

Roularta Media Group will continue to invest in (MORE) ENVIRONMENTALLY FRIENDLY PRODUCTION TECHNIQUES.

In the spring of 2003 the afterburners at the printer's (Roularta Printing), which had been in use since 1992, were replaced by a double thermal regenerative afterburner with a total capacity of 55,000 Nm³ per hour. This adjustment avoids - even more than before - **odour nuisance** due to its larger redundancy. We also find that the standards for conducted emission of volatile organic substances and diffuse evaporation of volatile organic solvents are smoothly met.

Thanks to its concept and the applied technique, the new afterburner installation ensures a **lower gas consumption** of at least 70% in comparison with the previous installation.

Since 1996 the heat from the afterburners is used entirely to heat the buildings and to produce cooling via the absorption cooling unit. With this revolutionary cooling technique cooling capacity can be derived from the already available (free) heat that is released during the drying process.

When the new afterburner was installed a study was conducted to further maximize the re-extraction of energy and the generation of the cooling capacity required for the printing presses and the buildings. In the context of this study a total concept was developed with the following main features:

- a 30m³ buffer tank with heat exchanger for maximum recycling of the afterburner heat, which was brought into use in June 2004. This energy is used to heat the buildings and/or to feed the absorption cooling machine.
- installation of one new 'open' type oversized machine with a significantly higher efficiency, replacing the five existing cooling towers. Since then the company's cooling requirements are as much as possible fulfilled with the so-called 'free-cooling': this is cold extracted directly from the outside air. In practice all the cooling required for the production process can be generated by the free-cooling system whenever the outside temperature is below 11°C, without having to use other sources of energy. Experience tells us that we are probably generating more than 4,000 hours of 'free' cooling a year in this manner. If the outside temperature is high enough (+/- 15°C) the absorption cooling unit (ACU) with heat buffer can be used to fulfil the cooling requirements of the production equipment and areas. Both systems (cooling tower and ACU) are practically for free in comparison with the previous systems.
- installation of a high-performance electrical cooling group with high efficiency in addition to the aforementioned energy-saving systems.

The structure of these three systems and the corresponding control system allow us to smoothly combine our cooling and heating requirements and save 48% of energy in comparison with the past.

In the future a decently sized combustion installation will be added.

Roularta Media Group has also made great efforts to **avoid soil pollution** over the past years.

In 2003 the ten existing underground single-walled tanks for storage of solvents and other chemicals were replaced by double-walled tanks. The unloading bay for the underground tanks was made liquid-proof and the (rain) drains at the loading bay were channeled over a well sized hydrocarbon separator (in accordance with Vlare II) against accidental leakage. The new tank park is now in accordance with all Vlare conditions concerning the storage of hazardous liquids in underground containers.

Furthermore, the storage of hazardous substances in moveable receivers within the company was thoroughly analysed and organised according to the applicable legislation on sealing, distance rules, etc.

Roularta Media Group also made efforts in the field of used **packaging material**. A few recent achievements in this context are: use of only 100% recycled and unprinted cardboard, wood without pulp resin, plastic foil without composite synthetics, lighter stretching or sealing foils and cardboard boxes, palettes are reused as much as possible, broken palettes are recycled.

Roularta Media Group underlines the importance of an **advanced environmental policy**. In addition to the well-considered choice of raw materials for the production process, a lot of attention is paid to the way in which printed matter and finished products are created and what the possible impact can be for the immediate living environment. Compliance with all existing laws and regulations has always been a matter of course for Roularta Media Group.

In the future Roularta Media Group will continue its effort to play an active role within the Flemish environmental policy programme and to look together with the sector federation (Febelgra) and the government for the best available and most practicable solutions for the prevailing environmental problems. ■

Within Roularta Media Group attention was paid to the following topics in 2004 in relation to PREVENTION AND WELL-BEING:

- extension of the dynamic risk management system (d.r.m.s.):

In 2004 the existing risk list from the overall action plan, drawn up in 2001, was extended to as many side aspects of the operations as possible. It included a far-reaching screening of the afterburner installation, the cooling installation and related machinery and the tank park. The start-up of two new printing presses was accompanied by a risk analysis.

The newly found risks were included in the existing d.r.m.s. list.

- risk analysis and prevention measures drawn up on the basis of the Royal Decree on biological agents:

The possible risk of the presence of legionella bacteria in the pipes of the humidifiers in the printing area and in the cool tower installation was dealt with in 2004 by means of a technical investment by which the water is changed very regularly. In addition, the cooling tower water is monitored by a water treatment company.

- risk analysis of the use, storage,... of chemicals

After stock was taken of the chemical products used in 2003, the chemicals used were thoroughly analysed together with the industrial doctor in 2004. Three factors (seriousness, exposure, probability) determine for each product the size of the risk. On the basis of these three factors the chemicals were classified according to the size of the risk they represent and the most adequate prevention measure per chemical product were listed.

- study and maximum use of personal protection equipment (PPE)

After dealing with working clothes in 2003, safety shoes were the topic in 2004. A few adjustments were made to the safety footwear.

- working in front of a PC screen

Over the past year special attention was paid to all elements related to working in front of a screen. All work stations were analysed and previously started medical examinations of 'screen' workers were continued. New ergonomic insights were gained in group and adjustments were made where required. The final choice for the use of flatscreens was made because their additional value has clearly been proven. ■