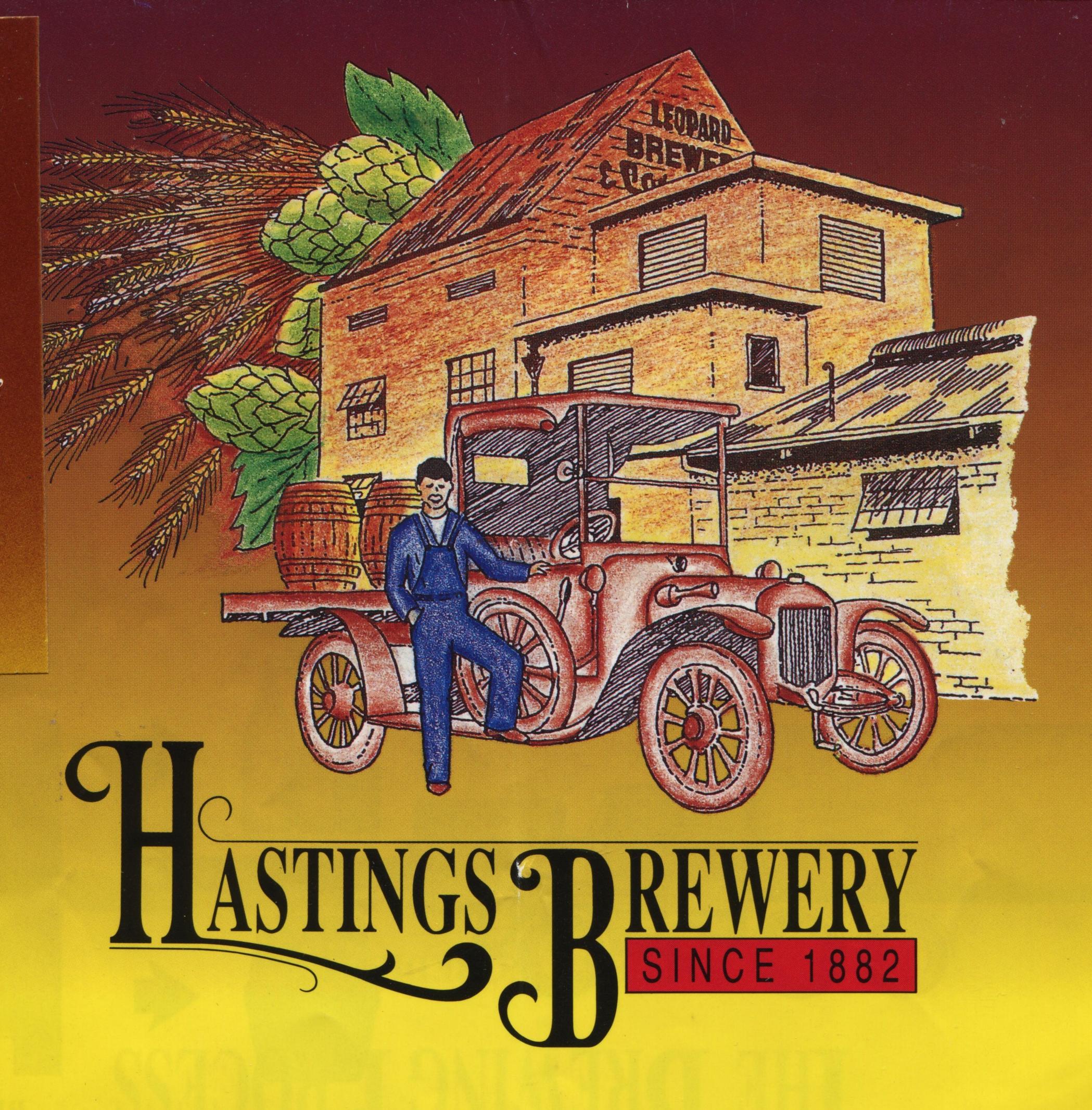


#### NEW ZEALAND BREWERIES

Hour-Long Tours run every Monday, Wednesday and Friday, starting at 10.30 am.

