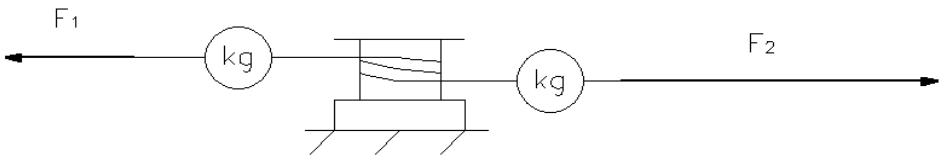
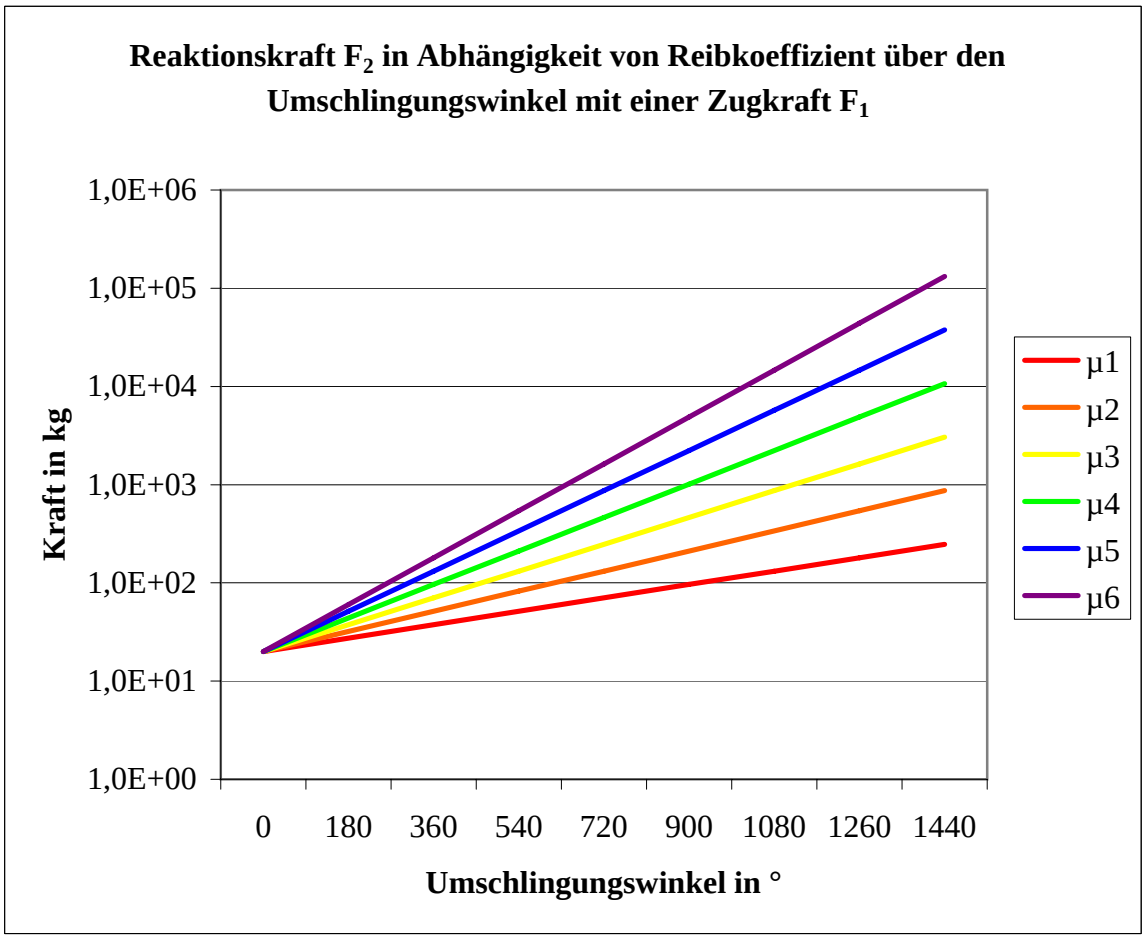


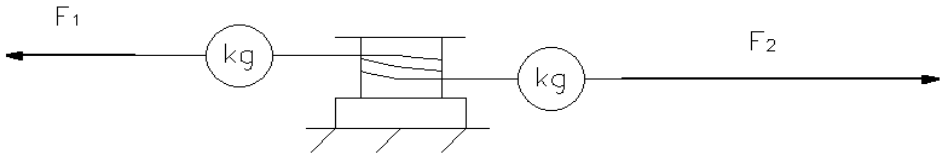
$$F2 = F1 \cdot e^{\mu\alpha}$$

F_1 in kg: 20

Reibkoeffizient

Winkel in °	μ_1 0,1	μ_2 0,15	μ_3 0,2	μ_4 0,25	μ_5 0,3	μ_6 0,35
0	20,00	20,00	20,00	20,00	20,00	20,00
180	27,38	32,04	37,49	43,87	51,33	60,06
360	37,49	51,33	70,27	96,21	131,72	180,34
540	51,33	82,22	131,72	211,01	338,04	541,53
720	70,27	131,72	246,91	462,81	867,52	1626,14
900	96,21	211,01	462,81	1015,08	2226,36	4883,02
1080	131,72	338,04	867,52	2226,36	5713,57	14662,92
1260	180,34	541,53	1626,14	4883,02	14662,92	44030,34
1440	246,91	867,52	3048,12	10709,83	37629,92	132215,93



