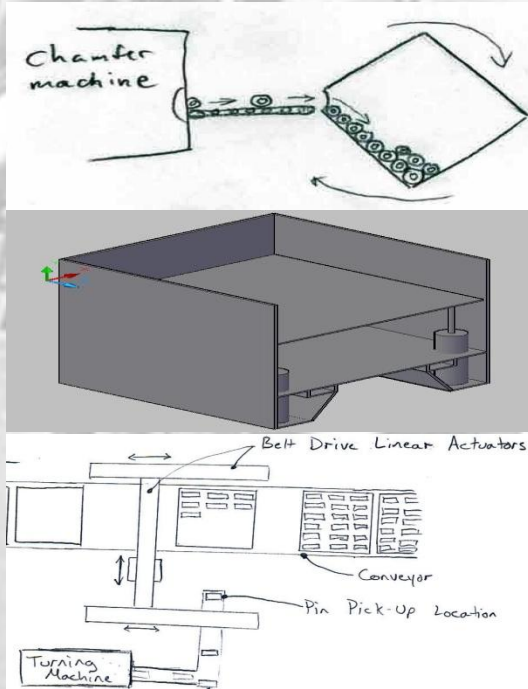


TEAM SCOPE:

Provide Burgess –Norton with simple, economical, and easily implemented design/plan to help resolve excessive nice occurrences. on piston pins

Preliminary Design Ideas:



It is hard to find any motorized vehicle in today's world, that does not utilize piston pins. From automobiles to airplanes, motorcycles to lawnmowers, piston pins are used in order to power these machines and help people accomplish incredible tasks.

TEAM PIN PALS:

Collin Perle (Team Leader)
Dylan Binder
Sandrine Simen
Guy Truong
Yun Seon Heo
Hyunseok Ko
Wahib Douh
Edilberto Barrera
Kyrstian Ustupski
Andrey Kolesnikov
Assyl Akhambay
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INSTRUCTOR: Philip Lewis

Special Thanks from Pin-Pals to Burgess-Norton for sponsoring this project.



IPRO 339

Piston & Piston Pin
Manufacturing Process
Improvement

PIN PALS

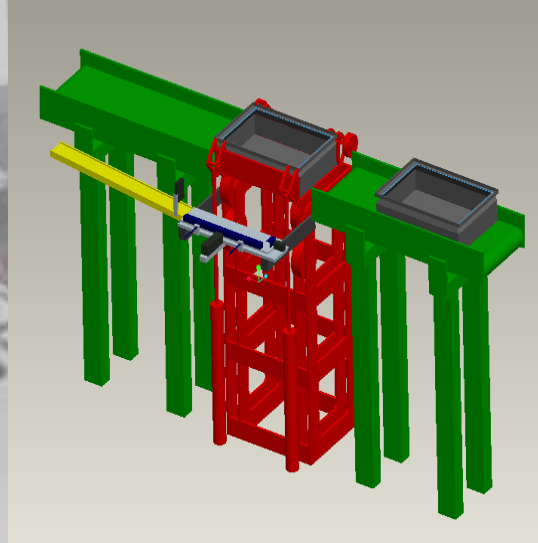
Sponsored by:





Pro 339 was challenged to innovate the manufacturing process of piston pins for Burgess-Norton.

Recommended Design For Burgess-Norton:



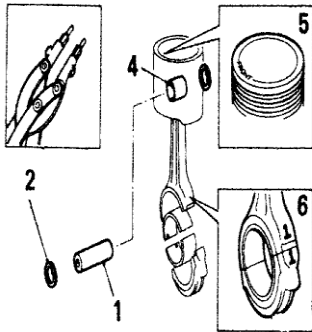
Burgess-Norton Manufacturing Company, is the world's largest manufacturer of piston pins and leading producer of powder metal parts. One of Burgess-Norton's specializations is the development and manufacturing of piston pins. Our team was confronted with the issue of nick occurrences on the chamfered ends of the piston pins.

Burgess-Norton Plant Visit:



The Solution:

To ease the handling process, we found that production, and efficiency would be increased if Burgess-Norton would retrofit a new conveyor system to their existing system, to automate the loading of piston pins onto their existing pans.



- 1. Piston pin
- 2. Circlip
- 3. Circlip pliers
- 4. Small end bush
- 5. Front marking on piston
- 6. Identification number on big end

Fully floating type piston pin is retained by circlips