4. Atlantic Alliance

Tegernsee, Germany

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"Legal Requirements and Technical Solutions in the Combating of Dust"

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1. Introduction

2. Legal requirements

2.1 Requirements resulting from environment protection

2.2 Requirements resulting from health and safety

3. Technical solutions

3.1 Sprinkling

3.2 Wet dust collectors

3.3 Dry filter systems

4. Summary und conclusion



Limits resulting from environmental protection (TA Luft):

Total dust including fine particulate matter: **20mg/m³**

If dust includes carzinogen substances: **1mg/m³**

Limits resulting from health and safety:

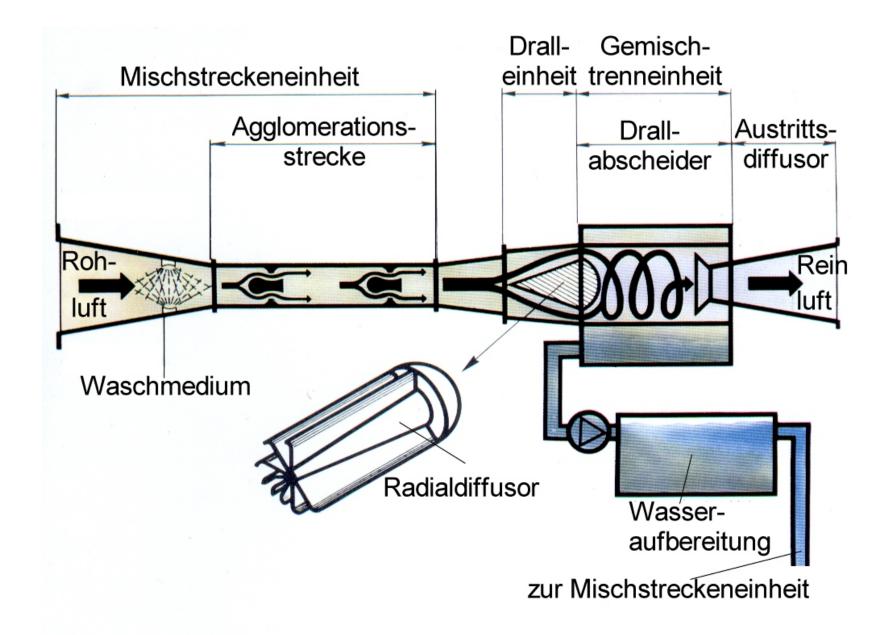
Workplace related: (silicogen particulate matter)

should be reduced to a value of:

0,05mg/m³

 $0,15mg/m^{3}$









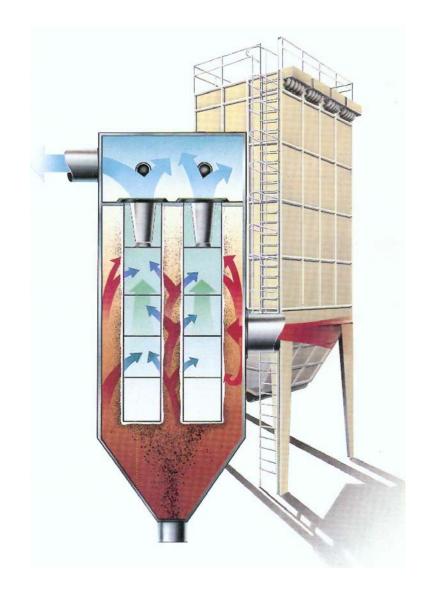
Lowpressure – ROTO-Vent with single Mixingpipe