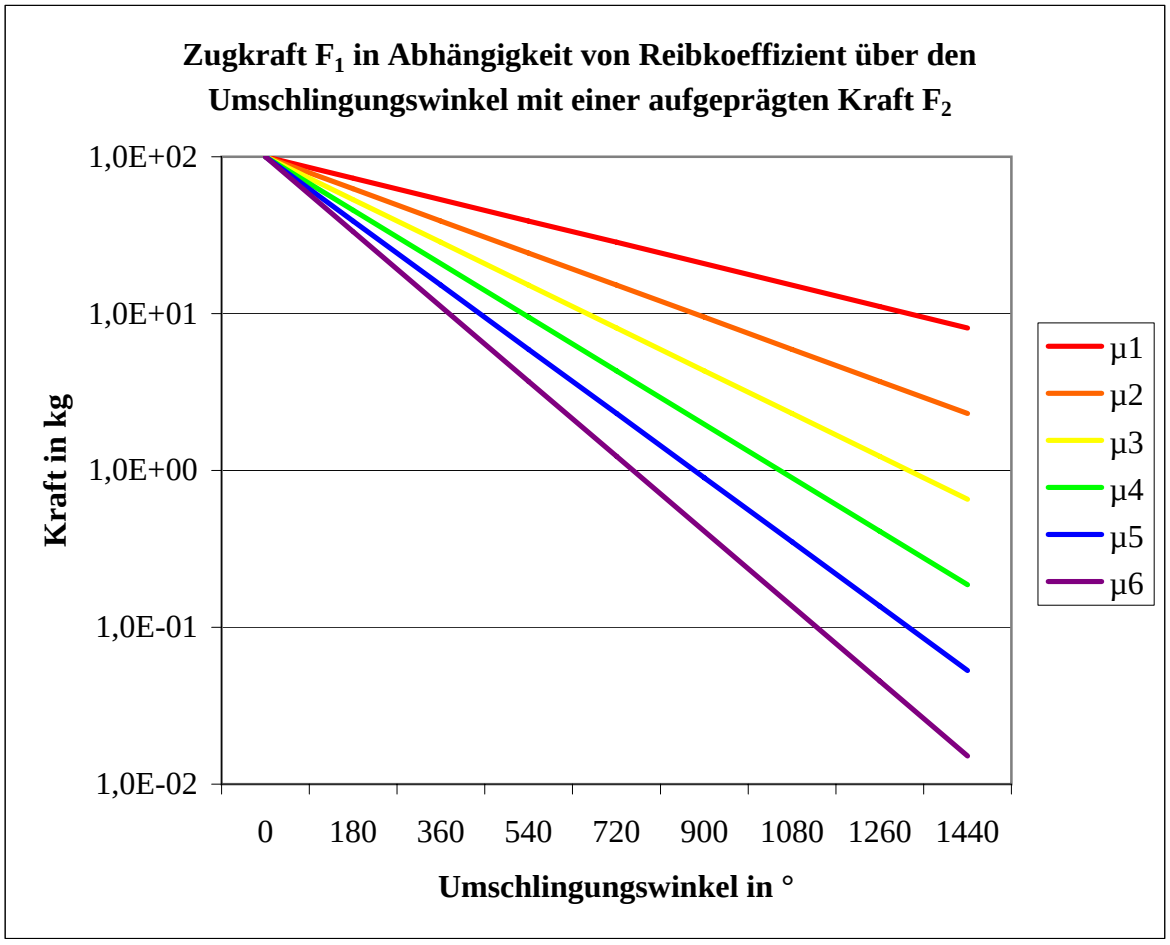


$$F1 = F2 / e^{\mu\alpha}$$

F_2 in kg: 100

Reibkoeffizient

Winkel in °	μ_1 0,1	μ_2 0,15	μ_3 0,2	μ_4 0,25	μ_5 0,3	μ_6 0,35
0	100,00	100,00	100,00	100,00	100,00	100,00
180	73,04	62,42	53,35	45,59	38,97	33,30
360	53,35	38,97	28,46	20,79	15,18	11,09
540	38,97	24,32	15,18	9,48	5,92	3,69
720	28,46	15,18	8,10	4,32	2,31	1,23
900	20,79	9,48	4,32	1,97	0,90	0,41
1080	15,18	5,92	2,31	0,90	0,35	0,14
1260	11,09	3,69	1,23	0,41	0,14	0,05
1440	8,10	2,31	0,66	0,19	0,05	0,02