304-308 Ellison Road,
Hastings
For enquiries phone
(06) 878-5199





Mr George Ellis set quality standards for others to follow.



A brewery has stood on the present New Zealand Breweries Hastings site since 1882 when Mr George Ellis, who was to become a mayor of the city, established his St Aubyn Brewery in Ellison Road, Hastings.

The new business flourished, manufacturing ales which were described as being "of the finest quality and flavour, possessing the pleasant combination of malt and hops not

The original Brewhouse was constructed in 1895.

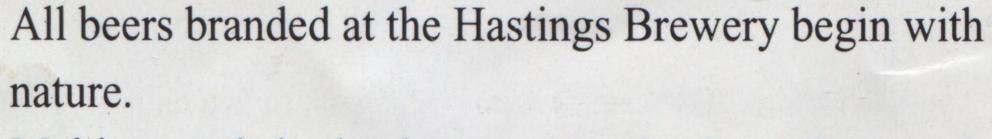
to be surpassed by any brand in the colony." That was heady praise indeed for, in those days, the colony with a population of just 600,000 had 89 breweries. In the early days the St Aubyn Brewery provided more than just beers. As a "cordial manufacturer" it also had a fine reputation for its aerated water products. In 1893, the ownership and name changed. The new owner was Mr Edward Newbigin who brought to the business 21 years' experience in the brewing industry, some of it in Napier. He changed the name to Burton Brewery and under his guidance the company continued to prosper and build a reputation as the brewer of fine ales. The Industrial Encyclopedia of New Zealand published in 1908 was full of praise for the Burton Brewery.



The Leopard Brewery in the mid 1920's.

## NATURAL INGREDIENTS

Hops grown in New Zealand are world renowned.



Malting grade barley is grown on the Canterbury and Manawatu plains.

The barley is "malted" to enable the insoluble starch of the harvested grain to be converted into soluble sugars so necessary for the brewing process.

The Canterbury Malting Company stores the grain until it is required for malting. They then 'steep' the grain in water and place it in huge beds supplied with optimum conditions of moisture, temperature, and air.

In this environment, the grain "germinates" or sprouts. This starts the biological process which converts the foodstore inside the grain into soluble materials. After about five days, the grain is kiln dried to arrest germination, enhance the "biscuity" flavour, and prepare it for storage until required for brewing.

Hops are essential to good beer flavour – giving it that characteristic bitterness and

spicy aroma which distinguishes a good beer. This flavour is derived from the resins and oils to be found at the base of the petals of the female hop flower (or cone).

New Zealand is internationally acknowledged as producing the finest hops in the world thanks to the pioneering breeding research undertaken at the Riwaka Hop Research Station.

This establishment was set up in the 1940's, primarily to breed disease resistant strains, and is jointly funded by the brewing industry and the Department of Scientific and Industrial Research.

Nelson province supplies the long summer sunshine hours, the right soil, and calm conditions, all of which are necessary for a quality crop. About 30 hop farms, covering a total of 220 hectares, supply the New Zealand market and export overseas.

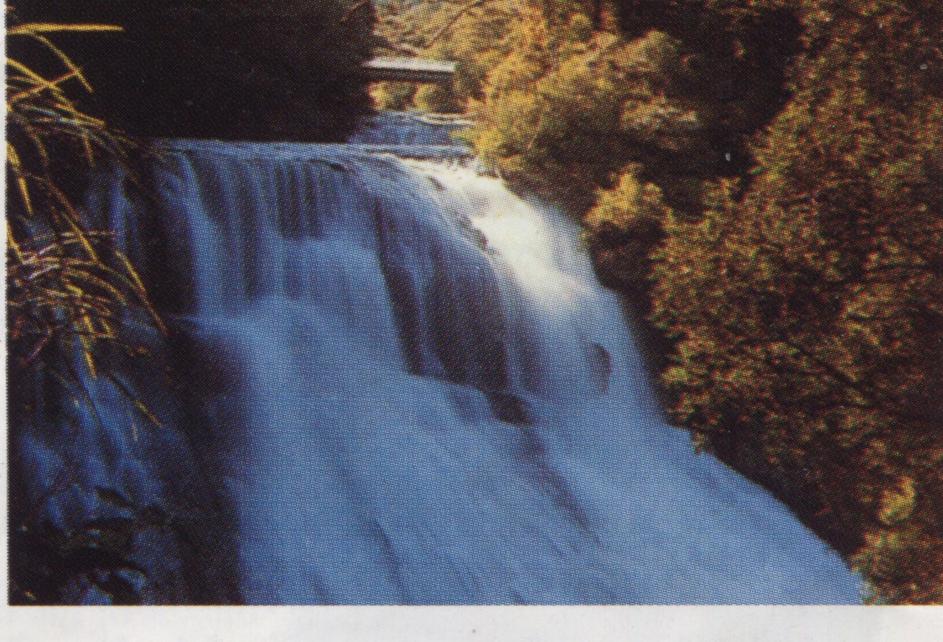
The other major ingredient in the brewing process is water and the Hastings Brewery still uses specially treated pure artesian water.

