

# Removing micro-pollution

An automatic treatment system for powder activated carbon for removing micro-pollution.



Pilot system

## Functional description

A Big Bag is lifted into the carrier frame with a forklift. The Big Bag is opened at the bottom by releasing the outlet connection and it is fed into the powder funnel. The multi-screw feeder meters the PAC at the same time as the treatment water into the wetting cone. The PAC suspension is supplied to the metering point at a max. back pressure of 1 bar via the Venturi water ejector.

## Technical specifications

- Big Bag frame made from normal steel into which Big Bags are lifted with a forklift truck.
- Vibrator for reliably removing PAC from the Big Bags.
- Tormal type 405 multi-screw feeder, made from normal steel. Capacity: Max. 50 kg/h. Linear discharge curve. dosing precision  $\pm 1-2\%$  at constant bulk density. Self-cleaning feeder screws. Power end: Nord gear motor, 0.25 kW, 230/400 V, IP 55.
- Rotary indicator with empty level display, installed in the feeder.
- Stainless steel wetting cone with inspection flap, inlet/outlet and overflow connections.
- Fittings for treatment water.
- Venturi ejector.
- Surface treatment, on the outside of the frame, powder funnel and feeder: Sand-blasted SA 2 1/2. 100  $\mu\text{m}$  2-component primer hematite epoxy. 50  $\mu\text{m}$  2-component top coat, acrylic. Welds on the wetting cone: Blasted with glass pellets.

## Treatment capacity

- 5-50 kg/h of dry PAC with a re-dilution of 3-5  $\text{m}^3/\text{h}$  and a final concentration of max. 1 %.

## Benefits

- Very accurate metering of 1-2 % using multi-screw feeder, so no weighing devices needed.
- Dust-free operation.
- Wetting cone made of high-grade stainless steel.

## Equipment options

- Electrical equipment, including ABB PLC control comprising a control cabinet with housing made from lacquered steel, internal wiring. Test run before dispatch in our factory. Configuration in accordance with SS-EN60204-1. Supply voltage: 3 x 400/230 V, 50 Hz. Control voltage: 24 VDC.
- Dust-free connection for Big Bags.
- Dust filter with blower.
- Mixed tank in place of wetting cone.
- Silo for filling with truck in place of frame for Big Bags.
- Frame for Big Bags and stainless steel multi-screw feeder.