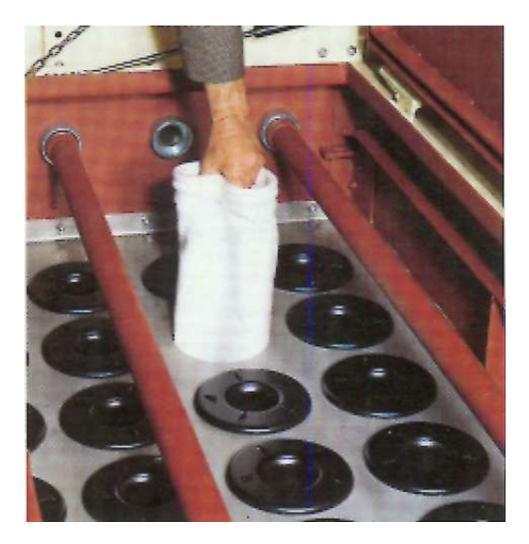


Highpressure – ROTO-Vent With tenfold Mixingpipe

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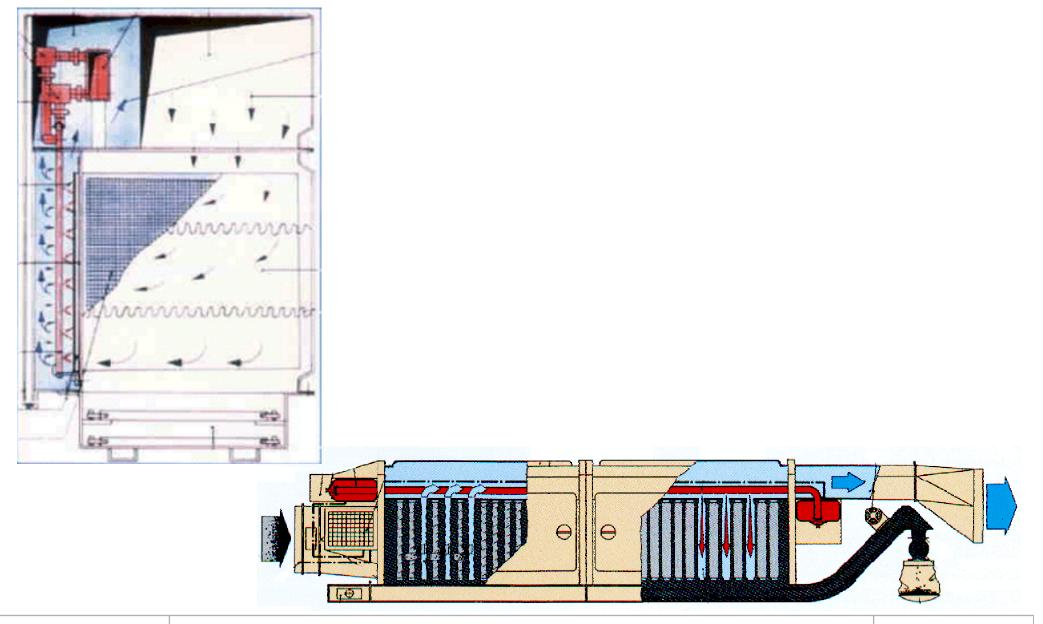
Examples Wet Dust Collectors





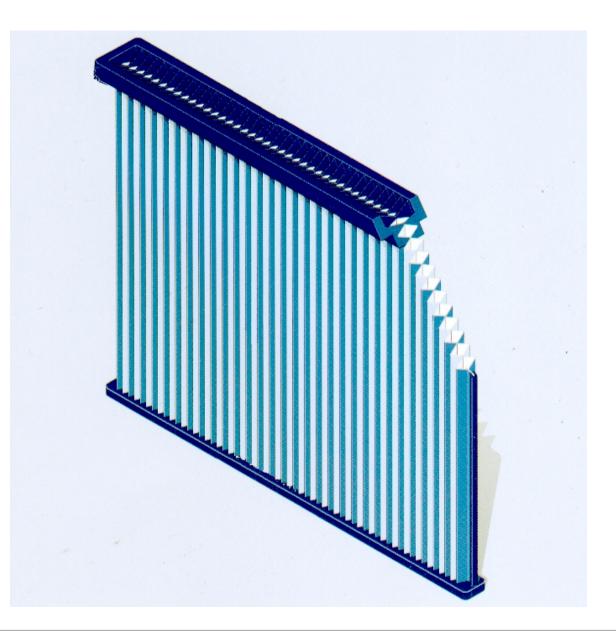
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Functional Principle Tubefilter



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Functional Principle Pocketfilter



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	Capacity m ³ /min	Degree of Separation %	Achievable Limits mg/m ³
Wet Dust Collectors	120 - 800	99 – 99,85	0,8
Tubefilter	1500	98	3
Pocketfilter	1500	99,5	0,5 - 1
Compactfilter	2000	99,99	< 0,1

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Comparison of the different21th AprilTechnical solutions2007

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