



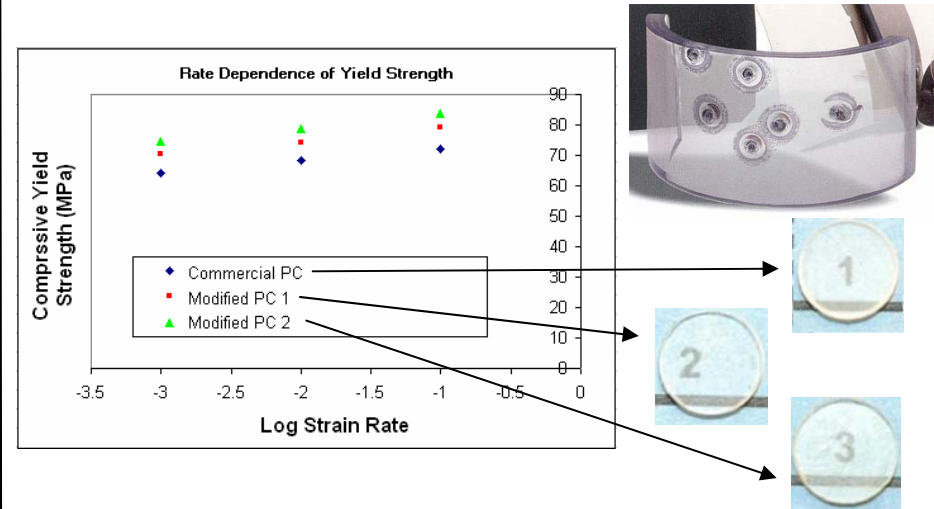
Team Safety

Challenge 7 : Blast Shield Enhancement

MIT Nick Tsui, Adam Mulliken, Joe Walish, Jacque Tio, Phil Vogel

Concept: Transparent Armor

- Protective layers that are optically clear
- Windows, safety glasses, police shields
- Polymers make ideal candidates due to their high strength to weight ratios



Highlights:

- Cheap, easy to mass produce
- Lightweight and Transparent
- Offers tunable blast protection from a number of different types of projectiles at a wide range of speeds

Soldier Benefits:

- 17% Strength Enhancement:
 - 1) Improved blast protection:
 - Windows on transport vehicles
 - Personal eye-wear
 - Generic blast shields
 - OR
 - 2) For the same protection:
 - 17% weight reduction