

技術矛盾除去方法の適用表

課題状況に従って何を 変化させる必要があるか ↓		変化に伴って 何が悪化する か →		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39			
				動くモノの重さ	動かないモノの重さ	動くモノの長さ	動かないモノの長さ	動くモノの面積	動かないモノの面積	動くモノの体積	動かないモノの体積	はやさ	ちから	緊張・圧力	かたち	構造の安定性	頑丈さ	動くモノが作用する時間	動かないモノが作用する時間	温度	明るさ	動くモノのエネルギー消費	動かないモノのエネルギー消費	出力（力強さ）	エネルギーの損失	物質の損失	情報の損失	時間の損失	物質の量	信頼性（寿命）	測定の精確さ	加工の精確さ	モノに作用する有害な要因	モノ自体の有害な要因	加工のしやすさ	使いやすさ	修理のしやすさ	適応性、汎用性	構造の複雑さ	テストや測定の煩雑さ	自動化の程度	性能、生産性			
1	動くモノの重さ			—	—	15, 8, 29, 34	—	29, 17, 38, 34	—	29, 2, 40, 28	—	2, 8, 15, 38	8, 10, 18, 37	10, 36, 37, 40	10, 14, 35, 40	1, 35, 19, 39	28, 27, 18, 40	5, 34, 31, 35	—	6, 29, 4, 38	19, 1, 32	35, 12, 34, 31	—	12, 36, 18, 31	6, 2, 34, 19	5, 35, 3, 31	10, 24, 35	10, 35, 20, 28	3, 26, 18, 31	3, 11, 1, 27	28, 27, 35, 26	28, 35, 26, 18	22, 21, 18, 27	22, 35, 31, 39	27, 28, 1, 36	35, 3, 2, 24	2, 27, 28, 11	29, 5, 15, 8	26, 30, 36, 34	28, 29, 26, 32	26, 35, 18, 19	35, 3, 24, 37	1	動くモノの重さ	
2	動かないモノの重さ			—	—	—	10, 1, 29, 35	—	35, 30, 13, 2	—	5, 35, 14, 2	—	8, 10, 19, 35	13, 29, 10, 18	13, 10, 29, 14	26, 39, 1, 40	28, 2, 10, 27	—	2, 27, 32, 22	28, 19, 35, 32	—	18, 19, 28, 1	15, 19, 18, 22	18, 19, 28, 15	5, 8, 13, 30	10, 15, 35, 20	19, 6, 18, 26	10, 28, 8, 3	18, 26, 35, 17	10, 1, 22, 37	35, 22, 31, 29	28, 1, 9	6, 13, 1, 32	2, 27, 28, 11	19, 15, 29, 3	25, 28, 17, 15	2, 26, 35, 1	1, 28, 15, 35	2	動かないモノの重さ					
3	動くモノの長さ			8, 15, 29, 34	—	—	—	15, 17, 4	—	7, 17, 4, 35	—	13, 4, 8	17, 10, 4	1, 8, 35	1, 8, 10, 29	1, 8, 15, 34	8, 35, 29, 34	19	—	10, 15, 19	32	8, 35, 24	—	1, 35	7, 2, 35, 39	4, 23, 10	1, 24	15, 2, 29	29, 35	10, 14, 29, 40	28, 32, 4	10, 28, 29, 37	1, 15, 17, 24	1, 29, 17	15, 29, 35, 4	1, 28, 1, 16	14, 15, 1, 16	1, 19, 26, 24	35, 1, 26, 24	17, 24, 26, 16	14, 4, 28, 29	3	動くモノの長さ		
4	動かないモノの長さ			—	35, 28, 40, 29	—	—	—	17, 7, 10, 40	—	35, 8, 2, 14	—	28, 10	1, 14, 35	13, 14, 15, 7	39, 37, 35	15, 14, 28, 26	—	1, 40, 35	3, 35, 38, 18	3, 25	—	—	12, 8	6, 28	10, 28, 24, 35	24, 36	30, 29, 14	—	15, 29, 28	32, 28, 3	2, 32, 10	1, 18	—	15, 17, 27	2, 25	3, 1, 35	1, 26	26	—	30, 14, 7, 26	4	動かないモノの長さ		
