

Jergens, Inc. Mechanical Engineering Intern Co-op



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Choose **Ohio** First

INTRODUCTION

Jergens, Inc. is a manufacturing company which has produced industry-leading workholding solutions, lifting solutions, and fasteners for over 80 years. Headquartered in Cleveland with additional locations in India and China, Jergens' commitment to quality and innovation is known by customers worldwide. Aside from manufacturing, there are two subdivisions that focus on automation and industrial supply.

OBJECTIVES

My role as a "Mechanical Engineering Intern" at Jergens was to work with the machinists and other engineers on various projects, most of which involved improving efficiency and quality. My main goals while working at Jergens were to become familiar with product engineering, improve my technical skills with different engineering programs, and to assist in quality assessments.

SKILLS LEARNED/IMPROVED

- Geometric Dimensioning and Tolerancing
- Solidworks
- Microsoft Excel
- Internal and External Communication
- Reverse Engineering
- Working in a team environment

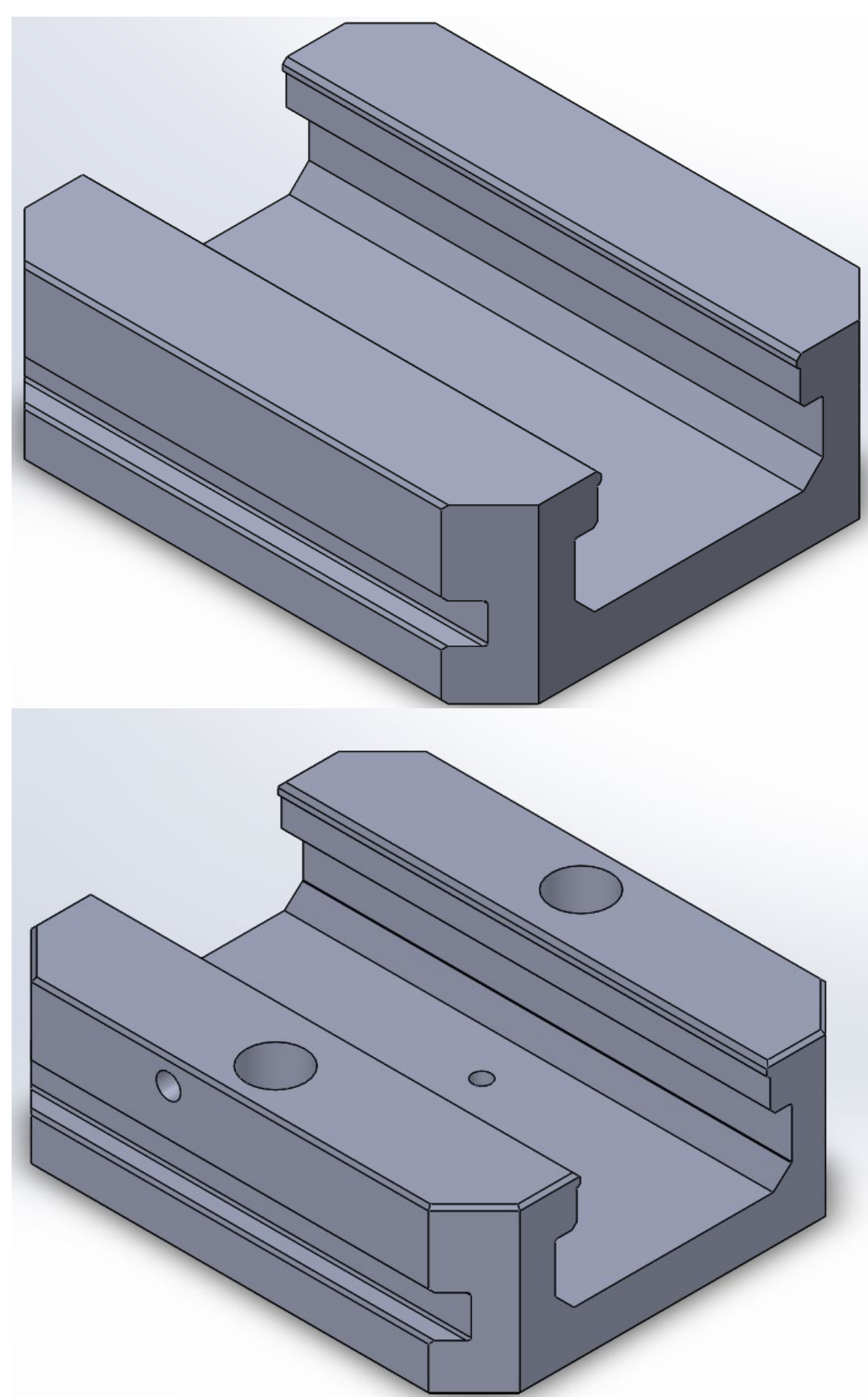


Figure 1: (Above) Original in-process vise base model; (Below) updated in-process vise base model.

