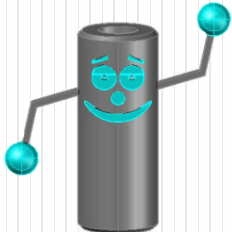


IPro 339

PIN  PALS



The Problem

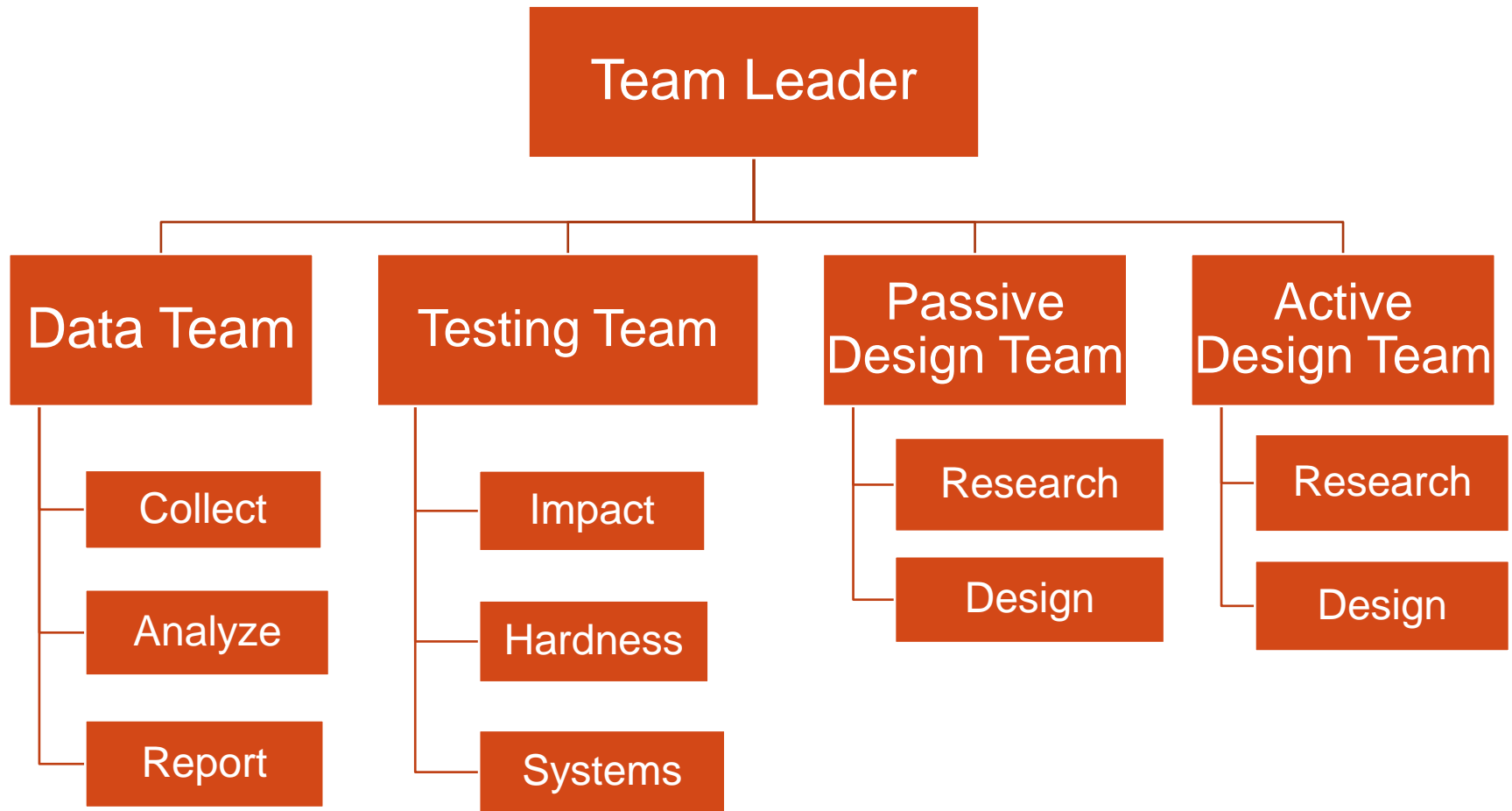
- Develop a material handling solution to eliminate nicks on the piston pin
- Must be efficient and practical
- Burgess Norton is the sole beneficiary



