

## Pump for Gold Mine Museum

A 36-year-old A-S-H pump, manufactured to designs dating back to 1936, was recently presented to the Gold Mine Museum by Envirotech.

The pump, a B-frame three-piece rubber-lined Hydroseal unit, was supplied by Envirotech's predecessor company, Denver Machinery, and was installed by South Roodepoort Main Reef Areas Limited on 22nd March, 1948. The pump was utilized on a first-stage residue duty and was taken out of service on 20th July, 1973.

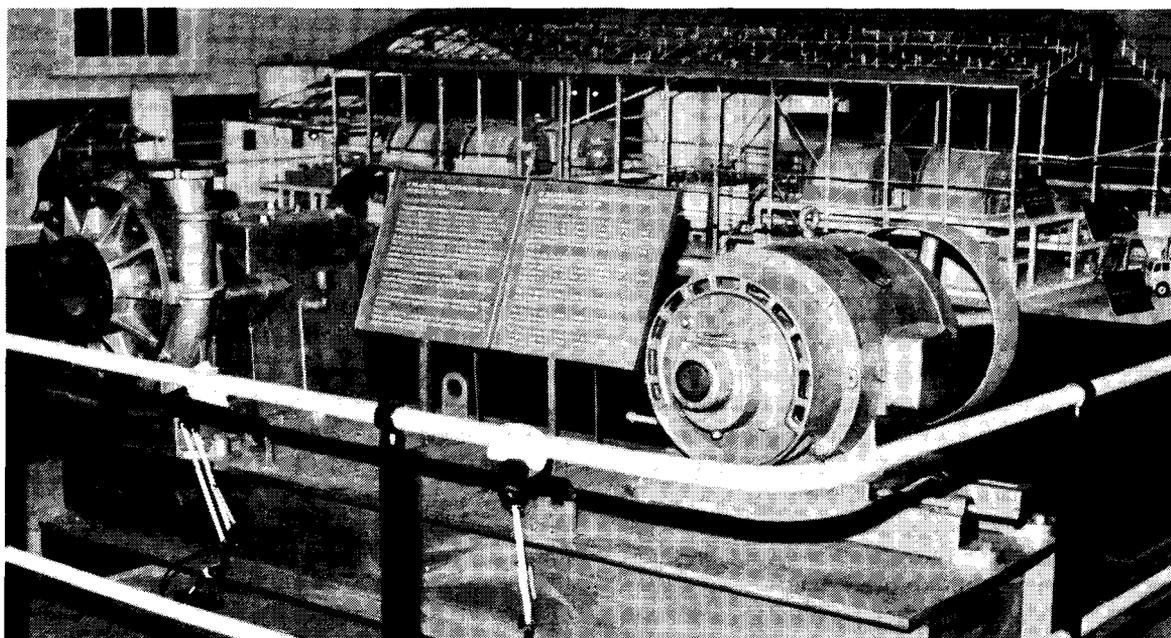
During its 25 years of operation, the pump ran for some

200 000 hours and pumped at an average capacity of 30 litres per second. During this period it is estimated that 21 600 000 tons of pulp at a relative density of 1,3 was transferred to a slimes dump. This is equivalent to 7 560 000 or 2 800 000 cubic metres of dry materials. (As a comparison in visual terms, the solids pumped would be equal to the square area of a rugby field to a height of almost half a kilometre.)

Envirotech is celebrating its 75th anniversary in South Africa this year, and has supplied over twenty-seven-thousand pumps to the mining industry.



Mr G.Y. Nisbet, President of the Chamber of Mines of South Africa, left, receiving a model of a pump that was presented to the museum by Mr P.A. Krumm, Managing Director of Envirotech



The 36-year-old A-S-H B-frame Hydroseal pump installed in the model room at the Gold Mine Museum

# Metals, materials, manufacturing

The 37th Annual Conference of the Australasian Institute of Metals will be held in Ballarat (Australia) from 13th to 17th May, 1985.

1985 is the Sesquicentennial year of Victoria, and for the first time the historic City of Ballarat has been chosen as the venue for an Australasian Institute of Metals congress. The theme of the 37th Annual Conference has been chosen to reflect the importance of manufacturing in a healthy economy for Australasia as well as Victoria. While manufacturing industry will remain, there will be important changes in the application of new technologies and materials, and the aim of the Conference is to highlight these so that we are aware of the opportunities presented at this appropriate review point, Victoria's 150th birthday. While some authorities see a continual decline in manufacturing activity, it is the intention to show that this need not be so if we take advantage of these opportunities.

