

Type: ClaroSwiss S plus Jug Filter: Testing of decarbonisation capacity (alkalinity)
Test facility: Laboratory Aquis GmbH
Balgacherstrasse 20
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Identification: V21208
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Scope

Determination of decarbonisation capacity of ClaroSwiss S plus Jug Filter.

Experimental setup

2x ClaroSwiss S plus jug water filters were compared with 1x ClaroSwiss S jug filter and 1x Brita maxtra+ jug filter.

Test procedure:

Approximately 15 litres of water were filtered every test day.

The used test water was artificial test water with a carbonate hardness about 12° dH and total hardness about 17° dH. (Carbonate Hardness 214 ppm as CaCO₃ and total hardness 303 ppm as CaCO₃).

The test was stopped during the weekend.

The test start was at 23rd of August 2021; test end was 8th of September 2021.

The test was done 12 days or 200 litres. Every 10 litres the water was analysed for water parameters.

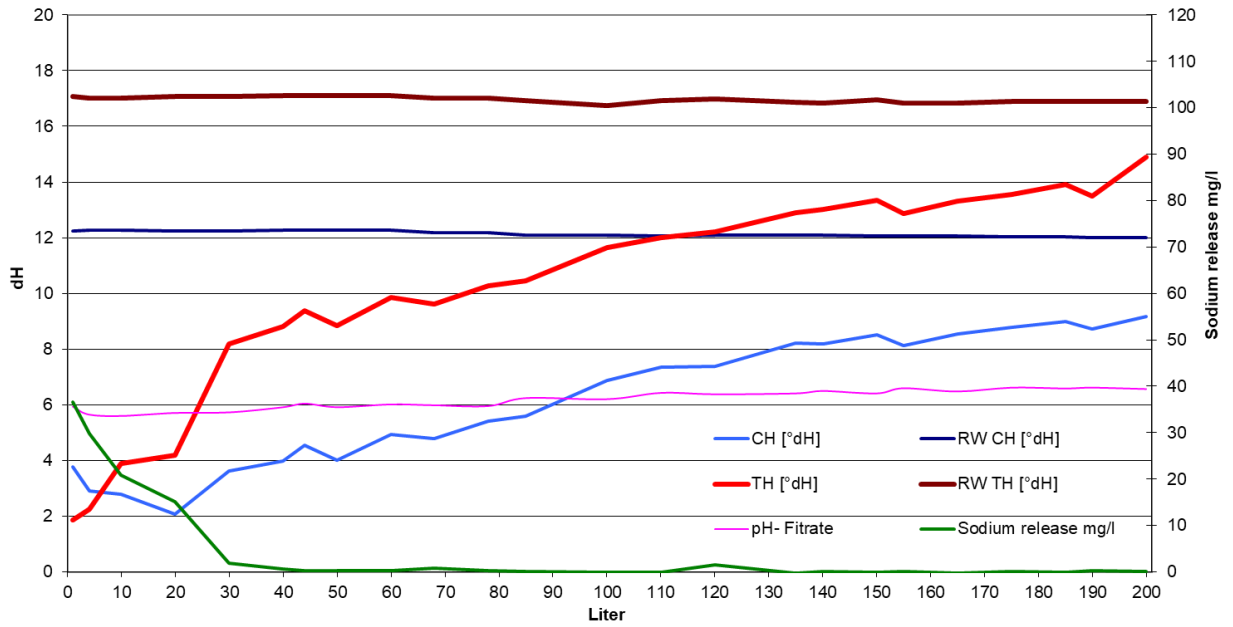
Test setup:

Automatic decantation device:

