Cleaning of turbine rotors, housings and blades

In connection with the visual inspection of the turbine, areas are identified that suffer from deposition of contaminants (deposits of material such as magnesite/dust, etc.).

These deposits should be cleaned with great care to ensure renewed, optimum performance of the turbine, including prevention of vibration and inadvertent breakdown of the turbine.

Cleaning enables effective scanning for cracks to be carried out.

Applications
On turbine components such as turbine housings, rotors and blades.

Execution
Blast-cleaning at low pressure (1.5 to 3 bar) using a suitable fine-grained blast material (Ø 0.03 – 0.1 mm.) at a blast distance of 30-60 cm. We use all relevant blast material, such as silicate, aluminiumxoid, glassbeads and nutshell.

When cleaning, the thin ends of the fins on the blades are taken into account (discharge edges) by, for instance, covering with tape.

Choice of abrasive material, blast parameters, etc., takes place in collaboration with the turbine supplier and/or customer.

Clean blast material is used at all times in order to ensure that no “waste” hits the surface.

Dust must be taken into account when carrying out blast-cleaning in order to ensure that dust does not spread to other components/equipment. The work is carried out in the turbine hall using a mobile cabin and the OMØ Mobile Fan.

Outcome
Clean with no visible trace of deposits and no unnecessary roughness (roughness not caused by corrosion and wear from rotation).

Control methods
Visual inspection, 100 % of all surfaces.