

# Howden Academy: Delivering engineering excellence



## Setting the Scene

Howden designs, engineers and supplies air and gas handling equipment, operating in more than 20 countries with over 4,400 employees worldwide. In 2008, due to organic business growth and an acquisitions programme, Howden needed to recruit 350 additional graduate-level engineers over a five year period.

Howden introduced a training programme called Howden Academy in partnership with Glasgow Caledonian University. The programme allows graduate engineers, who have recently

joined the business, to develop rapidly into their new job roles. The programme is held in Glasgow and delivered over a three week period.

## The Challenge

While Howden was having success with the Academy programme they were aware that a significant portion of the three-week training was devoted to non-job specific topics. Feedback gathered from students found that they wanted to spend time on more technical content during the face-to-face training. It was decided

to develop some topics into eLearning modules for students to complete in advance of the programme in Glasgow.

Howden turned to eCom to take the traditional learning plans for their 'Developing Engineering Excellence' course and develop these into an online learning solution with over 40 eLearning modules. The eLearning courses were to be rolled out on a global basis and had to take into account the needs of different nationalities, languages and customs.

"Howden and eCom have worked closely together over the past 3 years to create a suite of over 40 Howden Academy eLearning modules. eCom's creativity in partnership with our internal authors has ensured that the eLearning modules are interactive and user friendly for our employees."

*Meron Reid, Head of Howden Academy*





## The Solution

The project was managed using eCom's established eLearning development process. eCom worked closely with Howden to create a framework for the subject matter experts and authors to input their content. Many of the authors at Howden were new to writing training materials and eCom facilitated the content development process with resources like the Author Guidelines document, training and face-to-face support.

eCom's instructional designers worked with Howden to structure the technical material and identify the best interactivities for the content, ensuring that the online modules are an effective learning tool.

Adding video to the content has brought complex topics alive, and allowed Howden to include existing content. For example a clip of the notorious Tacoma Narrows bridge collapse helps to illustrate the effects of vibration. Animation is used throughout

to illustrate many engineering principles, with learners able to control the animations to explore the theories being explained.

One stand-out feature of the Howden Academy eLearning is the animated avatar of the Head of Howden Academy. In the 'Introduction to Howden Academy' module, the avatar character introduces the eLearning and explains to the students what will happen in their three weeks at Howden Academy.

The verifying of knowledge is a key objective of the project and each module includes an online assessment.

## The Benefits

Development of this substantial eLearning resource has enabled Howden to deliver technical training in a consistent format. It allows training to take place at any time and location, and at the learners own pace. By covering some content

in advance, the face-to-face programme has become more focused on preparing engineers for their specific roles. As a result Howden gets more value from their substantial investment in the Academy programme. Ultimately the eLearning programme has helped to achieve one of the main aims, to reduce the time to effectiveness for new engineers. To date over 6500 courses have been taken by over 200 students.

The development of the content has captured the extensive knowledge and expertise of Howden engineers and shared this with the next generation. The modules have been so well received that many are now used as part of Howden's Global Induction and for pre-course material for other training.

Howden won 'Excellence in the production of E-Learning - Private Sector' at the UK e-learning Awards in 2011, in partnership with eCom Scotland.



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### eCom Scotland

18b Dickson Street  
Elgin Industrial Estate  
Dunfermline  
Fife  
UK  
KY12 7SL

☎ 01383 630 032  
🐦 @ecomscotland  
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🌐 www.ecomscotland.com