

Messungen Ebene Platte (KWK3) vor Kanal MWK1

13.01.2018

g = 9.8066 m/s² Erdbeschleunigung
s = 0.1 m Spannweite
l = 0.06 m Flügeltiefe
A = 0.006 m² Grundfläche
rho = 1.2 kg/m³ Luftdichte
1/2*rho*A = 0.0036 kg/m = 3.6 g/m

Der Support steht beim MWK1 im Luftstrom.
F_A und F_W ohne Tragfläche gemessen.
Support bei 12 m/s

<F_A_S>	<F_W_S>	
21.94	348.45	[mN]

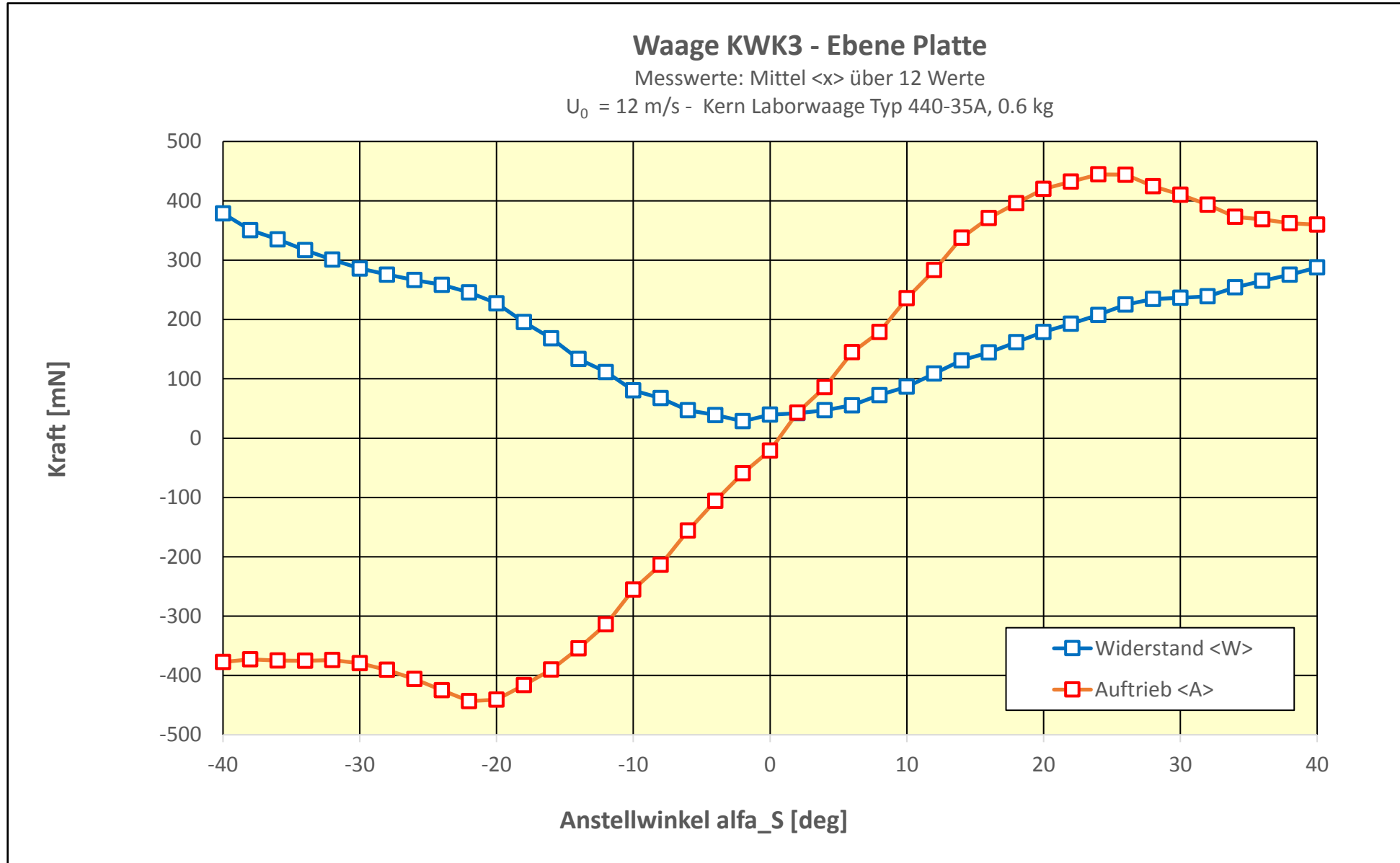
Widerstand und Auftrieb um F_X_S korrigiert.
X steht für A bzw. W (Korrektur in "Messung").