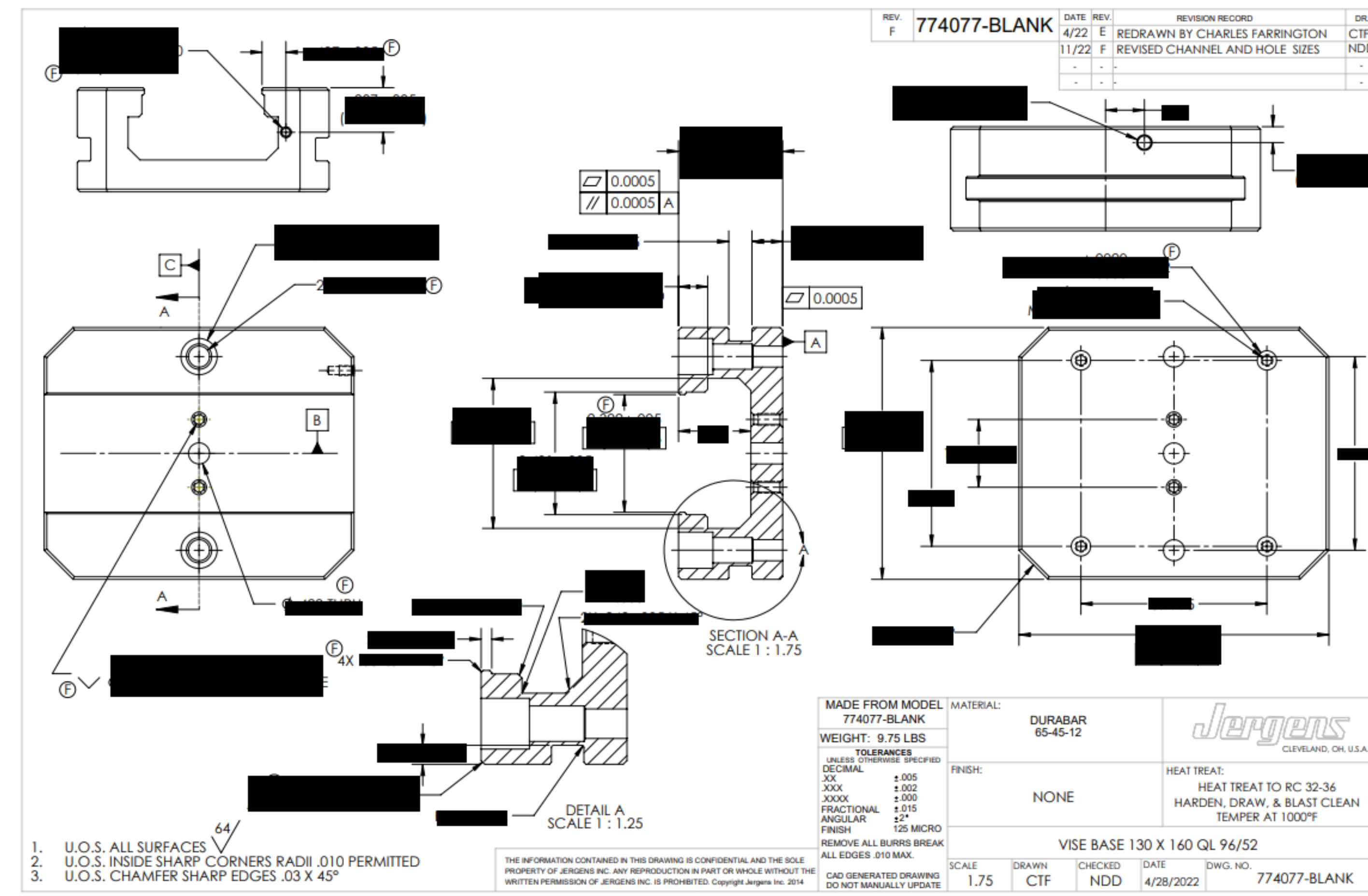


Figure 2: Updated Vise Base Print.