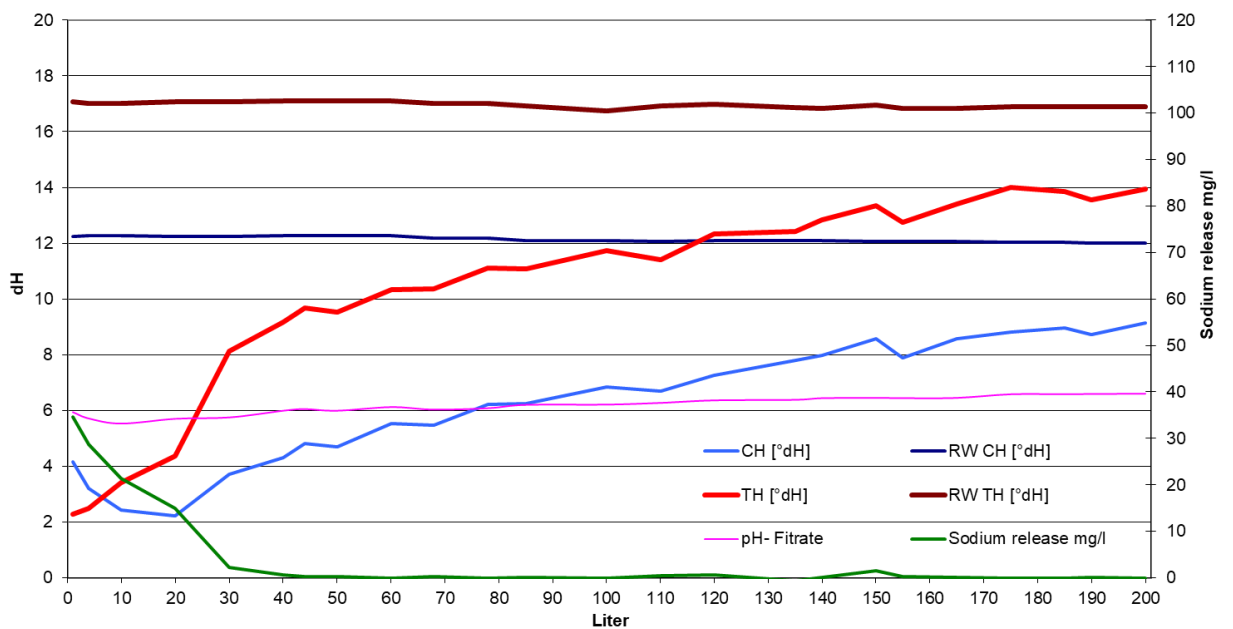


Test results

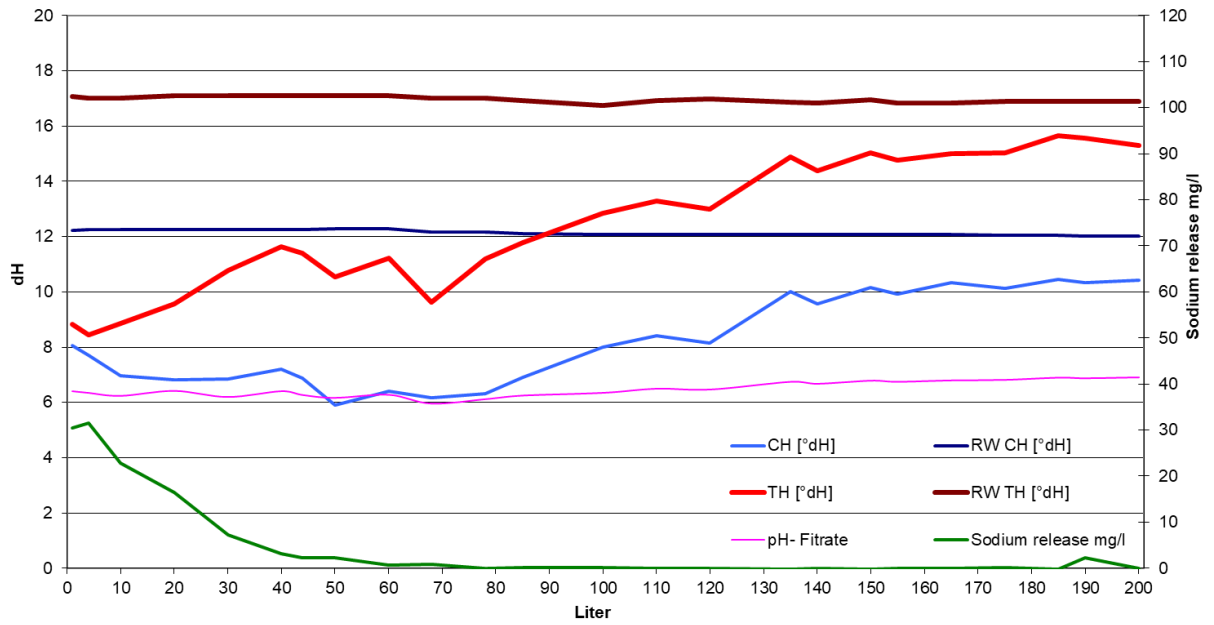
F1 Claroswiss S plus Jug filter
Hydrogencarbonate + Total Hardness