5	動くモノの面積			2, 17, 29, 4	—	14, 15, 18, 4	—	—	—	7, 14, 17, 4	—	29, 30, 4, 34	19, 30, 35, 2	10, 35, 36, 28	5, 34, 29, 4	11, 2, 13, 39	3, 15, 40, 14	6, 3	—	2, 15, 16	15, 32, 19, 13	19, 32	—	19, 10, 32, 18	15, 17, 30, 26	10, 35, 2, 39	30, 26	26, 4	29, 30, 6, 13	28, 9	26, 28, 32, 3	2, 32	22, 33, 28, 1	17, 2, 18, 39	13, 1, 26, 24	15, 17, 13, 16	15, 13, 10, 1	15, 30	14, 1, 13	2, 36, 26, 18	14, 30, 28, 23	10, 26, 34, 2	5	動くモノの面積	
6	動かないモノの面積			—	30, 2, 14, 18	—	26, 7, 9, 39	—	—	—	—	—	1, 18, 35, 36	10, 15, 36, 37	—	2, 38	40	—	2, 10, 19, 30	35, 39, 38	—	—	—	17, 32	17, 7, 10, 18	10, 14, 18, 39	30, 16	10, 35, 4, 18	2, 18, 40, 4	32, 35, 40, 4	26, 28, 32, 3	2, 29, 39, 35	27, 2, 39, 35	22, 1, 40, 1	40, 16	16, 4	16	15, 16	1, 18, 36	2, 35, 30, 18	23	10, 15, 17, 7	6	動かないモノの面積	
7	動くモノの体積			2, 26, 29, 40	—	1, 7, 35, 4	—	1, 7, 4, 17	—	—	—	—	15, 35, 36, 37	6, 35, 36, 37	1, 15, 29, 4	28, 10, 1, 39	9, 14, 15, 7	6, 35, 4	—	34, 39, 10, 18	10, 13, 2	35	—	35, 6, 13, 18	7, 15, 13, 16	36, 39, 34, 10	2, 6, 34, 10	29, 30, 7	14, 1, 40, 11	25, 26, 2, 16	25, 28, 2, 16	22, 21, 27, 35	17, 2, 40, 1	29, 1, 40	15, 13, 30, 12	10	15, 29	26, 1, 29, 4	35, 34, 16, 34	10, 6, 2, 34	7	動くモノの体積			
8	動かないモノの体積			—	35, 10, 19, 14	19, 14	35, 8, 2, 14	—	—	—	—	—	2, 18, 37	24, 35	7, 2, 35	34, 28, 35, 40	9, 14, 17, 15	—	35, 34, 38	35, 6, 4	—	—	—	30, 6	—	10, 39, 35, 34	—	35, 16, 18	35, 3	2, 35, 16	—	35, 10, 25	34, 39, 19, 27	30, 18, 35, 4	35	—	1	—	1, 31	2, 17, 26	—	35, 37, 10, 2	8	動かないモノの体積	
9	はやさ			2, 28, 13, 38	—	13, 14, 8	—	29, 30, 34	—	7, 29, 34	—	—	13, 28, 15, 19	6, 18, 38, 40	35, 15, 18, 34	28, 33, 1, 18	8, 3, 26, 14	3, 19, 35, 5	—	28, 30, 36, 2	10, 13, 19	8, 15, 35, 38	—	19, 35, 38, 2	14, 20, 19, 35	10, 13, 28, 38	13, 26	—	10, 19, 29, 38	11, 35, 27, 28	28, 32, 1, 24	10, 32, 35, 35	1, 28, 35, 21	35, 13, 8, 1	32, 28, 13, 12	34, 2, 28, 27	15, 10, 26	10, 28, 4, 34	3, 34, 27, 16	10, 18	—	9	はやさ		
10	ちから			8, 1, 37, 18	18, 13, 1, 28	17, 19, 9, 36	28, 10	19, 10, 15	1, 18, 36, 37	15, 9, 12, 37	2, 36, 18, 37	13, 28, 15, 12	—	18, 21, 11	10, 35, 40, 34	35, 10, 21	26, 14, 14, 27	19, 2	—	35, 10, 21	—	19, 17, 10	1, 16, 36, 37	19, 35, 18, 37	14, 15	8, 35, 40, 5	—	10, 37, 36	14, 29, 18, 36	3, 35, 13, 21	35, 10, 23, 24	10, 28, 37, 36	1, 35, 40, 18	13, 3, 18, 1	15, 37, 3, 25	15, 17, 18, 20	15, 17, 10, 18	26, 35, 36, 37	2, 35, 10, 19	3, 28, 35, 37	10	ちから			
