

Nachvollziehbare Berechnungen der H-Werte

Rechenweg: $tR_{column} = tR_{total} - tR_{extra}$, $W_{column} = 2 * \sqrt{\sigma^2_{total} - \sigma^2_{extra}}$, $N = (tR_{column} / W_{column})^2$, $HETP = 150 \text{ mm} / N$

Messung	tR_total (min)	σ^2_{total} (min ²)	tR_extra (min)	σ^2_{extra} (min ²)	tR_column (min)	W_column (min)	N	HETP (mm)
1	0.601	0.003	0.198	0.002	0.403	0.063	40.953	3.663
2	0.626	0.005	0.211	0.003	0.415	0.105	15.579	9.628
3	0.676	0.005	0.222	0.003	0.454	0.097	21.994	6.820
4	0.701	0.005	0.254	0.004	0.447	0.064	48.526	3.091
5	0.736	0.005	0.277	0.003	0.459	0.096	22.665	6.618
6	0.786	0.006	0.286	0.003	0.500	0.108	21.333	7.031
7	0.851	0.008	0.311	0.004	0.540	0.119	20.517	7.311
8	0.901	0.008	0.328	0.005	0.572	0.101	32.007	4.686
9	0.965	0.009	0.354	0.006	0.611	0.119	26.481	5.665
10	1.063	0.009	0.386	0.007	0.677	0.086	62.535	2.399
11	1.154	0.011	0.406	0.007	0.747	0.119	39.427	3.804
12	1.293	0.013	0.464	0.009	0.829	0.126	43.142	3.477
13	1.445	0.017	0.517	0.011	0.928	0.156	35.237	4.257
14	1.643	0.021	0.589	0.013	1.053	0.175	36.428	4.118
15	1.957	0.023	0.684	0.016	1.274	0.161	62.766	2.390
16	2.363	0.027	0.826	0.022	1.537	0.137	125.852	1.192
17	2.933	0.040	1.021	0.030	1.912	0.200	91.019	1.648
18	3.936	0.062	1.360	0.047	2.577	0.249	107.180	1.400
19	5.877	0.113	2.021	0.094	3.856	0.276	194.774	0.770
20	11.887	0.426	4.026	0.264	7.861	0.806	95.214	1.575