Regarding the performance of Willab heated water tubs and buckets.

The information of “working down to –20°C” is based on testing in a freezer. Under those circumstances the water surface is completely ice free at –20°C.

It is impossible to guarantee a specific temperature for frost-free performance because various real-world factors interfere with the freezing process.

Here are the key factors that influence the risk of freezing in practical use:

- **Wind cooling**: Increased airflow lowers the temperature of the water more quickly. (see chart below)
- **Heat loss to ground**: The temperature of the ground surface can draw heat away from the system.
- **Frequency of animal use**: Regular consumption and replenishment of water can introduce warmer water and physical agitation that inhibit ice formation.
- **Frequency of water replacement**: Stagnant water is more likely to freeze, while frequent changes introduce warmer water.

A simple way to prevent the water surface from partially freezing is to **place a floating object in it**, such as a filled water bottle or a piece of wood not harmful to animals. The movement of the floating object helps to **disrupt the formation of a solid ice layer** on the surface.

Termometerns temperatur (°C)

	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40
2 m/s	9	3	-2	-8	-14	-20	-26	-32	-37	-43	-49
5 m/s	8	1	-5	-11	-17	-24	-30	-36	-42	-49	-55
10 m/s	6	0	-7	-14	-20	-27	-34	-40	-47	-53	-60
15 m/s	5	-2	-8	-15	-22	-29	-36	-43	-50	-56	-63
20 m/s	5	-2	-9	-16	-23	-31	-38	-45	-52	-59	-66
25 m/s	4	-3	-10	-17	-25	-32	-39	-46	-53	-60	-68
30 m/s	4	-4	-11	-18	-26	-33	-40	-47	-55	-62	-69

Chart: Wind chill at different temperatures and wind.