

ENVIRONMENT

Roularta Media Group reaps the fruits of recent investments

Roularta Media Group has made considerable investments in the recent past with a view to producing in an environmentally and energy-friendly fashion. These investments ensure that Roularta Media Group can as from now observe the statutory pre-established emission levels and that more energy saving than in the past can be achieved in production:

- the thermally regenerative **afterburner installation** (with a total capacity of 55,000 Nm³/hr) on redundant operation can fully meet the existing levels for guided emission and diffuse evaporation of volatile organic substances. Thanks to its design and the applied technology, this installation is moreover highly effective at energy level:
 - 70% less gas is consumed compared with traditional afterburner systems;
 - the heat produced by the afterburners is used fully for heating the factory buildings and providing cooling through the absorption cooling machine. The latter technology allows cooling capacity to be obtained from the available ('freely') heat taken from the drying process of the ovens on the printing press and the afterburner process.
- with a view to yet more optimal recovery of afterburner heat, a **heat exchanger buffer tank** has been provided with 30 m³. Consequently, a stock of energy can be built up at times where there is less demand for heat for the buildings or the absorption cooling machine.

In addition to the afterburner installation and the absorber cooling machine, there are two other important components in the company's energy-saving concept:

- on the one hand, the **high yield cooling tower** of the 'open' type, which ensures that the company's cooling requirement is as much as possible fulfilled with so-called 'free cooling' (i.e. cold which is drawn directly from the outside air). Continuous monitoring shows that we were able to produce some 6,900 hours of 'free' cooling in 2005. After all, with an outside temperature of below 11°C, no other energy sources must be tapped. With a sufficiently high outside temperature (over 15°C), appeal can be made to the absorption cooling machine with heat buffer as described above. Both systems (cooling tower and absorption machine) ensure cooling for the production machines and buildings and are virtually expensefree, especially compared with traditional systems.
- on the other hand, the high yield **electrical cooling unit**, which ensures energy saving in creating cooling in between the seasons.

The interplay of the said components and the associated regulating system allows the cold and heat requirements to be seamlessly reconciled, with energy savings of approximately 55%, compared with the past. An effectively dimensioned firing installation will be added in the future.

Energy audit agreement

Like 220 other Flemish undertakings, Roularta Media Group has subscribed to the 'Energy' audit agreement of the Flemish Authority. Flanders is faced with an enormous challenge in reducing greenhouse gas emissions. After all, Flanders has undertaken to reduce this output in 2005 to a level which is substantially lower than that in 1990.

The audit agreement is aimed at a maximum contribution by medium-sized energy-intensive firms (annual consumption between 0.1 and 0.5 PJoules) to the 'rational energy use' government project and towards achieving the objectives for reducing greenhouse gas emissions under the Kyoto Protocol.

Firms joining the 'Energy' audit agreement undertake to submit an energy plan to the verification office and to implement the measures proposed in this energy plan within a period of four years. In addition, a report must also be made each year to the verification office concerning energy consumption, CO₂ emissions avoided, and measures introduced.

New building project

The importance that Roularta Media Group attaches to a progressive environmental policy is also reflected in the new building project to be started up on the Roeselare site in 2006. The following points will be included in a new factory building:

- roof and wall insulation which will insure 38 dB(A) acoustic reduction of the noise within the production hall, so that the standards imposed for noise emissions will be easily met;
- reduction in the noise produced by external activities (chiefly arrival and departure of lorries) by erecting an earthen acoustic barrier. The maximum permitted noise level in the adjoining residential neighbourhoods will be respected in accordance with the VLAREM regulations issued;
- attention to the least possible noise nuisance for the environment has also resulted in a limited form of mobility study and an arrangement that transport movements during the evening and night hours will proceed in a changed way;
- installation of a liquid-tight track with hydrocarbon separator which will offer perfect protection on accidental spillage during loading/unloading of bulk liquids;
- setting up of a separate area for storing hazardous substances in moveable receptacles, in accordance with the current law concerning tanking, distance rules, etc.;
- fitting of an appropriate rainwater buffer to comply with the requirement that rainwater is not massively discharged into the sewers in one go. Provision will also be made to use such water in the cooling process.

Roularta Media Group will also make further efforts in the future to play an active role within the Flemish environment policy programme toge-

ther with the sectoral federation (Febelgra) and the authorities in the search for the best available techniques and the most practical solutions to prevailing environmental problems.

PREVENTION AND WELL-BEING

Within the Roularta Media Group, attention was paid in 2005 to a broad range of aspects and areas in relation to prevention and well-being such as:

■ Further expansion/updating of the dynamic risk management system (d.r.b.s.)

The existing risk lists were further extended in 2005 with as many facets as possible of the business. This included amongst other things the ongoing screening during the starting up of a new printing press and the new container press installation for paper waste. The newly traced risks are included in the existing DRBS list for the printing business. Suitable preventive measures were introduced on each occasion corresponding to the nature and extent of the risk.

This analytical technique was also applied during the screening of the NV Biblo production environment and when screening a number of not purely administrative departments.

■ Risk analysis regarding the use, storage, etc of chemical products

Following the listing of the chemical products used in the printing environment at Roeselare, an in-depth risk analysis was carried out in 2005 in consultation with the medical officer in a number of other production environments within the group. On the basis of three factors (seriousness, exposure, probability) the extent of the risk was determined per product so that a classification became possible and the most suitable preventive measures could be adopted.

■ Fire and explosion prevention

A chemical lock (as for P-1 and P-2 products) was installed at the Roeselare production site for storing combustible chemicals. In addition, the sprinkler installation was also extended at two recently fitted rotary presses and in the extension to the despatch department.

As part of the preparation of the explosion safety file (as stated in the Atex legislation), attention was paid especially in 2005 to preparing and updating the zoning document (in accordance with AREI art. 105). The underlying intention here is, of course, to introduce adequate technical and/or organisational measures to avoid explosions and to protect in case of an explosion.

All offices and establishments outside Roeselare were also visited in 2005 in conjunction with the Prevention and Protection Committee. In addition to general prevention, the 'fire safety' aspect was examined in particular.

■ Smoking ban

In accordance with applicable law, the necessary arrangements were made within the working group set up for this purpose and technical and organisational measures were introduced to make Roularta Media Group a fully smoke-free environment as from 1/1/06. Smoking is still permitted only at locations specially fitted out for this purpose beyond the factory walls. In consultation with the medical officer, information sessions have been organised at the three larger establishments (Roeselare, Zellik and BMC).

■ Monitor working and general ergonomics

During the past year, further attention was paid to the elements connected with monitor working. New ergonomic insights were obtained on a group basis and workstations were adjusted as necessary. For example, further work was done within the establishment to replace old and older monitors with flat screens.

Following limited screening of a number of workstations in 2004, a more general investigation was made in 2005 into situations of ergonomic stress within the printing business. The intention was to check whether and where any problem situations may arise and how they can possibly be solved.

■ Training

In 2005, in addition to the annual practical refresher session for the internal fire brigade team and the annual refresher for the first aid teams in the various establishments, special attention was paid in the printing business to further working out the training programme (such as training in production technology and in very specific matters, e.g. working with a telescopic platform).