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An investigation in to batch cleaning using wash racks: Supplementary data

Table S1 presents the flow rate data for each nozzle ID as shown in Fig. 3.1 in the manuscript. Despite the flow through nozzle 1, the coupling, being excluded in Fig. 3.1 it has been included here to show the effect of the pump curve on coupling discharge. Flow rate through nozzles has been presented both as a percentage of total flow with and without the coupling included.

Nozzle ID	Flow Rate (l min ⁻¹)	% of Total Flow with coupling discharge	% of Total Flow without coupling discharge
1	1610	82	-
2	1.8	0.09	0.51
3	1.8	0.09	0.51
4	4.2	0.21	1.19
5	9	0.46	2.54
6	4.2	0.21	1.19
7	22.2	1.13	6.27
8	37.2	1.89	10.51
9	8.4	0.43	2.37
10	4.2	0.21	1.19
11	4.2	0.21	1.19
12	4.2	0.21	1.19
13	5.4	0.27	1.53
14	5.4	0.27	1.53
15	3.6	0.18	1.02
16	4.2	0.21	1.19
17	4.2	0.21	1.19
18	9	0.46	2.54
19	11.4	0.58	3.22
20	3	0.15	0.85
21	3	0.15	0.85
22	3.6	0.18	1.02
23	4.2	0.21	1.19
24	4.2	0.21	1.19
25	11.4	0.58	3.22
26	40.8	2.07	11.53
27	29.4	1.49	8.31

28	28.8	1.46	8.14
29	29.4	1.49	8.31
30	9.6	0.49	2.71
31	9	0.46	2.54
32	9	0.46	2.54
33	9	0.46	2.54
34	4.2	0.21	1.19
35	10.8	0.55	3.05

Table S1: Nozzle flow rate data and % total flow with/without coupling discharge

Fig. S1 shows the pump curve assumed for the flow through the coupling. Nozzle data downstream of the coupling is independent of this once the in-situ pressure measurement downstream of the coupling has been applied to the EPANET model.

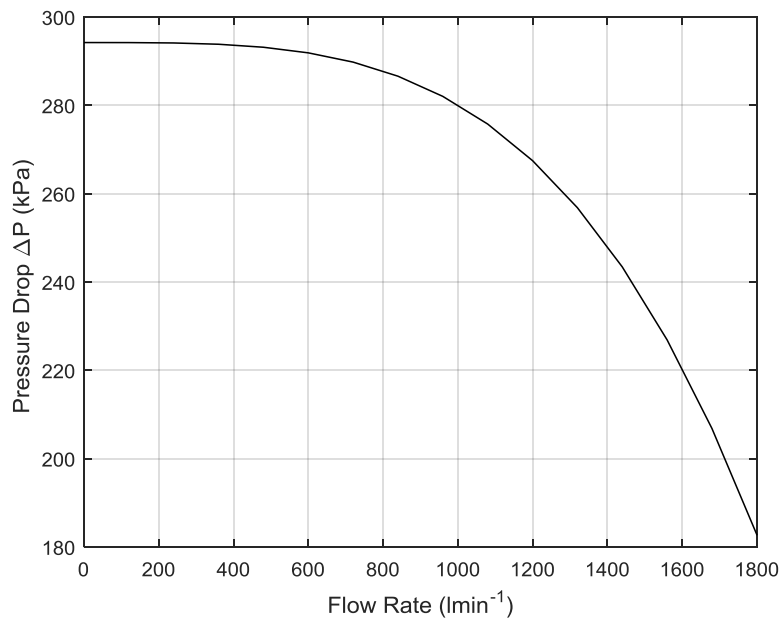


Fig. S1: Assumed pump curve