11	緊張・圧力			10, 36, 37, 40	13, 29, 10, 18	35, 10, 36	35, 1, 14, 16	10, 15, 36, 28	10, 15, 36, 37	6, 35, 10, 36	35, 24	6, 35, 36	36, 35, 21	—	35, 4, 15, 10	35, 33, 2, 40	9, 18, 3, 40	19, 3, 27	—	35, 39, 19, 2	—	14, 24, 10, 37	—	10, 35, 14	2, 36, 2, 35	10, 36, 3, 37	—	37, 36, 4	10, 14, 36	10, 13, 19, 35	6, 28, 25	3, 35	22, 2, 37	2, 33, 27, 18	1, 35, 16	11	2, 36, 3, 37	35, 24	10, 14, 35, 37	11	緊張・圧力				
12	かたち			8, 10, 15, 29, 40	10, 15, 26, 3	29, 34, 1, 28	13, 14, 10, 7	5, 34, 4, 10	—	14, 4, 15, 22	7, 2, 35	35, 15, 34, 18	35, 10, 37, 40	34, 15, 10, 14	—	33, 1, 18, 4	30, 14, 10, 40	14, 26, 9, 25	—	22, 14, 19, 32	13, 15, 32	2, 6, 34, 14	—	4, 6, 2	14	35, 29, 3, 5	—	14, 10, 34, 17	36, 22	10, 40, 28, 32, 1	32, 40	22, 1, 2, 35	35, 1	1, 32, 17, 28	32, 15, 2, 13	1, 15, 1, 31	16, 29, 1, 28	15, 13, 39	15, 1, 32	17, 26, 14, 10	12	かたち			
13	構造の安定性			21, 35, 2, 39	26, 39, 1, 40	13, 15, 1, 28	37	2, 11, 13	39	28, 10, 19, 39	34, 28, 35, 40	33, 15, 28, 18	10, 35, 21, 16	2, 35, 40	22, 1, 18, 4	—	17, 9, 15	13, 27, 10, 35	39, 3, 35, 23	35, 1, 32	32, 3, 27, 15	13, 19	27, 4, 29, 18	32, 35, 27, 31	14, 2, 39, 6	2, 30, 40	—	35, 27	15, 32, 35	—	13	18	35, 24, 18, 30	35, 40, 27, 39	32, 35, 30, 19	2, 35, 10, 16	35, 30, 34, 2	2, 35, 22, 26	35, 29, 23	1, 8, 35	23, 35, 40, 3	13	構造の安定性		
14	頑丈さ			1, 8, 40, 40, 15	40, 26, 27, 1	1, 15, 8, 35	15, 14, 28, 26	3, 34, 40, 29	9, 40, 28	10, 15, 14, 7	8, 13, 17, 15	26, 14	10, 15, 3, 14	10, 3, 35, 40	13, 17, 35	—	27, 3, 26	—	—	30, 10, 40	35, 19	19, 35, 10	35	—	19, 10, 35, 38	—	28, 27, 3, 18	10	20, 10, 28, 18	3, 35, 11, 13	3, 27, 16	3, 27	22, 15, 33, 28	21, 39, 16, 22	2, 1, 4	12, 27	29, 10, 27	1, 35, 13	10, 4, 19, 29, 15	35, 17, 14, 19	35, 10, 14, 19	15	動くモノが作用する時間		
16	動かないモノが作用する時間			—	6, 27, 19, 16	—	1, 40, 35	—	—	—	35, 34, 38	—	—	—	—	39, 3, 35, 23	—	—	—	19, 18, 36, 40	—	—	—	16	—	27, 16, 18, 38	10	28, 20, 10, 16	3, 35, 31	34, 6, 27, 40	10, 26, 24	—	17, 1, 40, 33	22	35, 10	1	1	2	—	25, 34, 6, 35	1	20, 10, 16, 38	16	動かないモノが作用する時間	
