Active/interactive safety in the sugar factory

An exemplary vocational training tool available in all European sugar factories

Community Programme: Leonardo da Vinci
Product development: January 1997 – January 2000
Budget: 600,000 EURO
Languages: 11 European languages
Users: all European sugar factories
Produced by: the European sugar profession

An "active/interactive" tool for training in safety

Within the framework of the Leonardo da Vinci Programme, the social partners in the sugar industry have developed a new tool for training in safety. Produced in eleven languages, it can already be found in all sugar factories in the fifteen European countries. Focused on human behaviour, it aims to improve safety in sugar factories appreciably and to reduce industrial accidents to an absolute minimum. Entitled "Active/interactive safety in the sugar factory", it makes use of user-friendly interactive techniques.

A joint production, from the European sugar profession as a whole

The Comité Européen des Fabricants de Sucre¹ (CEFS) and the European Committee of Food, Catering and Allied Workers' Unions (ECF-IUF)² developed the project together, with the help of all the sugar profession, through several cross-linked and complementary working groups:

- *The human resources managers* of the largest European sugar companies provided their skills by contributing towards the work of the CEFS Committee on Social Questions.
- *The social partners* followed the project step by step, evaluated the results and set out joint recommendations within a joint body called the "Leonardo Steering Group".
- Safety engineers in several countries defined and verified the technical content of the tools within the framework of a "Leonardo Technical Committee".

Behaviour: the leading factor in safety

In addition, five pilot sites agreed to monitor and test the project as it was being developed: in Denmark, France, Germany, Italy and the United Kingdom. These factories guided the project as a whole on the basis of two fundamental observations:

- Safety is everybody's business.
- There are practically never any accidents without human error.

¹ The Comité Européen des Fabricants de Sucre represents all sugar manufacturers and refiners in fifteen European countries (excluding Luxembourg, which is not a manufacturer, plus Switzerland) and Hungary.

² The European Committee of Food, Catering and Allied Workers' Unions was the predecessor of EFFAT.

The tools are thus intended for all the players involved in the sugar company from the general management to the factory manager and the operators or supervisory staff (see box).

They are based on behaviour: when an accident occurs, the analysis almost always highlights one or more behavioural factors without which the accident would not have happened. The operator himself must thus identify the risks connected with the different activities and define the appropriate preventive measures. Constant self-assessment will enable him to adopt a more responsible behaviour, systematically directed towards safety.

Intellectual property contract

Widely presented outside the European sugar industry, the product has aroused a great deal of interest on the part of many sectors: iron and steel, chemicals, industrial cleaning, textiles, agri-foodstuffs, etc.

It has an original pedagogical approach and it is simple and easy to use. As it is largely built around images, mastery of the language is secondary. The different aspects connected with safety in most jobs are dealt with: electrical work, welding, grinding, handling machines, work at heights, work in confined spaces, carrying heavy loads, etc.

The four main partners have signed an intellectual property contract³ which allows them to grant licences.

An exemplary joint production

At the request of the Directorate-General for Employment and Social Affairs, the product was transmitted to Commissioner Mrs Diamantopoulou and to Mr Antonió Guterres, President of the Council, as a contribution to the Lisbon Summit. A letter of support and thanks has since reached us from Mrs Diamantopoulou.

It is an exemplary product first of all because it allows an entire profession - employers' organizations and trade unions - to adopt a common approach to safety in eleven languages, in all European sugar factories.

An assessment of its utilization will be conducted at the end of 2000. It could then be extended to certain Central and Eastern European Countries.

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³ The four major partners are the CEFS, the EFFAT and the two consultants that provided technical and material support for the product (DFM and AFISUC).

The "Leonardo Kit":

A series of tools based on behaviour intended for all the players involved in the sugar industry

General Management

• "Diskette No 1": this diskette presents the product and contains a database on the relevant European legislation in the field of health/safety (18 files).

Factory Manager

• "Diskette n° 2": this tool is essentially intended for the factory manager. By answering "yes" or "no" to a hundred questions on an interactive table, the level of safety at the industrial site in question can be determined, on the basis of six priority themes: management commitment, organization of work, taking the human factor into account, risks connected with the manufacturing process, cleaning and maintenance work, and subcontracting.

Operators/Supervisory Staff

- "CD-ROM": a CD-ROM allows the operator to move through fifteen virtual workshops during the campaign or the off-season. Based on the cartoon strip concept, each workshop shows five or six risk situations which the operator must identify himself and propose one or more preventive measures by clicking on a random "risks" bar and on a "preventive measures" bar. The computer screen is then transformed to show a normal situation.
- "Accident analyses": the operator also has access to four accident analyses allowing him to go back from the superficial causes of an accident to its underlying causes by retracing the fault tree. He once more recommends appropriate preventive measures.
- There is also a lexicon comprising all the hypertexts used on the screen, describing the procedures, safety rules and operating methods connected with different types of work (work at heights, work in confined spaces, handling of machines, using a ladder, scaffolding, slings, etc.).

The trainer links up the situations shown on the screens with real situations in the factory. A "Trainers' Guide "provides full instructions on how to use the kit.

Extremely flexible, the product can be used both during the campaign and during the offseason, by seasonal workers and permanent staff alike and for training in groups or selfinstruction.