Goal

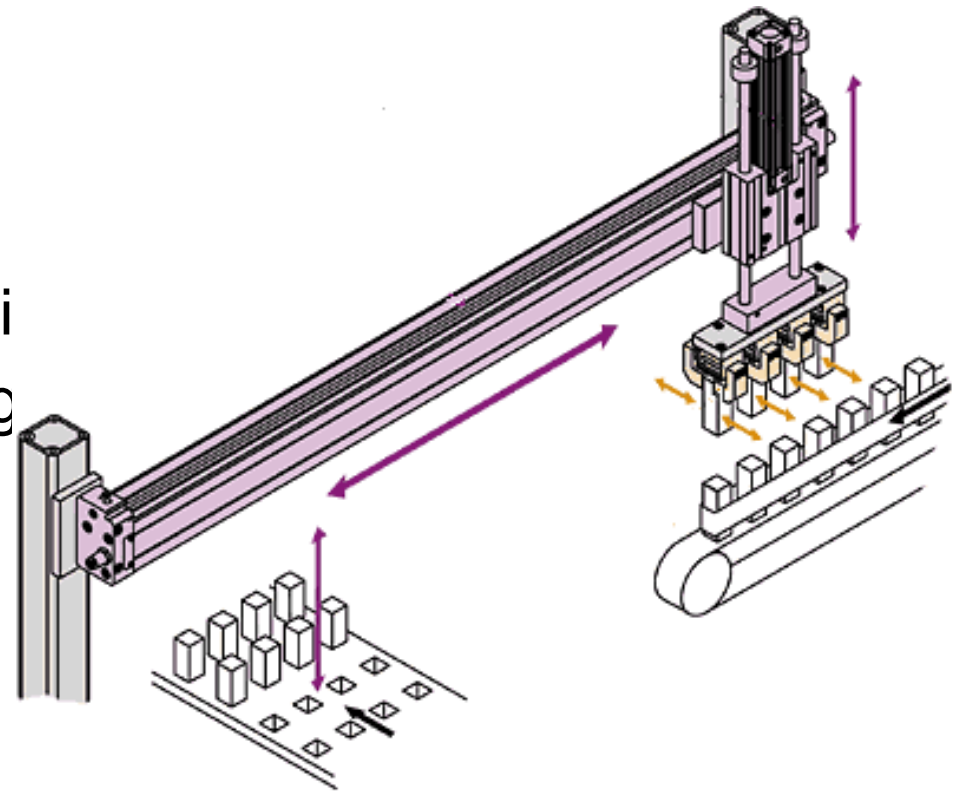
- Asses Burgess Norton existing system
- Identify other methods of opportunity
- Develop multiple solutions
- Provide Burgess Norton with a solution

Organization and Tasks



Progress Toward Goals

- Visited the plant twice
- Tested samples
 - Built testing apparatus
 - Performed hardness tests
 - Conducted impact testing
- Potential solutions
 - Spring Box
 - Ammo Box
 - Conveyor System
 - Robot - Pick and Place



Major Obstacles

- Identify the cause of the problem
- Ethical Issues
 - Confidentiality
 - Potential Job Losses
- Resolution
 - Ethics Bowl
 - Personal Assessment of Plant
 - Testing

Anticipated Major Challenges

- Developing arguments and support for each solution
- Design Proposal
 - Pending approval from Burgess Norton
- Prototype
- Cost and Funding
 - Practicality Reasonable
- Maintainability

Questions?