



Case **Study**





550 Employees



Product-Line-Specific OJT Helps Optimize Staff Resources



ELECTRIC POWER GENERATION COMPANY

An upstate New York company with more than 550 employees provides power generators around the globe with a full-service, OEM alternative for services, parts and repairs for gas turbines, steam turbines, industrial turbines and generators. The workload and work mix of the company's bearings, seals and hydraulics (BSH) division is entirely at the whim of its customers and their seasonal needs for equipment repair.



CHALLENGES

Due to resource limitations and limited capacity, the company's BSH division was finding it necessary to turn away work during its busiest seasons — spring and fall. At those times, the division didn't have enough skilled labor to handle customer demands for repairs and replacements of components and complete parts.





The company implemented workforce training that combines custom-designed on-the-job training (OJT) modules for specific product lines with basic, online skills training from Tooling U-SME. Training takes place mainly during the company's seasonally slow summer months, and typically involves only one or two trainees at a time for best results.

Creating the Program

Working with a Tooling U-SME instructional designer, the company's subject matter experts and a summer intern identified detailed work procedures, broke them into knowledge, skills and attitudes (KSAs), and developed training materials. While the company's BSH division has close to 30 product lines, all of which will eventually have custom-designed training programs, the division initially tackled its most profitable product lines — hydrogen seals and tilting pad bearings. The company has established a systematic approach that allows workers in its hydrogen seal department to improve their skills by starting with basic tasks, then escalating to more difficult ones as they gain — and demonstrate — product knowledge and experience.

The company started its summer internship program at the same time it started developing its first OJT package, which resulted in a mutually beneficial situation — the intern received meaningful work experience while the company received the help it needed to draft OJT documentation.

How It Works

Dedicated computer stations on the shop floor support training in a controlled and supervised atmosphere. Area work leaders, plus hourly mechanics and machinists, oversee and approve OJT procedures, work instructions and forms to ensure system integrity. Instruction is informal, and relies heavily on facilitators and field workbooks to drive consistency. The shop operations manager also plays a key role in ensuring consistent delivery and results.

A training pyramid helps articulate the BSH division's vision in simple, graphical form. Tooling U-SME online training modules assess and certify basic knowledge and skills — for example, shop math and precision measurements — that become the minimum requirement for continued employment. If individuals are not successful at this stage, the company will consider cutting its losses and helping those workers find alternative employment.

Certification

Once basic skills have been demonstrated through certification, additional online training modules are assigned to build the skills and knowledge needed for specific BSH product lines. Certifications are built from a combination of test questions from individual skill modules. Certification through the OJT package becomes the final requirement for pay increases and work assignments.

Ongoing Development

The company continues to collect product samples to support worker instruction and establish pace, and to match student experience and receptiveness to new material. By not being driven to meet a customer schedule, the company can take the time it needs to provide quality instruction. Over time, the company's goal is to have more certified hourly workers gain further experience and confidence by training others — in the process gaining a deeper understanding of product-line requirements.





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Workforce training combines custom-designed on-the-job training (OJT) modules for specific product lines.

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The program is enabling the company to shift from a seniority-based system — with unclear incentives for workers to expand their capabilities — to a "pay for performance" system that is based on product certifications and demonstrated skill expertise.

In general, members of the workforce have welcomed the training. Employees view it as an investment to make them more valuable to the company, and as a more effective training approach than the unstructured ways of the past.

One of the key benefits of the new training program is the ability to cross-train. By using a cross-functional matrix to identify its weak areas — and by cross-training its team to make a broader and stronger foundation — the company is better able to shift its resources to areas of greater need, and to optimize its work schedule.

By continuing its policy of cross-training into the future, the company can increase and broaden its resources, allowing it to put an end to resource limitations and proactively seek higher-margin work opportunities.

To find out how Tooling U-SME can help your company train people faster and better, call 866.706.8665 or email info@toolingu.com.





A systematic training approach allows workers to improve their skills by starting with basic tasks, then escalating to more difficult ones as they gain — and demonstrate — product knowledge and experience.

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