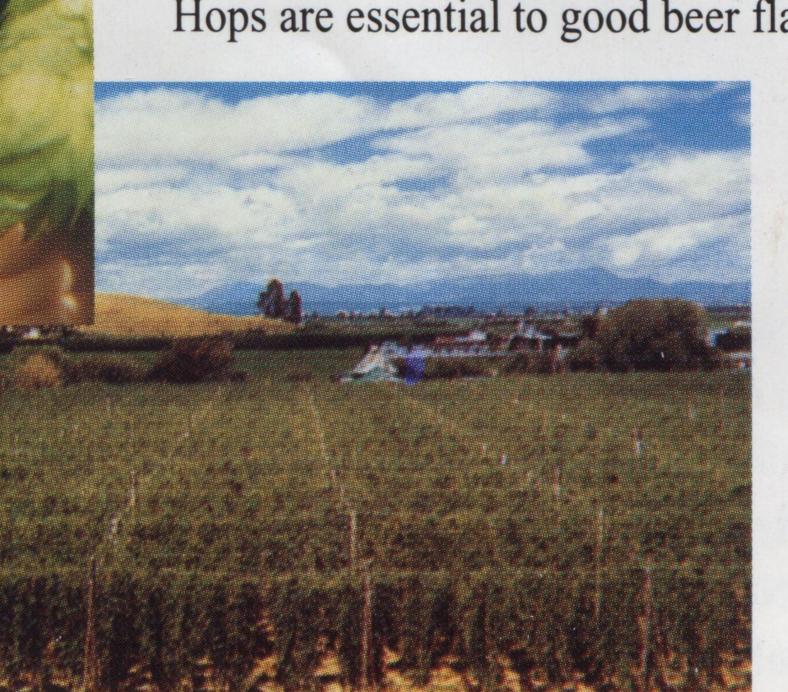
When the brewers are satisfied they have the finest ingredients that nature can provide they set about the practice of their art – the brewing of beer.



Barley is grown on the fertile Canterbury and Manawatu Plains.

Pure water, an essential ingredient.