MAIN PROJECTS

- Creation of new drawings for several vise bases
- Tracking the quality of multiple runs of vise bases
- Designing jaws for lathes and vertical mills
- Reverse engineering of a few small parts that lacked drawings.

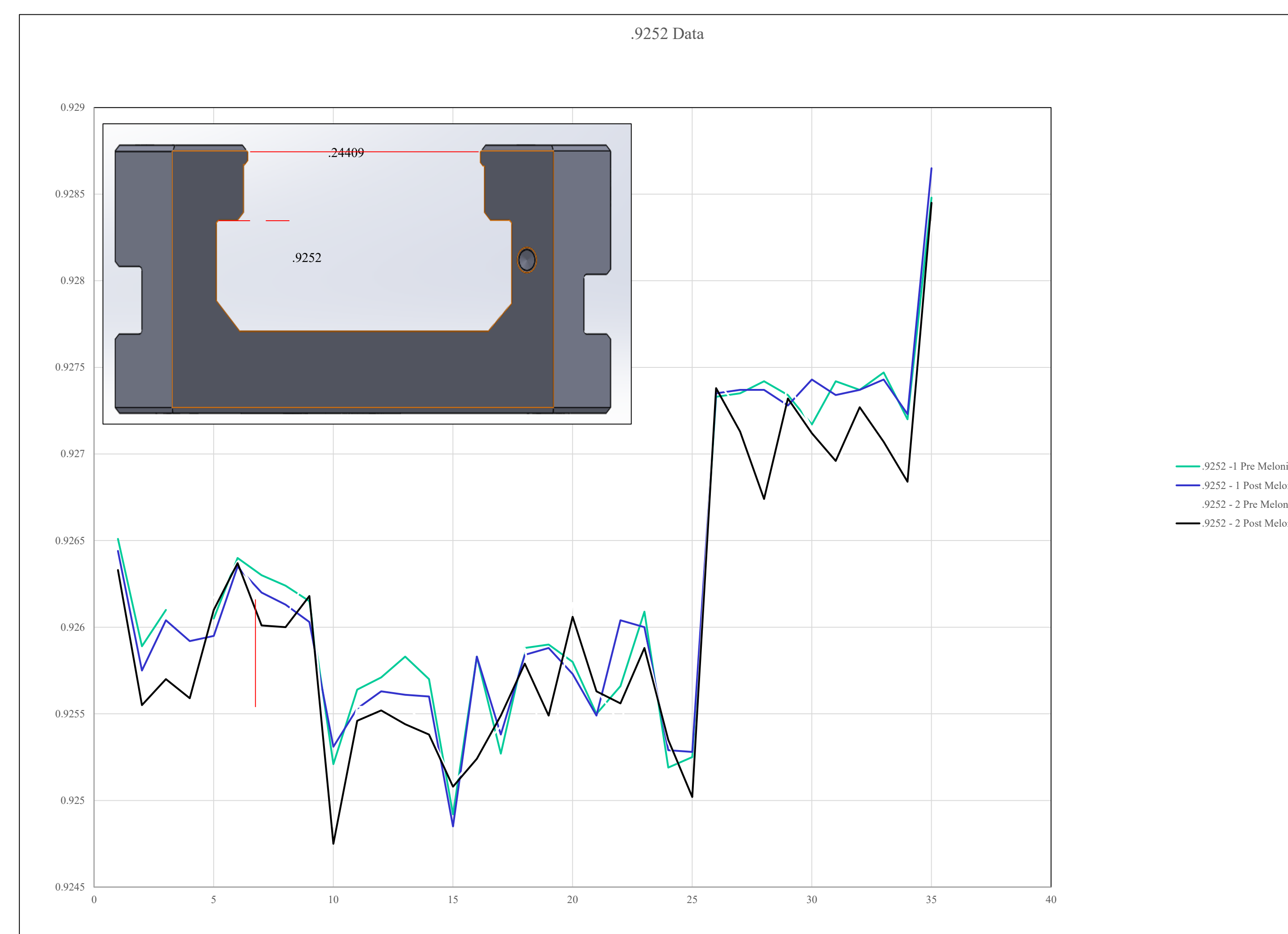


Figure 3: Graph of a specific dimension's changes before and after heat treatment.

