

The Sit-Down Dilemma

Mechanical Design and Engineering
Dossin

The Problem:



Football season is here and the Lions are ranked #1. Detroit is in a football frenzy being able to watch a live football game in person and over finally having a winning team that everybody, and we mean EVERYBODY are packing into Ford Field to watch the games. Ford Field has 65,000 seats for people to sit in. However, due to the high demands of fans wanting to watch the game, the stadium created an area of stadium bleacher seats (*think Barnabo Field bleachers*) to accommodate an extra 3,000 people in. Although happy to have extra seating available, the bleacher seats quickly become uncomfortable for the football fans to sit on.

The Challenge:

Design a portable, collapsible stadium seat that someone can bring into the Ford Field bleacher area and sit on comfortably throughout the entire game.

Design Factors to Consider:

In addition to factors you will come up with, following are some items to think about:

Security- Ford security need to quickly verify nothing illegal is being smuggled in the chairs into the stadium.

Multi-use- Can people use their chair at tailgating parties before the game? Can it hold people's drinks or food?

Materials- Think about weight, type and cost.

Desirability- What makes your design more attractive to a consumer or better than the competition's?

Requirements and Objectives:

Create a virtual presentation board that explains/ shows your idea. On your board be sure to:

- Define the problem
- Show evidence of some background research
- Specify some key requirements and design factors you considered
- Show other ideas you may have had, before you reached your final idea.
- Address materials you would use.
- Include at least one "final" sketch or drawing.
- A title, your name and date.