Sessions will be organized to cater for a wide range of topics, in which advances in both theory and practice will be discussed.

Papers are invited from anyone in government, private industry, or educational establishments who would like to contribute to the following areas:

1. *High Technology Materials and Applications*

These may be metal or ceramic-based materials, and applications may be current or proposed. Examples are aerospace materials (Ti, Al), engineering ceramics, special coatings.

2. *Computers and Applications*

This area will include software developments, CAD, alloy data banks, computer control, and problems of utilization for small companies.

3. *Quality Control*

The application of modern methods of quality control for materials and manufactured products. This session may include N.D.T. methods.

4. *Testing*

Advances in the mechanical testing of materials will be considered, with particular emphasis on relevance to final application and possible failure mechanisms.

5. *Solidification and Casting*

Advances in the theory and practice for cast components.

6. *Heat Treatment*

High technology items such as high-energy density-heating processes would be particularly welcome, as well as advances in heating and cooling practice.

7. *Metallography*

This area will include advances in analytical instruments, both image and chemical, for research and applications connected with the behaviour of materials.

8. *Materials Processing*

Advances in the theory and practice of various manufacturing processes such as rolling, forging, extrusion, machining, and joining techniques.

In addition to the above sessions, another will be organized to illustrate how various State departments can assist the metals industry, with special emphasis on small companies. Speakers will be invited from Federal (e.g. TTC, Patent Office), State (e.g. Department of Industry, Commerce and Technology), and Semi-Government bodies (e.g. CSIRO, University, Research Institutions) so that a unified picture of the resources available can be obtained.

A special session will be arranged for students to present some of the latest research work carried out for undergraduate honours projects and post-graduate degrees. Informal student activities will also take place.

Intending authors are invited to submit the titles of proposed papers, together with a brief synopsis (not more than 250 words). Authors will be asked to submit accepted final papers as camera-ready copy by 28th February, 1985.

In the first instance, titles and abstracts should be sent to:

The Technical Director,  
A.I.M. 1985 Congress,  
Victorian Branch A.I.M.,  
191 Royal Parade,  
Parkville, Vic., 3052.

Telephone enquiries may be made to Dr A. Brownrigg on (03) 560 7066 during business hours.

## Steel rolling

Conferences on steel rolling, sponsored by The Iron and Steel Institute of Japan (ISIJ), and supported by iron and steel institutes in many countries of the world, have been held since 1980. The first conference was held in Tokyo in 1980, sponsored by The Iron and Steel Institute of Japan. The second conference was recently held in Düsseldorf, sponsored by Verein Deutscher Eisenhüttenleute and Centre de Recherches Métallurgiques. The Third International Conference on Steel Rolling will be held in Tokyo from 2nd to 6th September, 1985, sponsored by ISIJ. These three conferences are closely linked together in their themes: the first conference was on flat rolled products, the second was on long products, and the third will be on pipe and tube. ISIJ wishes to continue this International Conference on Steel Rolling to contribute to the progress of technology for steel rolling in the world. It is hoped that the conference will promote personal contacts and the exchange of technical information among participants.

The main subject of the Conference is the technology of pipes and tubes, and its application. The following themes will be discussed:

- Manufacturing Technology of Seamless Pipe and Tube
  - Recent Technology of Heating, Piercing, Rolling, Extrusion, and so on
  - Modernized Pipe-making Facilities, Sensing Devices, and Process Control Systems
- Manufacturing Technology of Welded Pipe and Tube
  - Recent Technology of Forming, Welding, Post-

annealing, Cold Expanding, and so on

- Modernized Pipe-making Facilities, Sensing Devices, and Process Control Systems

- Technology of Cold Rolling and Drawing
  - Recent Technology of the Cold Rolling and Drawing Process
  - Their Modernized Facilities
- Technology of Finishing, Inspection, and Processing
  - Recent Technology of Heat Treatment, Upsetting, Straightening, Threading, Non-destructive Inspection, and so on
  - Processing such as Bending, Fitting, Forging, and so on
- Recent Trends of New Products of Pipe and Tube for Oil and Gas Fields, Energy Transportation, and Power Plants
  - Metallurgical Development of Tubular Goods
  - New Products and their Characteristics
  - New Applications and Customer's Requirements.

The only language of the Conference will be English.

Further information is available from the Secretariat, 3rd Steel Rolling Conference, The Iron and Steel Institute of Japan, Keidanren Kaikan, 3rd Floor, 9-4, Otemachi 1-chome, Chiyoda-ku, Tokyo 100, Japan.

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