONDITIONS
(TEMPERATURE, RAW GAS CONCENTRATIONS, PH VALUE)

EASY ACCESS TO ALL PARTS TO BE SERVICED WITHOUT SPECIAL EQUIPMENT



Proven technology in the
wood-based panel industry

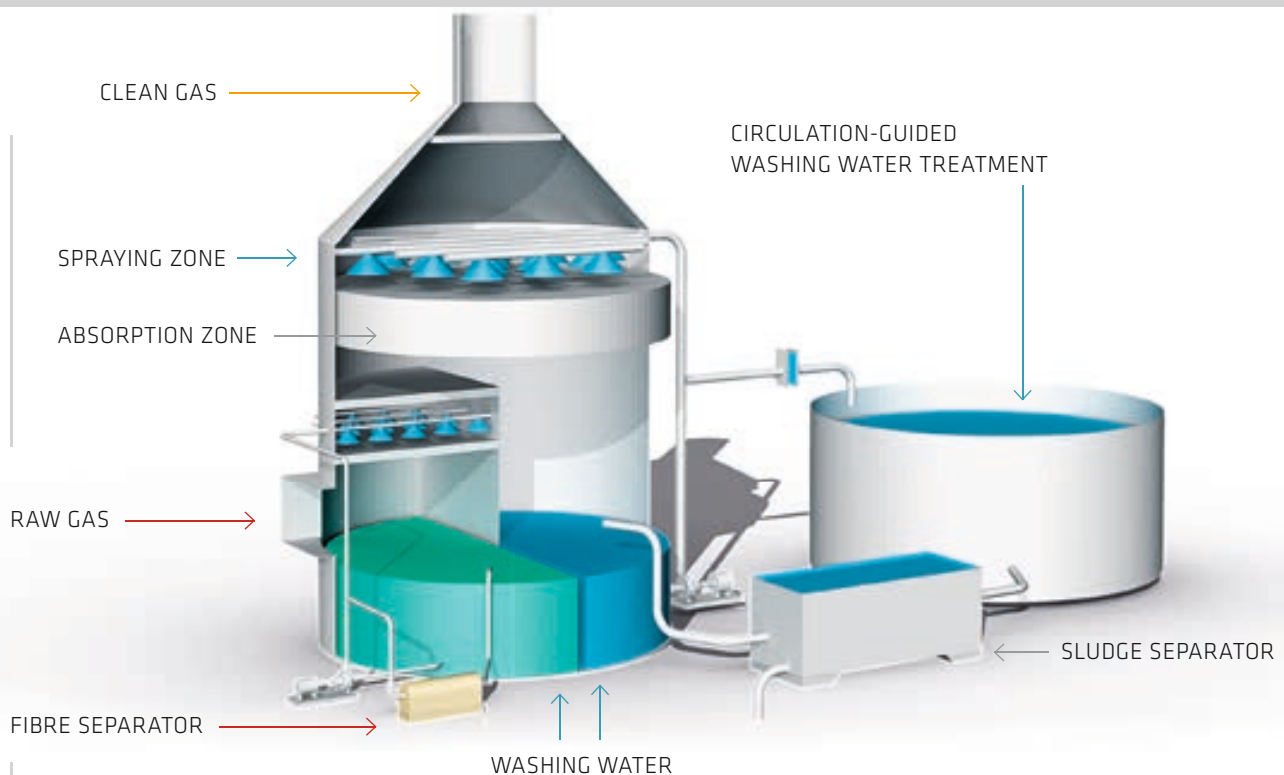
BIOCAT-DUO-Scrubber

High absorption performance and secure observance of clean gas values

Exhaust air cleaning for applications, amongst others in the wood-based panel industry (MDF etc.) for separation of dusts, formaldehyde and water-soluble, biodegradable hydrocarbons (VOC).

The two-stage BIOCAT-DUO-scrubber consists of a pre-scrubber (DLP-dust scrubber) for dust separation and a main scrubber (BIOCAT-scrubber) for separation of VOC and formaldehyde with separated washing water trap.

In the DLP-stage of the BIOCAT-DUO-scrubber the dust content of the exhaust air is reduced by washing out below limit value level effectively and energy-saving. The solid-containing washing water is regenerated in a separate cycle in a fibre separator. The water-soluble VOC and the formaldehyde are absorbed from the washing water in a second cycle. A part of the absorbed compounds is already degraded by immobilised microorganisms of the fillers. The remaining absorbed compounds are biologically degraded in the BIOCAT-reactor. This results in an increase of the separation performance of the scrubber and in a reduction of the total waste water quantity.



Benefit from the Wessel-effect: higher efficiency,
less emissions, lower operational costs

BIOCAT-Scrubber

with integrated fibre separation

The dust separation before the absorption stage cares for a secure operation and avoids dust blockings in the scrubber.

BIOCAT-Scrubber stage

- » SPECIAL FILLERS SECURE A CONSTANT HIGH SEPARATION PERFORMANCE
- » EVEN DISTRIBUTION OF THE WASHING WATER OVER THE ENTIRE FILLER BED
- » HIGH-EFFICIENCY DROPLET CATCHER ACCORDING TO BVT (FEDERAL ENVIRONMENTAL AGENCY)
- » AUTOMATIC CLEANING OF THE DROPLET CATCHER TO SECURE A MINIMUM PRESSURE LOSS

DLP* -Dust scrubber stage

- » SECURE SEPARATION OF COARSE AND FINE FRACTIONS
- » EFFECTIVE CIP*-CLEANING OF THE DUST SEPARATOR - ALSO DURING OPERATION
- » HIGH-EFFICIENCY DROPLET CATCHER FOR EFFECTIVE SEPARATION OF THE WATER CYCLES
- » AUTOMATIC CLEANING OF THE DROPLET CATCHER TO SECURE A MINIMUM PRESSURE LOSS



EXTENDED WATER TREATMENT

for different requirements

CYCLE WATER TREATMENT WITH BIOCAT-Reactor

- » EFFICIENT WATER TREATMENT BY SEPARATED WATER CYCLES OF DLP-STAGE AND BIOCAT-SCRUBBER STAGE
- » NO IMPACT ON MICROORGANISMS BY TRANSFER OF DUST PARTICLES FROM THE DLP-STAGE
- » MINIMUM QUANTITIES OF WASTE WATER AND FRESH WATER BY WATER TREATMENT
- » EFFECTIVE DEGRADATION OF POLLUTANTS TO H_2O , CO_2 AND COMPOSTABLE BIOMASS





THE BETTER WESP

BIOCAT-DUO-Scrubber:

Combined scrubber for the separation of fibres and water-soluble, biodegradable hydrocarbons from the exhaust air of various production processes in the wood-based panel industry:

- » WOOD FIBRES FROM MDF-DRYERS
- » VOC
- » FORMALDEHYDE, METHANOL, ETC.
- » ODOURS

Advantages:

- » COMPACT
- » EFFICIENT
- » RELIABLE
- » LOW OPERATIONAL COST