

Concept Matrix

The first column displays a list of the 10 more important factors in the design plus the Grand Total and Ranking for each concept.

The second column, Weight of the factor, assigns a number from 1 to 5 rating the importance of the factor in question, 1 not important to 5 very important.

Each cell rates how the concept fulfills the corresponding factor. The first number from 1 to 5 shows how the concept covers the factor, 1 very badly to 5 very well, and the second number is the product of this first number times the weight factor.

The Grand Total for a concept model is the summation of the total of the column's second numbers, the higher the Grand Total the better the concept.

The bottom row is the ranking position for the concept model based in the Grand Total value.

	Weight of the factor 1 to 5	A- Twin step	B- No legs	C- Four Legs	D- Raised Top	E- small stool	F- Two side legs	G- Two front legs	H- Two step stool	I- Two step stool	J- One piece leg
Portability	4	1/4	5/20	5/20	5/20	5/20	5/20	5/20	1/4	1/4	5/20
Easy to use	4	5/20	5/20	4/16	3/12	5/20	4/16	4/16	5/20	5/20	3/12
Strength	5	5/25	5/25	2/10	4/20	5/25	3/15	3/15	5/25	5/25	4/20
Tool capacity	3	5/15	5/15	5/15	5/15	2/6	5/15	5/15	5/15	5/15	4/12
Stability	5	5/25	5/25	3/15	3/15	5/25	3/15	3/15	5/25	5/25	5/15
Weight	3	3/9	5/15	2/6	3/9	5/15	4/12	4/12	3/9	3/9	4/12
Manufacturing	4	3/12	5/20	3/12	3/12	5/20	3/12	3/12	3/12	3/12	3/12
Cost	5	3/15	5/25	4/20	4/20	5/25	4/20	4/20	3/15	3/15	4/20
Look	4	1/4	4/16	4/16	4/16	4/16	4/16	4/16	1/4	1/4	4/16
Novelty	2	4/8	4/8	4/8	3/6	5/10	5/10	5/10	4/8	4/8	4/8
Grand Total		137	189	138	145	181	151	151	137	137	147
Ranking		7	1	6	5	2	3	3	7	7	4

The concepts E and F will be explored with prototypes.