17	温度			36, 22, 6, 38	22, 35, 32, 9	15, 19, 9	15, 19, 9	3, 35, 39, 18	35, 38	34, 39, 40, 18	35, 6, 4	2, 28, 36, 30	35, 10, 3, 21	35, 39, 19, 2	14, 22, 19, 32	1, 35, 32	10, 30, 32, 40	19, 13, 39	19, 18, 36, 40	—	32, 30, 21, 16	19, 15, 3, 17	—	2, 14, 17, 25	21, 17, 35, 38	21, 36, 39, 31	—	35, 28, 21, 18	3, 17, 30, 39	19, 35, 3, 10	32, 19, 24	22, 33, 35, 2	22, 35, 2, 24	26, 27	26, 27	4, 10, 16	2, 18, 27	2, 17, 16	3, 27, 35, 31	26, 2, 19, 16	15, 28, 35	17	温度		
18	明るさ			19, 1, 32	2, 35, 32	19, 32, 16	—	19, 32, 26	—	2, 13, 10	—	10, 13, 19	26, 19, 6	—	32, 30, 32	32, 3, 27	35, 19	2, 19, 6	—	32, 35, 19	—	32, 1, 19	32, 35, 1, 15	—	32	19, 16, 1, 6	13, 1	1, 6	19, 1, 26, 17	1, 19	—	11, 15, 32	3, 32	15, 19	35, 19, 32, 39	19, 35, 28, 26	28, 26, 19	15, 17, 13, 16	15, 1, 19	6, 32, 13	32, 15	2, 26, 10	2, 25, 16	18	明るさ
19	動くモノのエネルギー消費			12, 18, 28, 31	—	12, 28	—	15, 19, 25	—	35, 13, 18	—	8, 15, 35	16, 26, 21, 2	23, 14, 25	12, 2, 29	19, 13, 17, 24	5, 19, 9, 35	28, 35, 6, 18	—	19, 24, 3, 14	2, 15, 19	—	—	6, 19, 37, 18	12, 22, 15, 24	35, 24, 18, 5	—	35, 38, 19, 18	34, 23, 16, 18	19, 21, 11, 27	3, 1, 32	—	1, 35, 6, 27	2, 35, 6	28, 26, 30	19, 35	1, 15, 17, 28	2, 29, 27, 28	35, 38	32, 2	12, 28, 35	19	動くモノのエネルギー消費		
20	動かないモノのエネルギー消費			—	19, 9, 6, 27	—	—	—	—	—	—	—	36, 37	—	—	27, 4, 29, 18	35	—	—	—	19, 2, 35, 32	—	—	—	—	—	28, 27, 18, 31	—	—	3, 35, 31	10, 36, 23	—	10, 2, 22, 37	19, 22, 18	1, 4	—	—	—	—	19, 35, 16, 25	—	1, 6	20	動かないモノのエネルギー消費	
21	出力（力強さ）			8, 36, 38, 31	19, 26, 17, 27	26, 35, 37	—	19, 38	17, 32, 13, 38	35, 6, 38	30, 6, 25	15, 35, 2	26, 2, 36, 35	22, 10, 35	29, 14, 7, 40	35, 32, 15, 31	26, 10, 28	19, 35, 10, 38	16	2, 17, 25	16, 6, 19, 37	—	—	—	10, 35, 18	28, 27, 18, 38	10, 19	35, 20, 10, 6	4, 34, 31	19, 24, 26, 31	32, 15, 2	32, 2	19, 22, 31, 2	2, 35, 18	26, 10, 34	26, 35, 10, 34	35, 2, 19, 34	20, 19, 39, 16	28, 2, 17	28, 34, 35	21	出力（力強さ）			
22	エネルギーの損失			15, 6, 19, 28	19, 6, 18, 9	7, 2, 6, 13	6, 38, 7	15, 26, 17, 30	30, 18	7, 18, 23	7	16, 35, 38	36, 38	—	—	14, 2, 39, 6	26	—	—	19, 38, 7	1, 13, 32, 15	—	—	3, 38	—	35, 27, 2, 37	19, 10	10, 18,																	