

Project Deliverables		Score
1.	Product Description, Concept Sketches, Pugh Matrix & PDS <ul style="list-style-type: none"> • Complete set of documents • Clear narrative describing the ideation process and results 	/2 /4
2.	Assembly Model <ul style="list-style-type: none"> • Good, hardcopy shaded renderings • Exploded/unexploded states • Thoughtful choice of views, color added to parts 	/5
3.	Exploded Assembly Drawing with BOM <ul style="list-style-type: none"> • Clear, orderly, exploded state, as line drawing printed in black and white • No hidden lines • Neat, organized balloons and Bill of Material • BOM identifies off-the-shelf versus manufactured items 	/5
4.	Assembly Drawing with Cross-Sections <ul style="list-style-type: none"> • Three orthogonal views with cutting planes identified on first sheet (small isometric reference view optional) • Clear, large-scale cross-sections; each filling a separate page if clarity and scale requires it • Sufficient cross-section scale to see how parts mate together • Black and white print, format correct, hidden lines optional 	/7
5.	Detailed Engineering Drawings <ul style="list-style-type: none"> • Drawings for all manufactured parts, fully-dimensioned • Hidden lines showing in all views except 3D isometric • Center lines shown and no dimensioning to hidden lines • Appropriate tolerances (ISO fits for moving parts) • Text positioned outside part views, no overlapping text • Arrowheads not overlapping, flipped correctly and cleanly 	/7
6.	Tolerance Analysis <ul style="list-style-type: none"> • Radial/Diametral fits explained • Axial fits explained along with worst-case tolerance calcs. 	/5
7.	Materials and Manufacturability <ul style="list-style-type: none"> • Materials and Manufacturing methods with aPriori cost estimates in excel Manufacturing_BOM_Template.xls • Catalog information shown for off-the-shelf items 	/5
8.	Complexity, Creativity & Innovation <ul style="list-style-type: none"> • Clear or novel concept with innovative designs • Did the group challenge themselves with product or design complexity? 	/5
Total Grade		/45

Note: Total is 100 pts. An additional 10% is allocated based on individual contribution to the project via the CATME evaluation; added to the final gradesheet.

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