

# Environmental Management

New investments  
consolidate  
international  
environmental  
protection standards



Treated water analysis



■ The Gerdau Group's commitment to protecting the future of coming generations is reflected in its day-to-day practices, in its ongoing investments for the modernization of industrial equipment and in its programs to encourage environmental awareness in its communities and its employees.

■ The largest recycler in Latin America and one of the largest in the world, the Company plays an important role in improving quality of life, processing metallic scrap and expanding economic activity. In 2002, it used 6.4 million metric tons of steel scrap, transforming this raw material into new steel products.

■ This year, the Company's environmental practices were again recognized. Gerdau AZA was chosen among more than 300 Chilean companies to receive the Quality Award for Liquid Industrial Waste Management, presented by the Sanitary Services Superintendency.



Automotive scrap

## ENVIRONMENTAL PROTECTION PRACTICES

- The Gerdau Group follows international environmental practices and meets all of its regulatory obligations.
- The mills protect the atmosphere with highly efficient systems to filter gases and capture solid particles, preventing emissions into the air.
- To preserve water resources, process waters are treated and recirculated through closed systems. This equipment allows the water to be returned to the production process, reducing the need for intake water. The low volume returned to the rivers is of a quality equivalent to or higher than the intake water. As a result of this work, initiated in the 1940s, the Gerdau Group's process water recirculation rate is one of the best in the global steel sector.
- Soil protection is carried out through the rigorous management of industrial waste products, based on the principles of reduction, reuse, recycling and controlled disposal. Under these guidelines, Gerdau develops new uses for wastes in partnership with other sectors of the economy, allowing a reduction in the use of natural raw materials.

## TECHNOLOGICAL UPDATE

■ The Gerdau Group invested R\$ 55 million in the environmental area during the past year.

■ The upgrading of the dust removal systems for the electric arc furnaces at Gerdau's Açonorte (Brazil), Charlotte (USA) and Laisa (Uruguay) mills provided for increased levels of atmospheric protection. At Açominas, investments to refurbish the secondary dust removal system of the sintering unit and the beginning of the installation of new fine particle filtering equipment represent important advances in environmental protection.

■ In order to improve water management, the Cartersville (USA) mill installed new equipment to increase residuals recycling efficiency through segregation of the casting and rolling mill water systems. During the same period, the Laisa mill also completed the upgrade of its process water treatment system.

■ The Gerdau Group's mills employ radioactivity detectors to protect the production process from contamination by radioactive scrap. During the past year, new and more advanced equipment was installed at the Cambridge (Canada), Charlotte (USA), Jackson (USA), Jacksonville (USA), Knoxville (USA) and Cartersville (USA) mills.

## PROTECTION OF GREEN AREAS

■ The Gerdau Group manages 7,400 hectares of native forests and green areas surrounding its mills.

■ One of its major achievements during 2002 was the conclusion of a project to expand the green areas at the Gerdau Riograndense mill, state of Rio Grande do Sul, with the planting of 13,000 tree and shrub seedlings.

## ENVIRONMENTAL EDUCATION

■ The Gerdau Group is involved in projects to develop environmental awareness in partnership with universities, the Brazilian Steel Institute (IBS), the Brazilian Business Council for Sustainable Development (CEBDS) and, on an international level, the International Iron and Steel Institute (IISI) and the Steel Manufacturers Association (SMA).

■ In the last year, the Company participated in about 50 community-related activities, such as the Education for Nature Project, which should benefit about 24,000 students in Rio de Janeiro by 2004. The aim of this initiative is to raise social awareness of the importance of preserving the Tijuca Forest, listed as a UNESCO World Biosphere Reserve.

■ Since 1997, Gerdau has participated in the Adopt-a-Class Wetlands Program in Canada, which has already reached more than 3,000 teachers and nine to ten year old students in the Selkirk region where the Gerdau AmeriSteel MRM Special Sections mill is located. The program includes partnerships with Ducks Unlimited and the Lord Selkirk school division.

■ In the United States, a group of more than 60 Community Action Team (CAT) volunteers took part in the planting of native vegetation in a new municipal park in Tampa, Florida.