Sauna equipment usage and servicing

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Root cause	Effect		
Air-in and air-out openings in wrong position, e.g.: air-in opening under the sauna door and sauna heater 1-2m away from it.	No or little air circulation in the cabin, unfavoura- ble heat distribution and heating phase. Target temperature not reached.		
Air-in and air-out openings too small for hea- ter capacity, air throughput not of required vo- lume, target: volume of air (m ³) should exchange 5-10 times an hour.	No or little air circulation in the cabin, unfavou- rable heat distribution and heating phase, heat accumulates in the heater, i.e. heater overheats. Target temperature not reached.		
Wrong position of heater and bench sensors, e.g.: bench sensor placed under the bench or at same level as top bench in the cabin.	Control unit fails to turn off, heating limited by STB. Possible fire hazard!		
Heater capacity too small for the cabin volume, large glass fronts not considered or designed too large.	Cabin takes too long to heat up. Target temperature not reached.		
Sauna heater(s) walled in or covered without ta- king account of how this affects the required vo- lume of air throughput.	Heat accumulates in the terminal box, side wall warp, fire precautions are rendered ineffective, etc. Insufficient convection.		
Sauna stones filled in too densely instead of being loosely filled thereby much obstruction air throug- hput.	Shorter life of tubular heating elements. Heat da- mage to the sauna heater. Target temperature not reached. Increased energy requirements.		
Best practice: Commercial operators should not check the stones once a year, but after 1000-1500 operating hours. Chief sauna operators use 8 litres of water 12 times a day = 96 litres 96×360 days (company closed on 5 days) = 34,560 litres a year. Even smaller commercial saunas where just 4 litres are poured over the stones every hour still consume 17,280 litres a year in the process.			
Maintenance intervals, particularly for commercial sauna heaters, are not adhered to or are too long with regard to connection terminals, rock store / Sauna stones, etc.	Sauna heater / heater function fails or is restricted. Wear of heating elements. Increased energy requirements.		
Intervals of de-scaling combination heaters do not or not properly comply with supplier instructi- ons regarding the degree of hardness and any on- site de-scaling procedures, as appropriate.	Vaporizer heating element destroyed, sometimes corrosion, serious damage to sauna heater. Clogged water drain openings.		
Vaporizer not used as intended with regard to its filling level and the ban of adding essences, etc.	Corrosion, vaporizer heating element destroyed, sometimes serious damage to sauna heater. Overboiling or foam formation.		



Common mistakes in sauna planning

Sauna equipment usage and servicing



Root cause	Effect
Too much water poured on at too short intervals.	Water escapes from the sauna heater, excessive load on the heating elements - reduced life.
Distance between sauna heater and guard rail (or bench) not as specified. Frequent cause: ready-made guard rails that fit only "approximately" or non-compliance with the safety information in the installation instructions	Damage and staining of the sauna cabin, sometimes provoking a fire hazard.
Combination of unsuitable components (third- party make) without verifying their compatibility.	Particularly when combining power circuit brea- kers and control units, the components should be carefully matched. Malfunctions or even failure of safety-relevant circuits.
Use of unshielded sensor cable and a non-profes- sional extension of sensor cables.	"Interference" caused by noise sources may pro- voke malfunctions

ATTENTION!

Please have your sauna system serviced regularly by a licensed specialist. Work on the electrical system of the heater, on wiring etc. may only be carried out by a trained and licensed electrician!