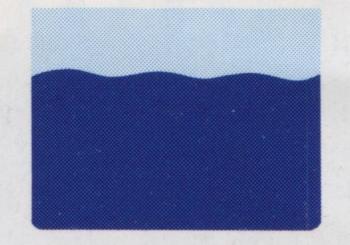


## THE BREWING PROCESS

#### NATURAL INGREDIENTS



Malted Barley



Pure Water



Hops



Sugar



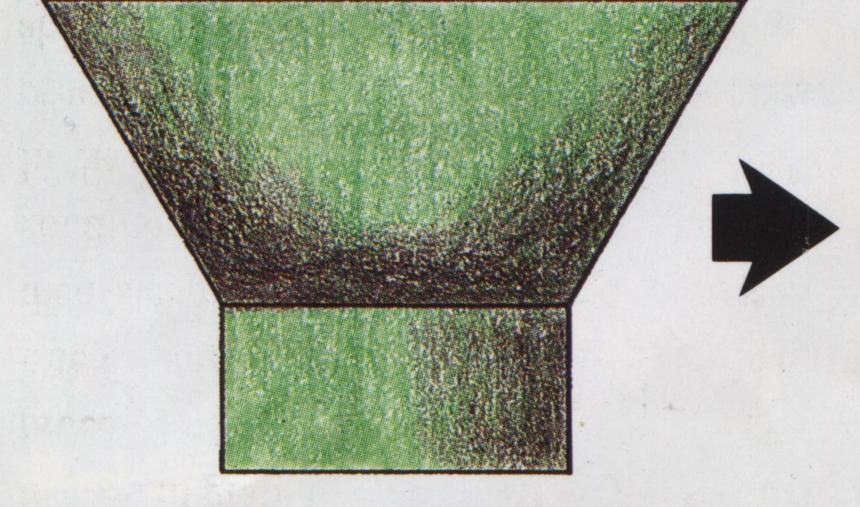
Yeast



Malted Barley

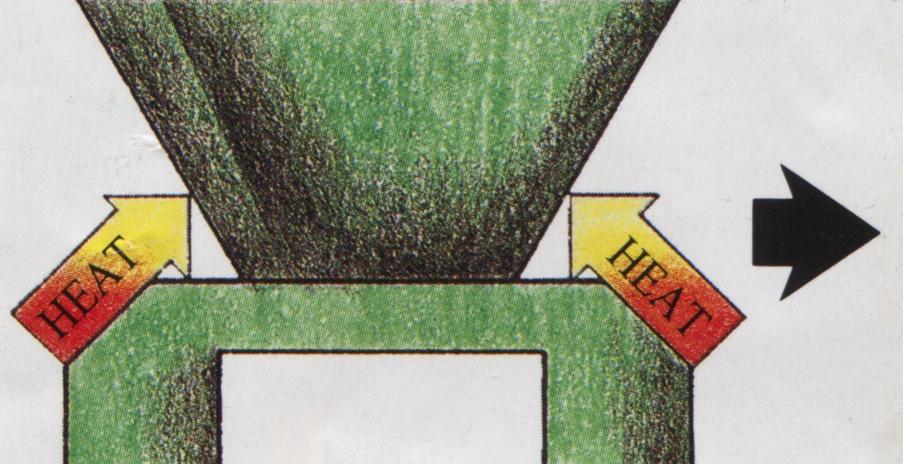


Pure Water



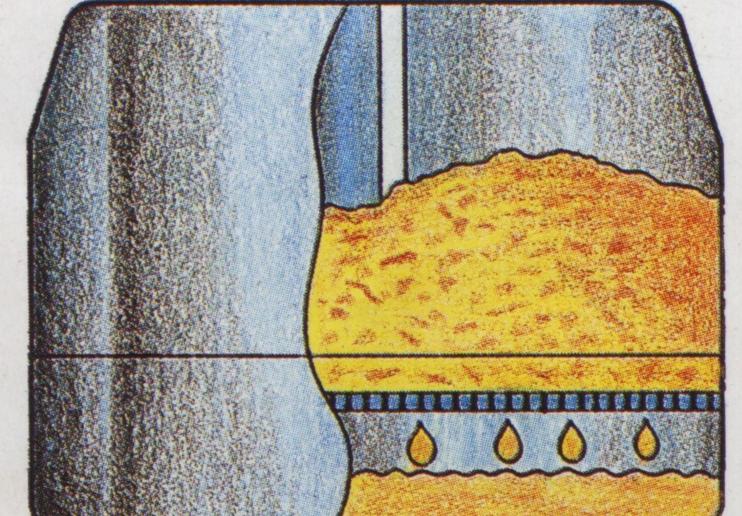
MILLING & MASHING

The required quantity of malt is crushed and mixed with hot water to produce the "mash" which has to be kept at very carefully controlled temperatures so that . . .



