Conversion of paint mist separation for test operation

Rapid conversion from wet to dry

Through a temporary and simple paint mist separation facility in existing paint shops, a future professional conversion from wet to dry absorption and its achievable cost savings are easily determined.

The paint mist separators known as edrizzi cubes have been tried and proved for many years in several applications. The handy boxes made of recyclable cardboard enable economical and eco-friendly coatings. For the edrizzi paint mist separation system arises a different situation in any application – depending on used material, plant size, application and air management.

Quick and easy test conversion

To achieve concrete numbers for cost effectiveness and to present plant operators the benefits of the edrizzi system, Siegfried Nittmann, head sales Germany and expert in paint mist sep-

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Quick and economically timbered crossbeams, in this case made of wood, build the temporary paint mist separation wall for the test. Construction steel or form tubing are

aration and filtration, conducts quick and easy test conversions. Therefor a temporary paint mist separation wall is installed in the spray booth. The facility is positioned in front of the steel sheets of the wet absorption and is equipped with edrizzi boxes. The construct supports the paint mist separators to bear the depression in the cabin. The edrizzi system is applied in exhaust air or circulation air system. Before implementation, initial pressure difference and recommended inflow speed just have to be adapted in the paint shop, and then painting operation restarts for the test.

In step two, the system is completed by the matching follow-up filtration.

For example: In the paint shop of an automobile supplier, the follow-up filtration was fixed at the appropriate location in the discharge air tower. With 72 paint mist separator boxes an extraction surface of 18 square meters was built. The waste air quantity in this cabin adds up to 30 000 cubic meters per hour per square meter extraction surface.

Large potential savings

The three month test in the beginning of 2015 resulted in a yearly sav-



After control of the initial pressure difference and recommended inflow speed, the paint mist separation is ready for painting operation.

of the saturated edrizz boxes, as they are no longer special refuse in most cases. By the changeover from wet to dry absorption costs of chemicals and coagulation agents, paint sludge extraction, maintenance costs of pump equipment zero. Costs of cleaning the plant reduce. Supply and storage of the dissembled boxes are cost-efficient. In addition, working conditions in the painting area improve by the reduced noise level (between 15 and 20 dB less) and the end of the odour nuisance by wet absorption.

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