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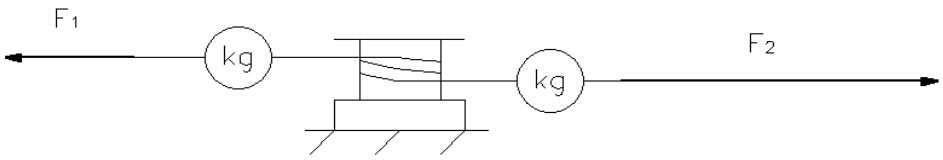
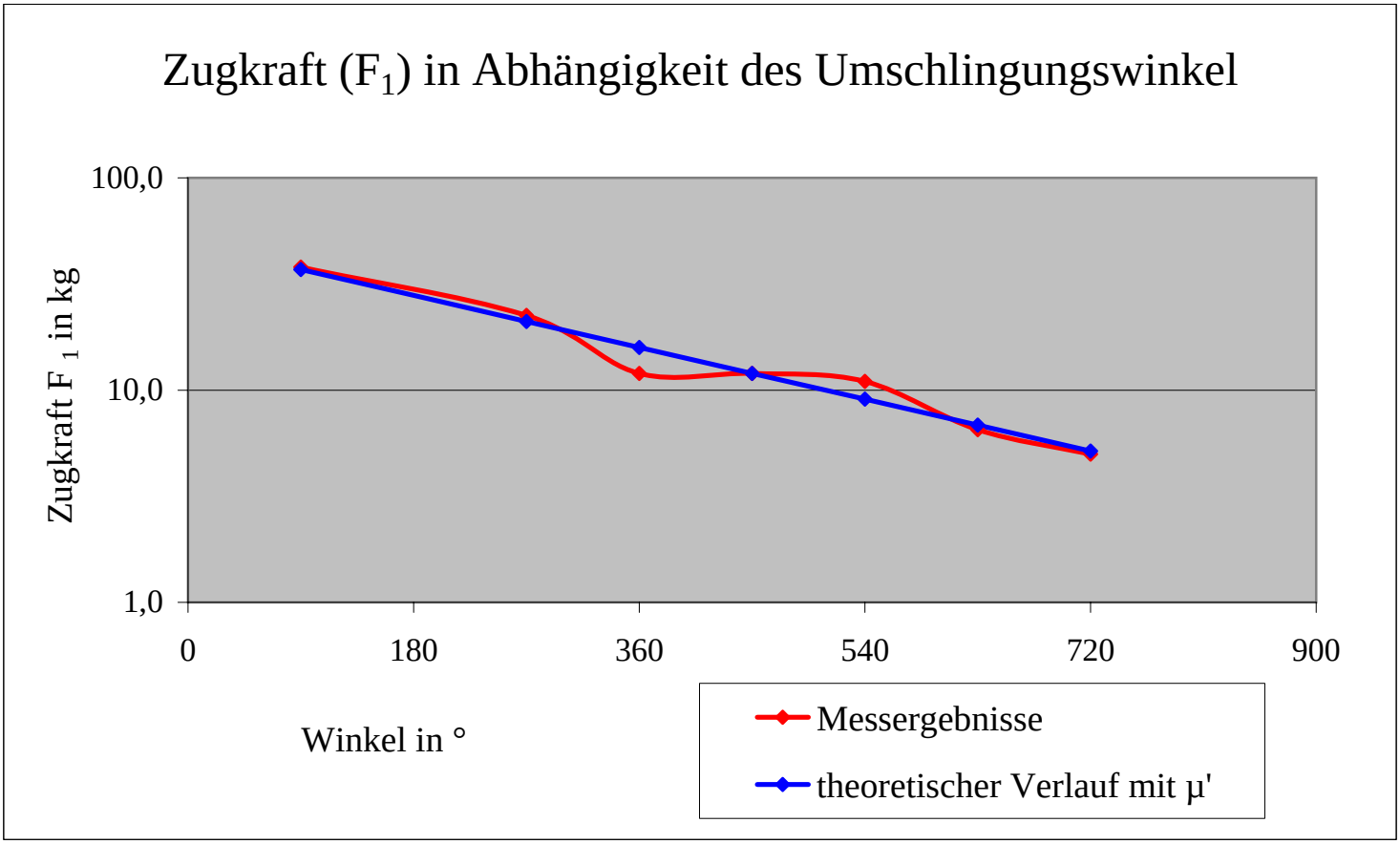


$$\mu = \frac{\ln(F2/F1)}{\alpha}$$

F_2 in kg	Winkel in °	F_1 in kg (gemessen)	berechneter Reibbeiwert μ	F_1 in kg (berechnet mit μ')
49	90	38,0	0,16	36,98
49	270	22,5	0,17	21,07
49	360	12,0	0,22	15,90
49	450	12,0	0,18	12,00
49	540	11,0	0,16	9,06
49	630	6,5	0,18	6,84
49	720	5,0	0,18	5,16

arithmetisch gemittelter Reibbeiwert μ'

0,18



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