

Design Project 1

For our first design project we were assigned the task to create a mug for a one figured disabled person. We had to not only create a mug that was easy to use but was relatively safe and easy to maintain. In order to classify what our customer wanted we created an AHP table, a concept combination table and a classification tree. We also used Solid Works to form a basic design of our mug. Once we had narrowed down our options it was easy to come up with the design solution bellow.

AHP Table

	Portable	Durable	User Friendly	Flexible	One finger use	Total	Weight
Portable	1	5	0.33	0.33	0.11	6.77	0.146
Durable	0.2	1	0.33	5	0.33	6.86	0.148
User friendly	3	3	1	3	1	11	0.237
Flexible	3	0.2	0.33	1	0.33	4.86	0.105
One finger use	9	3	1	3	1	17	0.366
Total						46.49	

Concept combination table

Unbreakable	Ambidextrous	Handheld	No joint strain	Safe
Plastic	One side	Handles	Lightweight	Smooth edges
Steel	Both sides	Hole for finger	Small Shape	Rubber sleeve
	Bottom			

Final Design

