

## Maintenance Recommendations for Centrifugal Fans



In order to assure a trouble free operation, and for safety reasons, we recommend to check the fans' appearance and function within regular intervals by specialised persons and to document these checks. This can be done by trained personnel or by a specialised service company. If required you can ask for the help of a Gebhardt service partner. Addresses may be got by using [www.nicotra-gebhardt.com](http://www.nicotra-gebhardt.com)

### Safety rules

#### Safety rules prior to starting works on the fan:

- Isolate motor from feed line by operating isolator switch!
  - If there is no isolator switch disconnect feed line on all motor poles.
  - Assure that no uncontrolled start of the motor during maintenance is possible (e.g. locked isolator switch)!
  - Wait until impeller comes to complete standstill!
  - Check surface temperature to prevent burning hazard!
  - Before starting maintenance check whether harmful or dangerous residues from the conveying media are left. If yes, remove by appropriate means.
  - The restart has to be executed by respecting the safety instructions of the manual, chapter „Putting into operation/ safety checks“.
- Excepted from this are works, which only can be executed while the fan is running. In this case the appropriate safety instructions for the running machine have to be respected, (e.g. vibration checks, shock impulsion checks).



Check the professional guidelines and rules for the application (type of installation) in order to respect them. If these points are neglected there may be the risk of injury or death for the maintenance personnel.



#### Maintenance and checks of fans, referring to VDMA 24186-1:

Type, magnitude and intervals of maintenance, as well as further necessary works in function of the use and the placement of the fan have to be defined individually case by case.

Item	description		
<b>1.0</b>	<b>Fan</b>	<b>periodically</b>	<b>if needed</b>
1.1	Check on deposit, damages, corrosion, and fixings	x	
1.2	Check impeller whether damages or unbalancing exists (eventually vibrations)	x	
1.3	Check bearings on noise	x	
1.4	Relubricate bearings (acc. to greasing intervals)	x	
1.5	Check flexible connection on tightness	x	
1.6	Check good function of AVM (anti vibration mounts)	x	
1.7	Check correct function of guards and safety devices	x	
1.8	Check function of IVC (inlet vane control)	x	
1.9	Check whether drain is functioning	x	
1.10	Clean all parts to assure correct function		x
1.11	Check rotational sense (for all speeds)	x	
1.12	Check whole fan on correct and safe operation	x	
<b>2.0</b>	<b>Motor</b>	<b>periodically</b>	<b>if needed</b>
2.1	Check externally on deposit, damages, corrosion, and fixings	x	x
2.2	Check rotational sense	x	
2.3	Check bearings on noise	x	
2.4	Relubricate bearings (for relubricatable bearings only)	x	
2.5	Check correct function of guards and safety devices	x	
2.6	Check tapping on tight connection	x	
2.7	Cleaning for assure operation		x
<b>3.0</b>	<b>Belt drive</b>	<b>periodically</b>	<b>if needed</b>
3.1	Check on deposit, damages, and wear	x	
3.2	Exchange belts		x
3.3	Check tensioning and alignment	x	
3.4	If necessary tighten and adjust		x
3.5	Check correct function of guards and safety devices	x	
<b>4.0</b>	<b>Drive coupling</b>	<b>periodically</b>	<b>if needed</b>
4.1	Check on deposit, damages, corrosion, and fixings	x	
4.2	Check correct function of guards and safety devices	x	
4.3	Cleaning for assure operation		x



- Don't use high pressure cleaner (Steam jet cleaner)!
- Un tight flexible connectors may cause break downs or hazards by escaping media. They have to be exchanged.
- Use only original Gebhardt spares according to spare parts list. For damages caused by using other than Gebhardt parts no liability will be taken by Gebhardt!
- Before restart make sure that the safety instructions of the manual, chapter „Putting into operation/safety checks“ are entirely respected.