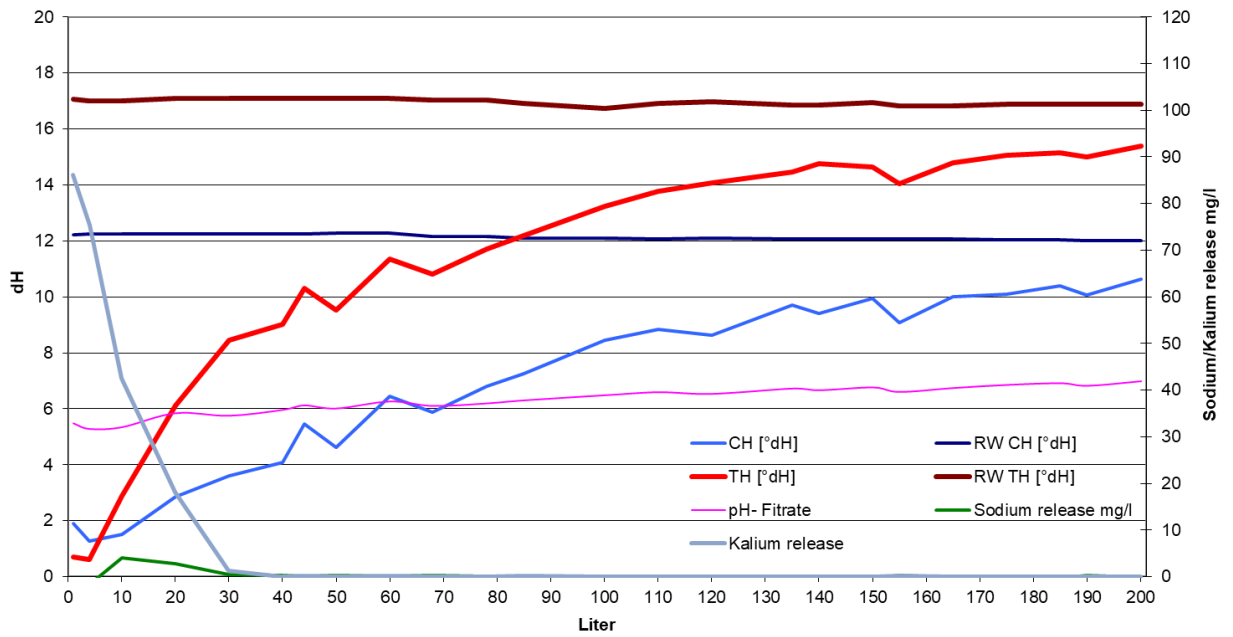
F2 Claroswiss S plus Jug filter
Hydrogencarbonate + Total Hardness