CONCLUSIONS

Jergens is an excellent place to work, placing emphasis on the "Jergens Family." I was able to interact with the machinists, engineers, and employees in other divisions frequently; this allowed me to deepen my understanding of how the company functions. Due to working as a co-op for two consecutive semesters, I was able to contribute to some of the larger projects at the time, with the largest being the vise base improvements.

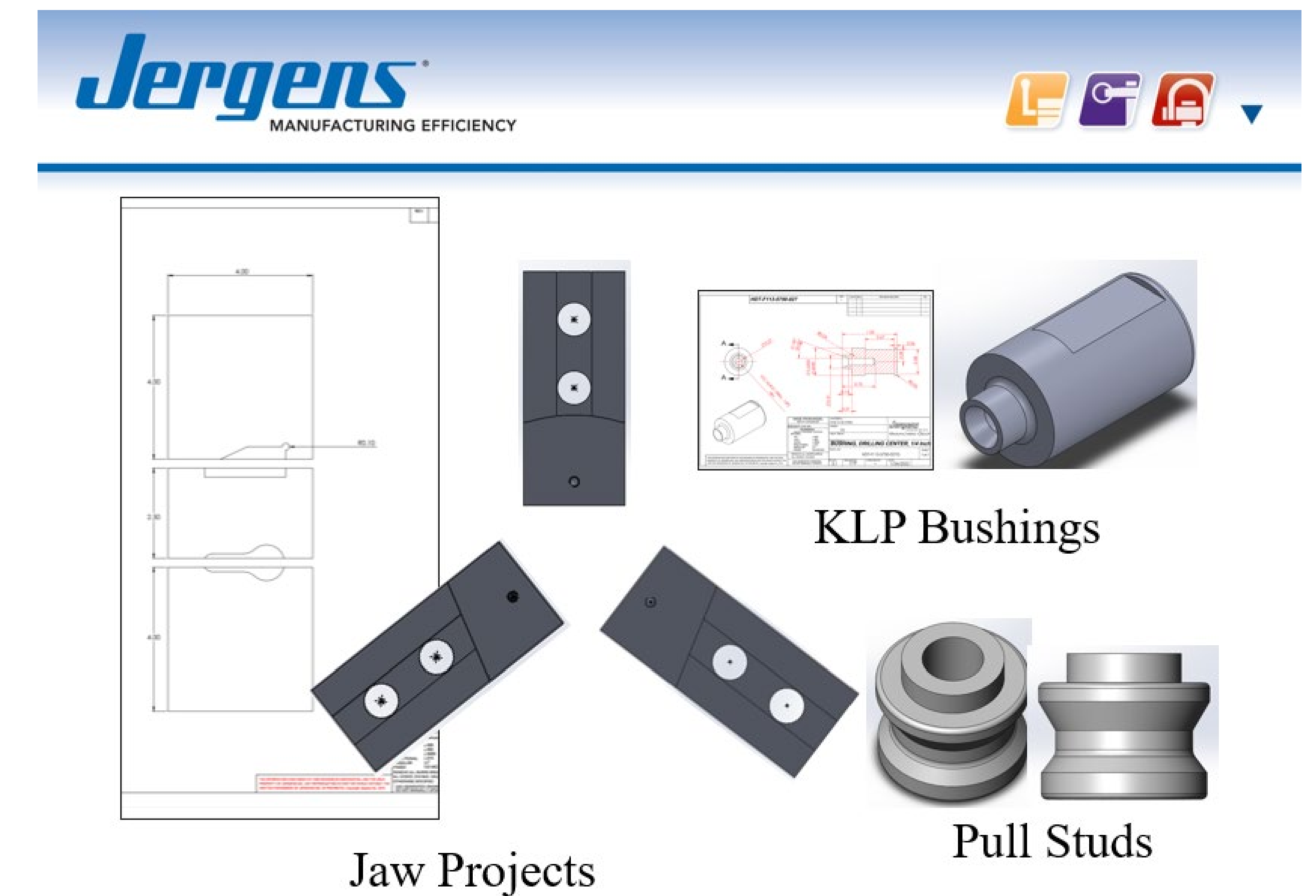


Figure 4: Other projects I contributed to.

FUTURE WORK

Although I have no current plans to return to Jergens in the future, I would be more than willing to resume my employment there after graduation. Although manufacturing is not the field I would like to pursue, understanding how machining and production works is critical to success in engineering design. I hope that wherever my career takes me will have as inviting, challenging, and stimulating as the time I spent at Jergens.