LEARNING TECHNOLOGIES

Triplex Safety Glass

A COMMON COAL THROUGH TRAINING

Triplex Safety Glass manufactures 34,000 windscreens a week, supplying to the majority

of the UK motor industry. To meet demand, they decided to move to a four-shift pattern of continuous production. In addition, they were anxious to improve on their 'right first time' policy – essential in glass production where mistakes mean waste. The need to increase overall efficiency and maintain their position in the market place led to a conscious company decision to adopt the Total Quality Management way of working, making sure that all employees knew and understood the quality philosophy and reflected it in their work. Training needs were identified, and retraining of existing employees was implemented, as well as the recruiting of an anticipated 130 new workers for the new shift system.

The Training Solution

Training had traditionally involved trainers using a checklist of things to learn working on the shop floor, and training as they worked. Trainees were reviewed weekly and their progress matched against the criteria on the checklist. The company recognised the need for a more dynamic approach which would interest those involved, be more interactive and more precise.

Supported by funding from the Employment Department the company evolved a new training strategy.

Open and flexible learning was seen as the way forward. A learning method which involves users working at their own pace, in a place and at a time to suit them and their employers, open learning frees trainers to concentrate on the particular individuals who need their help. This method enabled them to write and produce their own training materials to suit their precise needs.



Learning Methods Branch

Employment Department

Moorfoot Sheffield S1 4PQ

Requests for publications

Tel: (0709) 888688

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The Format

Emphasis was still placed on the use of a checklist, but computer based training (CBT) packages were used to reinforce learning, in conjunction with a process manual. The CBT package tests knowledge of the processes described in the manual. It uses interactive techniques, asking the user various questions. The answers are logged and eventually printed out. If the user's responses are wrong at any point, the computer will refer to the relevant page in the manual so that the trainee can go back and re-read the appropriate passages.

There are 40 manuals, each one a full training document, written in effect by members of the work-force. Before writing each one, a co-

ordinator spent time on the shop floor, asking detailed questions of all employees involved in each element of every process on the production line, including finding out what happened if anything went wrong. The workers therefore had a significant input into the producing of what ultimately became their own training manual. The resulting document is used alongside a checklist, the whole process being more formalised and detailed than previously. As the workers participated in the production of the document, they see it as a credible and useful part of their training.

Training is compulsory and undertaken by all. Some resistance from employees was anticipated but never happened; all were interested in the



contents of the manuals and were keen to try the computer training. Morale rose as management was seen to take an interest in everyone, from senior, experienced workers to those doing even the most menial of tasks. It is this interest and involvement, coupled with a sense of importance and value placed on every job which is essential to the training success.

The Benefits

The benefits for the company have been enormous. Expected business outcomes were forecast at the outset. As the project proceeded, it became clear that the benefits were going to be even greater than originally anticipated.

Improved Productivity and its Consequences

The improvement in overall attitude has had knock-on effects in terms of productivity:

- The training initiative has helped process loss faults and improve yield, amounting to £1.2m in a full year.
- Sales have increased, despite fierce foreign competition.

Improved Flexibility

One of the problems identified at the outset was that shifts needed to be interchangeable, with a need for flexiblity and annualised hours. Workers would often be required or want to make up time on a different shift; due to inconsistencies in operational techniques, it was occasionally difficult for them to slot in easily. Now, with a more tightly documented training process resulting in standardisation, there is a more confident workforce who have no qualms about working in any part of the factory or on any of the four shifts.

Improved Employee Attitudes

The company has noted a significant improvement in motivation. They have also noticed that training has:

- heightened awareness
- increased commitment
- enhanced flexibility
- \bullet improved self-esteem
- develop self-confidence
- reduced absenteeism

The trainers themselves have been particularly enthusiastic about the new training. Each has completed a two-day training course in which they could share their view, discuss approaches and generally have considerable input into the training ethos. This has resulted in a strong desire to teach and train the workforce, using the process manuals which they themselves have been instrumental in writing.

It is this holistic philosophy, encouraging the whole of the company to work together in the same direction, which has been so important. The repetitive jobs are the key jobs in terms of production and quality. If these are not right every time, the result is an increase in the production of scrap. The company realised that if that employees could feel some control over the working environment - by contributing to the manual and sensing an interest taken by management in that job – then that in turn would be instrumental in improving training itself and the ultimate quality of the product. This involvement and resultant enthusiasm ensures that the whole workforce is working in the right direction.

Improved Skills

The project has enabled the company to provide new and innovative methods of training, developing skills which had previously been unrecognised.

Reduced Accident Rate

There has been a significant reduction in the accident rate, an improvement which can be credited to better training and enhanced awareness and motivation.

The Future

The company's long term aim is to incorporate

accreditation for National Vocational Qualifications (NVQs) into the training plan. To win accreditation, all 40 training manuals will have to be presented in an acceptable format to comply with prescribed standards, and submitted for scutiny. This project is currently underway.

There is no doubt that this training has considerable benefits for Triplex Safety Glass. In their own words, it is 'a superb project which has paid tangible dividends that we can prove statistically'.