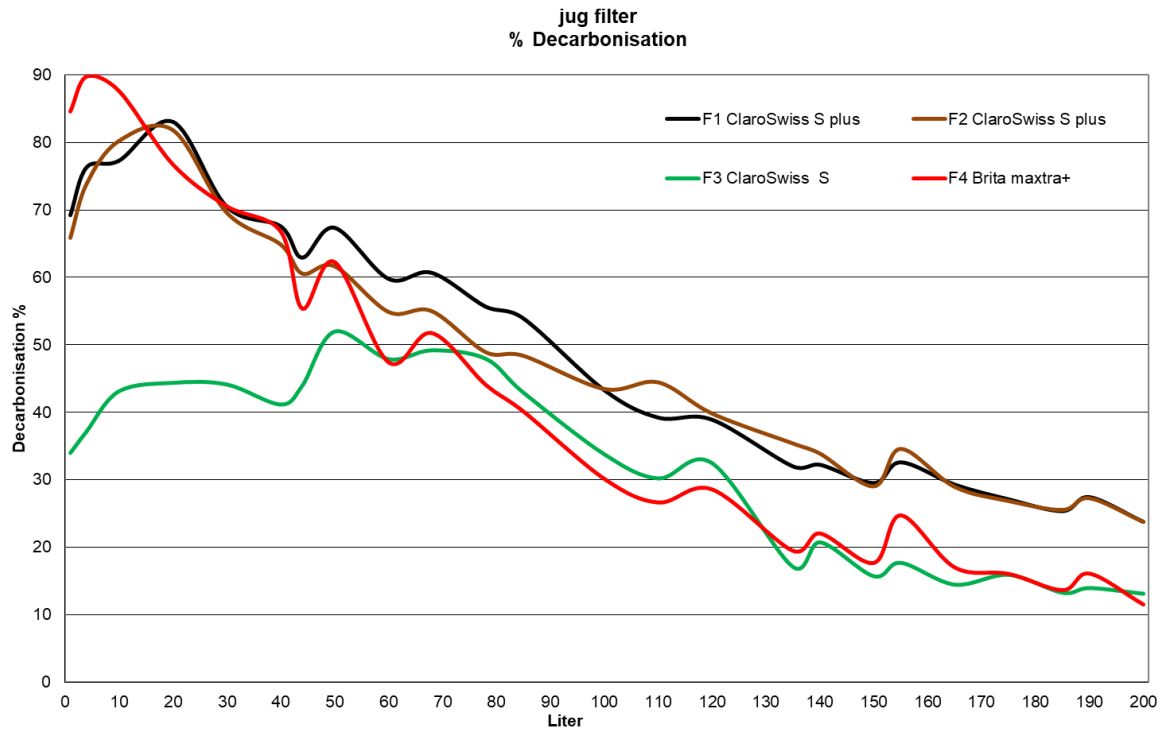


F3 ClaroSwiss S Jug filter
Hydrogencarbonate + Total Hardness



F4 Brita Maxtra+ Jug filter
Hydrogencarbonate + Total Hardness





Filtration time for approx. 0.75 L

Volume / L	ClaroSwiss S plus /mm:ss	ClaroSwiss S plus /mm:ss	ClaroSwiss S /mm:ss	Brita maxtra+ /mm:ss
1	1:40	1:40	5:00	5:00
4	1:00	1:20	1:30	2:30
8	2:20	1:30	2:40	4:00
16	2:00	2:00	3:30	3:30
44	2:10	2:10	4:00	4:30
50	2:00	2:00	5:20	4:00
68	2:10	2:10	6:00	4:30
85	2:00	2:00	7:00	4:00
110	1:50	2:10	4:00	4:00
120	2:00	2:00	4:30	3:30
140	1:30	1:40	2:10	3:20
150	1:30	1:40	3:00	3:30
155	1:20	1:30	2:40	3:20
175	1:30	1:40	2:40	3:30
185	1:30	1:40	3:00	3:30
190	1:20	1:30	2:15	3:30
200	1:20	1:30	2:20	3:30
Mean value	1:42	1:46	3:37	3:44

A minimal reduction of 30% of the Carbonate Hardness should normally be enough to ensure a sufficient protection from limescale, when using heated water.

This study had been conducted to outline the new ClaroSwiss S plus jug filter technology compared to the new Brita jug filter maxtra+.

A capacity of at least 160L was shown with 30 % reduction in CH° based on a feed water carbonate hardness of 12° dH for the new ClaroSwiss S plus jug filter.

The maxtra+ filter reached only 100 litres.

Our ClaroSwiss S plus Jug Filter has a mean filtration time for 0.75L water about 1:44 minutes instead 3:44 minutes measured for maxtra+ filter.