b+mJetRefresh

Deep cleaning of heat exchangers

Heat exchangers – full output only when clean

Heat exchangers are the very heart of refrigeration and air-conditioning systems. Without them the basic functions of air warming and air cooling, as well as waste-heat recovery, would not be possible. The prerequisites for loss-free and thus optimum output, however, are clean and undamaged units.

Problems through dirt patches and damage

When heat exchangers are in operation, it is impossible to avoid patches of dirt adhering strongly to the exchanger surfaces, dirt which may be very difficult to remove. Along with reduced heat exchange efficiency, a rise in energy consumption, and premature ageing through damage to materials, this frequently leads in practice to further problems, such as:

- Breakdown of cooling equipment
- Increased risk of breakdown by EDP equipment (e.g. servers in computer centres)
- Production breakdowns in temperature-dependent process plant
- Insufficient hygiene, e.g. through growth of germs and pollutant smells
- Complaints about lack of comfort in rooms
- Increased consumption of heat and electrical energy

Cleaning heat exchangers – but how?

To avoid the disadvantages of dirty heat exchangers, it is necessary to clean the coils, as required under VDI 6022, regularly, thoroughly and without damaging them. This is not possible with traditional cleaning methods. Thus, as a rule, the user has to put up with continued poor heat exchange, unnecessarily high energy costs, and often even excessive or avoidable repair costs through premature replacement of heat exchangers which are merely dirty, yet potentially fully functional.

„Effective cleaning of heat exchangers requires the use of specialist technology“

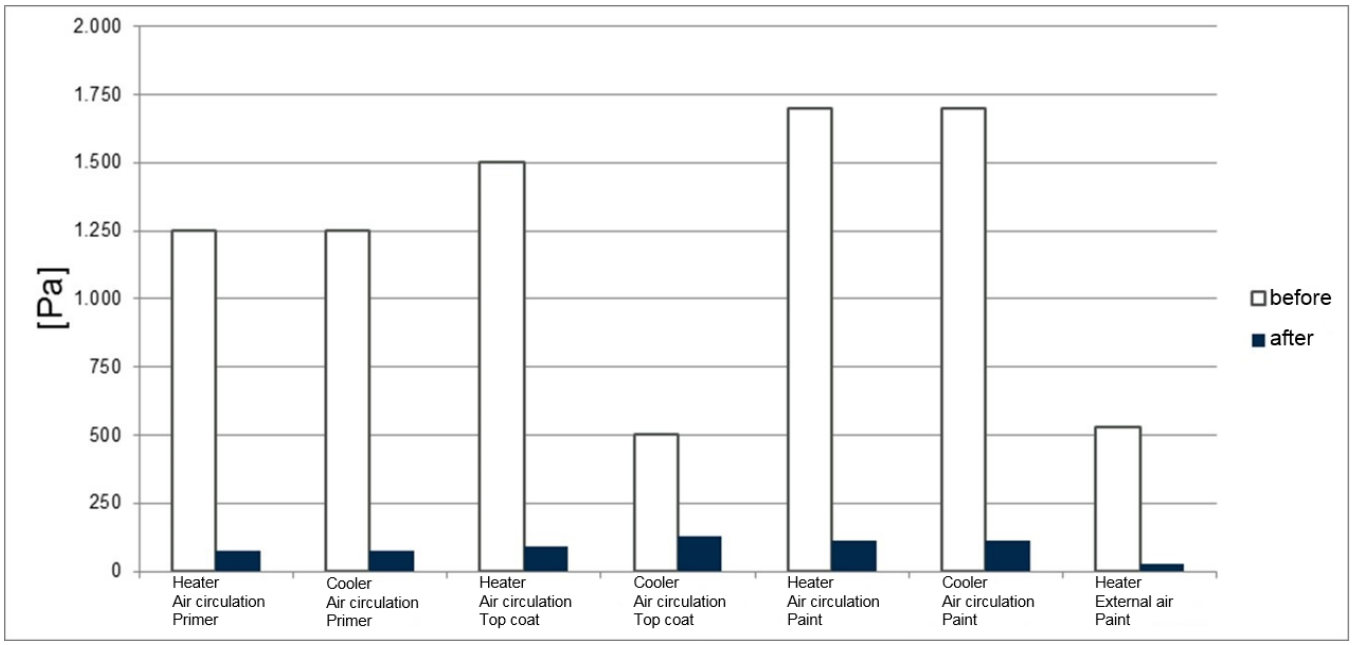
Strong but gentle deep cleaning of heat exchangers

We can provide you with highly effective and gentle deep cleaning of your fin, plate or rotation heat exchangers using our innovative and patented b+mJetRefresh process. This process comes in various versions and we customise it to deal with the individual problem in question, depending on the type and level of dirt contamination. In this way even the toughest deposits, such as oils and fats, are removed, together with microbiological contamination. Cleaning with the b+mJetRefresh process includes correcting deformed louvre ends. In this way the coil fins are re-aligned for optimum performance, with the aim of improving your heat exchanger´s efficiency.

Your benefit

- Greatest possible restoration of heat exchanger output *)
- Greatest possible minimisation of differential pressure and thus maximum airflow
- Preservation of equipment substance by gentle deep cleaning
- Reduction in maintenance costs
- Perfectly hygienic heat exchangers
- Removal of hailstorm and damage through fitting

*) Lowering of condensation temperature in cooling systems by 1 K gives a mean energy saving of about 3%.



Differential pressure [Pa] via various heat exchangers in ventilation systems of paint booths before and after the deep cleaning with the b+mJetRefresh cleaning process.

Take advantage of our many years of experience and our well-developed expertise in specialist cleaning of ventilation and cooling equipment. For every problem we can offer you the right solution.

b+mJetRefresh service package

Procedure	Process variant	Application to fin-heat exchanger	Application to rotation-heat exchanger	Auxiliary service water protection-disposal system
	Fluidic consultation and inspection of the process	X	X	
standard	Gentle deep cleaning of fin-heat exchanger	X	X	yes
select	Gentle deep cleaning of fin-heat exchanger with additional protection to the sensitive fin ends	X		yes
certified	Fluidic reconstruction of damaged heat exchanger-fins	X		yes

For precautionary maintenance of your heat exchanger we also offer you a long-term service contract.
Please do not hesitate to contact us:

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