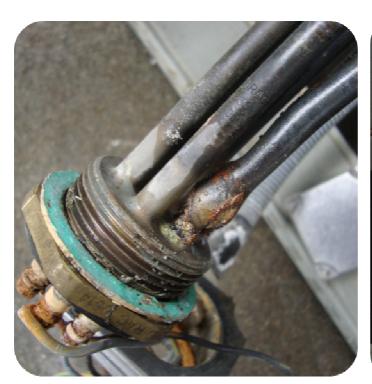
## Electrical heater damage due to dry operation.

BAC offers heaters for pan water heating in winter time as part of a heater package. This package exists out of the heating element (electrical resistance), a low level cut out switch (LLCOS) and a thermostat. The thermostat should be set at 4°C to make sure the heater is only activated at temperatures close to freezing point of the sump water. The LLCOS should deactivate the heater whenever the water level in the tank gets too low and the heater could end up in the air instead of the water. If the heater is not submerged completely during operation it will not get sufficient cooling and it will burn. Below you find a picture showing the consequences of dry operation.





The heater is burst and deformed due to overheating. Once the element is open by bursting, water will enter and flow to the connection box, starting corrosion and short circuiting.

To prevent this kind of problems it is paramount to check the LLCOS at regular times (mainly for pollution) and to shut down the heater power supply whenever the tower is drained.