U0	alfa_S	Uhrzeit		Waage A	Waage B	F_A	F_W	<F_A>	<F_W>	<c_A>	<C_W>
[m/s]	[deg]	hh:mm	s.sss [s]	-(A+W) [g]	W [g]	[mN]	[mN]	[mN]	[mN]	[-]	[-]
12	-40	14:01	39.362	-37.86	73.9	-353.430	724.708	-377.442	378.771	-0.728	0.731
12	-38	14:00	46.26	-35.34	71.72	-356.764	703.329	-372.860	350.608	-0.719	0.676
12	-36	14:00	1.883	-33.8	70.56	-360.491	691.954	-374.893	335.006	-0.723	0.646
12	-34	13:59	25.258	-31.7	67.33	-349.409	660.278	-375.339	316.713	-0.724	0.611
12	-32	13:58	35.3	-30.18	66.01	-351.370	647.334	-373.853	300.942	-0.721	0.581
12	-30	13:57	48.726	-27.97	63.87	-352.057	626.348	-379.312	285.848	-0.732	0.551
12	-28	13:57	4.976	-26.6	64.02	-366.963	627.819	-390.619	275.650	-0.754	0.532
12	-26	13:56	22.127	-23.74	62.01	-375.299	608.107	-406.125	266.496	-0.783	0.514
12	-24	13:55	42.825	-21.24	61.97	-399.423	607.715	-424.627	258.414	-0.819	0.498
12	-22	13:54	51.718	-16.97	60.52	-427.077	593.495	-443.227	245.597	-0.855	0.474
12	-20	13:54	14.375	-16.55	58.99	-416.192	578.491	-440.653	227.327	-0.850	0.439
12	-18	13:53	31.527	-15.31	54.93	-388.537	538.677	-416.303	195.655	-0.803	0.377
12	-16	13:52	49.477	-15.06	53.2	-374.024	521.711	-390.173	168.201	-0.753	0.324
12	-14	13:52	7.19	-14.64	49.12	-338.132	481.700	-354.424	133.356	-0.684	0.257
12	-12	13:51	23.355	-16.97	46.46	-289.197	455.615	-313.821	111.446	-0.605	0.215
12	-10	13:50	41.736	-19.98	43.72	-232.809	428.745	-255.210	80.661	-0.492	0.156
12	-8	13:49	52.977	-23.48	41.54	-177.107	407.366	-213.458	67.316	-0.412	0.130
12	-6	13:49	12.101	-26.26	39.73	-132.095	389.616	-155.894	46.820	-0.301	0.090
12	-4	13:48	20.623	-30.92	39.56	-84.729	387.949	-105.953	38.959	-0.204	0.075
12	-2	13:47	37.458	-34.23	38.7	-43.836	379.515	-59.290	28.479	-0.114	0.055
12	0	13:47	1.18	-39.33	39.08	2.452	383.242	-20.840	39.400	-0.040	0.076
12	2	13:17	33.216	-45.95	40.53	53.152	397.461	42.960	42.089	0.083	0.081
12	4	13:18	35.696	-51.3	40.27	108.167	394.912	85.848	47.022	0.166	0.091
12	6	13:19	18.537	-58.38	41.73	163.280	409.229	144.752	55.336	0.279	0.107
12	8	13:20	30.34	-63.35	43.08	198.780	422.468	178.877	72.511	0.345	0.140

ANIPROP GbR
Messprotokoll und Auswertung für Waage KWK3

Messung vom 13.01.2018

12	10	13:21	14.884	-70.21	44.69	250.264	438.257	235.725	86.758	0.455	0.167
12	12	13:22	1.266	-77.23	46.56	300.768	456.595	283.228	108.840	0.546	0.210
12	14	13:22	59.439	-85.6	49.31	355.882	483.563	337.646	131.101	0.651	0.253
12	16	13:23	54.478	-90.46	50.34	393.441	493.664	371.072	144.273	0.716	0.278
12	18	13:24	35.312	-95.27	51.8	426.293	507.982	395.826	161.590	0.764	0.312
12	20	13:25	36.242	-98.67	53.38	444.141	523.476	419.991	178.997	0.810	0.345
12	22	13:26	26.192	-100.81	54.63	452.869	535.735	432.249	192.816	0.834	0.372
12	24	13:27	19.858	-102.36	56.14	453.261	550.543	444.417	207.681	0.857	0.401
12	26	13:28	5.651	-107.52	58.53	480.425	573.980	443.932	225.226	0.856	0.434
12	28	13:28	51.64	-104.57	59.65	440.512	584.964	424.437	234.617	0.819	0.453
12	30	13:29	46.43	-104.75	59.62	442.572	584.669	410.331	236.651	0.792	0.457
12	32	13:31	23.505	-102.7	60.56	413.250	593.888	393.267	238.848	0.759	0.461
12	34	13:32	6.631	-101.02	61.41	388.439	602.223	372.837	254.075	0.719	0.490
12	36	13:32	49.49	-103.33	62.97	395.794	617.522	368.822	265.121	0.711	0.511
12	38	13:33	35.19	-102.77	63.6	384.125	623.700	362.118	275.365	0.699	0.531
12	40	13:34	36.719	-102.86	64.75	373.730	634.977	359.729	287.597	0.694	0.555



Waage KWK3 - Ebene Platte

Messwerte: Mittel $\langle x \rangle$ über 12 Werte

$U_0 = 12 \text{ m/s}$ - Kern Laborwaage Typ 440-35A, 0.6 kg

