Employee Engagement and Retention through Co-ops and Internships

Marie Anette Karlsson
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Cleveland State University
Grand Valley State University

Industry Panelists

Steve Heethuis
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[NNautocam logo]
[Parker logo]
Financial Reality of College Completion (MI Data – 2010)
Grand Valley State University
Grand Rapids, Michigan, USA
Grand Valley State University

- Master’s – Comprehensive Public University
- 25,500 Students (over 21,000 undergrad)
- Located in Grand Rapids Michigan
- Population approx 1.3 million
- Diverse employer base with extensive design and manufacturing
Padnos College of Engineering & Computing

- Programs in Engineering, Computing, OSH, Bio-Medical Informatics
- ~ 2,200 students
- Co-op or internship required in all programs
- School of Engineering founded by, and partners with local industry
- Named “Exemplar of Real World Engineering Education” by NAE
- Over $150,000 in scholarships annually
AutoCam Scholars Program

- Visibility and pipeline program
- Philosophy to support students in need
- Students selected late freshman year through application and interview process
- Provides 50% of tuition until graduation
- Students guaranteed 3-semester paid co-op position
Industry Sponsored Graduate Fellows Program

• Industry sponsors participate in selection of fellows and fund tuition
• Fellows attend school full-time fall & winter semesters
• Fellows work at sponsor half-time (F,W) and full-time during summer
• Two year program
• Very popular with multi-national companies with needs in US and abroad
Leading Manufacturer of High-Precision Components Worldwide

- Precision Engineered Products
- Autocam Precision Components
- Metal Bearing Components
42 high-precision manufacturing facilities strategically located around the world
• Founded in 1980
• 2016 expected revenue of $900M
• Traded on Nasdaq (NNBR)
• Global reach, local depth
• Continuous investment in technology leadership
• Supplying to diversified end markets
• 42 manufacturing facilities in major global markets
• Group Headquarters: Kentwood, Michigan
• 16 manufacturing operations with locations in:
  - United States
  - Mexico
  - Brazil
  - France
  - Poland
  - China
• Annual Sales: $330M
• 1,100,000+ sq. ft. manufacturing capacity
• 2,800 employees
• More than 2 million parts produced daily
• **Culture** dedicated to continuous improvement
• Apprenticeship Program
• AMP or Advanced Manufacturing Partnership Program
• Scholarship and Engineering Co-Op Program

Developed out of growth
728 Hours in class at GRCC + 8,000 hrs. at Autocam
6 semesters of class at GRCC; earn Associates in Tooling and Manufacturing Technology

• Dec. 2014 Graduated 1st Class:
  – 7 started in ‘12, 6 completed cohort
  – Autocam had 83% of graduates
  – 3 are pursuing Engineering
• Aug. 2014 Started 2nd Class for Autocam
  – 6 of 21 students are from Autocam
  – 100% on plan to graduate in Summer ‘16
GVSU Engineering Scholarship awards 2, ½ Tuition scholarships for Jr. and Sr. year

Aug. 2015 Graduated 1st Scholars:

- Chris Foster
- Leah Bauer

Aug. 2017 will Graduate our refined process:

- Alissa Smith
- Luke Hubbard

- MQE
- General Motors

- M.E. Jr. Yr.
- M.E. Jr. Yr.
38.5% of our workforce
Cleveland State University, Cleveland, Ohio, USA
Cleveland State University

- Urban Public University
- Over 250 partnerships with industry, gov’t, community (Engaged Learning)
- 17,300 Students (over 12,600 undergrad)
- Located in heart of downtown Cleveland, Ohio
  - Regional population approx 2.1 million
  - Robust and diverse $170 billion economy, one of the 12 largest economic regions in U.S.

CLEVELAND STATE UNIVERSITY
Washkewicz College of Engineering

- Programs in Biomedical, Chemical, Civil, Computer, Electrical, Environmental and Mechanical Engineering; Computer Science; Engineering Technology
- ~2,500 students
- Optional co-op or internship
- Fenn Co-op Program Earned 2015 E. Sam Sovilla Award of Excellence from Ohio Cooperative Education Association
- School of Engineering started as an educational program of the YMCA (Fenn College)
- Over $500,000 in scholarships annually

CLEVELAND STATE UNIVERSITY
Industry Sponsored Scholarships

- **Co-op/Internship Required**
  - Albert M. Higley Co.
  - Karpinski Engineering
  - Lincoln Electric Scholars
  - Parker Hannifin Scholars
  - Washkewicz Scholars

- **Co-op/Internship Not Required**
  - AECOM
  - General Electric
  - Goodyear Tire & Rubber Company
  - Lubrizol Foundation
  - Nathan N. Hoffman (Barber & Hoffman)
  - Richard L. Bowen & Associates
Parker Hannifin Corporation

Parker can be found on and around everything that moves. The company manufactures highly engineered components and systems that facilitate motion and the controlled flow of liquids and gasses for a wide variety of global markets to increase customers’ productivity and profitability.
Key Facts about Parker Hannifin (2015)

- $12.7 Billion in Revenue
- 864,000 Products Sold
- 465,000 Customers
- 60,000 Employees
- 13,000 Distribution/MRO Outlets
- 1,100 Markets
- 137 Divisions
- 312 Manufacturing Plants
- 48 Countries
Parker Human Resource Needs

Internships and Co-ops
- Manufacturing Engineer
- Process Engineering
- Quality Engineering
- Lean Engineering
- Design Engineering
- Test Engineer
- Safety Engineer
- Environmental Engineer

Career Opportunities
- Design Engineer
- Manufacturing Engineer
- Lean Engineer
- Product Engineer
- Design Engineer
- Facility Engineer
- Sales Engineer Trainee
- Management and Leadership Trainee
Washkewicz/Parker Hannifin Scholars Program

- Current and incoming freshman engineering and business students eligible; up to eighteen scholarships awarded annually
- Rigorous application process that includes interviews with Parker Hannifin
- Current scholarship winners are eligible to receive future scholarships, but must re-apply annually
- Covers tuition for up to 15 credit hours per semester
- Scholarship recipients considered for a summer internship or co-op with Parker

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