

innovate@wpi.edu



Kinefac Corporation 156 Goddard Memorial Drive Worcester, MA 01603

Kinefac is an innovative world leader in the development and manufacture of specialized metal forming, metal working, and metal processing equipment. Throughout it's 55 year history in Worcester, Kinefac has extended its metal forming technology from its roots in cylindrical die rolling to extrusion, coiling, turning, and other radial forming processes. Kinefac has been built on a cohesive team of engineers, designers, assemblers, and supporting staff committed to establishing world-wide leadership in its various technology markets.





Kinefac manufactures two-die and three-die CNC cylindrical die rolling machinery to roll-form various threads, worms, knurls, and other helical forms for a variety of industries. The cylindrical dies must work together to displace the rolled material between them into the desired shape. For the dies to work together and equally share the flow of metal they must be precisely phased to one another. Kinefac wants to develop a method of automatically phasing the dies before use without expending any work pieces to adjust the phasing.

The company needs 4 engineers to work as a team consisting of a mixture of graduate & undergraduate students, to work about 10 hours each week. Most of the work may be done on campus after an initial meeting at the company. Weekly reports and a summary presentation are required at the end of the project.

WPI Center for Innovative Manufacturing Solutions www.wpi.edu/+centerforIMS



ROBERT A. FOISIE innovate@wpi.edu SCHOOL OF BUSINESS

Engineering majors— Understand and experience the current methods of phasing the dies, understand the current level of machine control, research and design a method to automate the process, generate a final design proposal and implement if time permits.

The project timeline begins in February and should be completed before mid-April 2016. Students will be selected by a brief interview process with the company and should have the following qualifications.

You should be able to describe why you would be a good match for this paid consulting assignment.

ME/MFE/IE major Students:

- 1. Interest in the Project
- 2. Engineering Acuity
- 3. Basic Research and Organizational Skills
- 4. Ability to do Internet, Phone, and other basic Searches
- 5. Knowledge of Basic Manufacturing Processes
- 6. Knowledge of Basic Electronic Sensing Devices
- 7. Presentation Skills
- 8. Availability Minimum 10 Hrs./Week

You will work in a team with the goal of providing actionable advice to the company.

If you are interested please email mic-admin@wpi.edu and include a letter explaining why you are a good candidate for one of these positions.

Undergraduates earn \$14 to \$18/hour.
Initial estimate is 50 hours of work for each student.

Graduate/PhDs earn \$18 to \$22 per hour. Initial estimate is for 50 hours for each student.

This opportunity is open to all academically qualified students. A non-disclosure agreement is required.



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