**MASH TUN** 

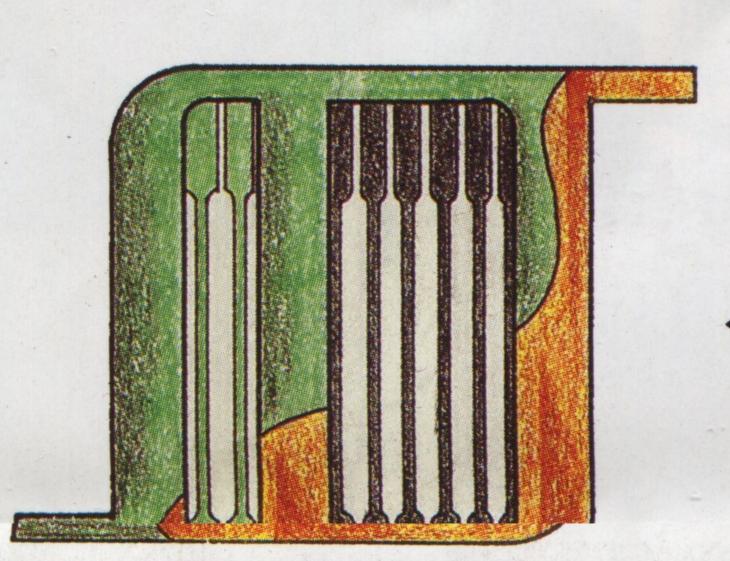
... starch in the mash is converted by malt enzymes to soluble sugars which are . . .



LAUTER TUN

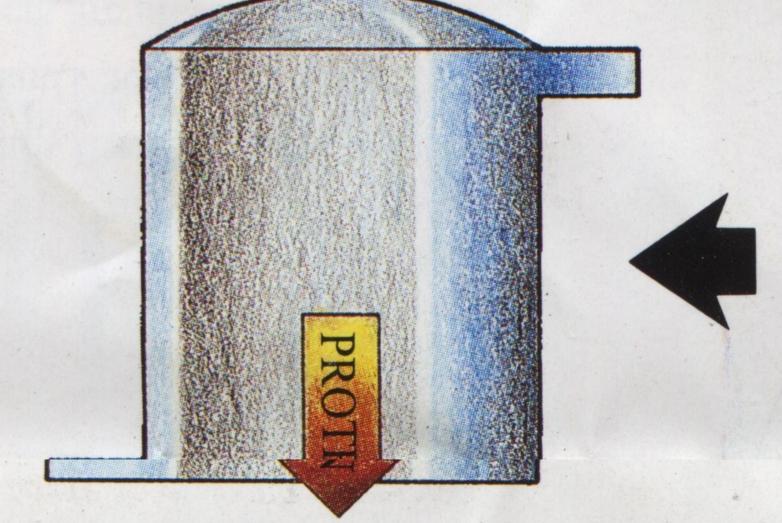
... separated from the grain husks and pumped to the kettle where . . .





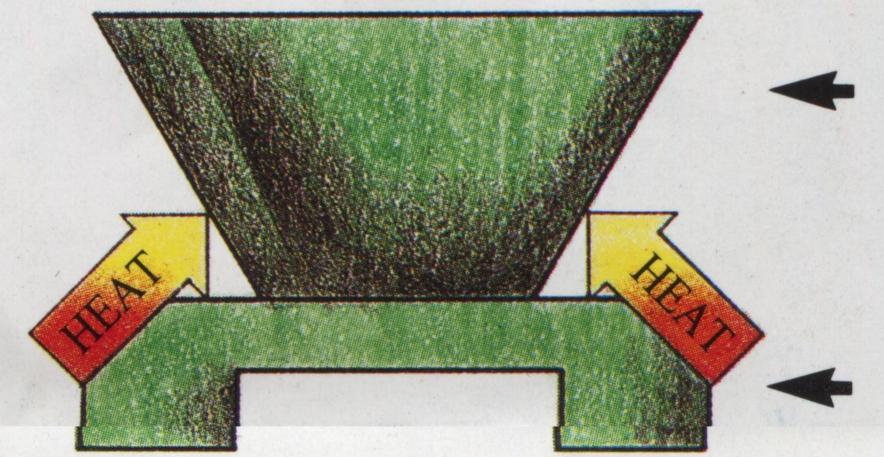
**COOLER** 

The wort is cooked in a plate cooler and then pumped to the fermenting vessel.



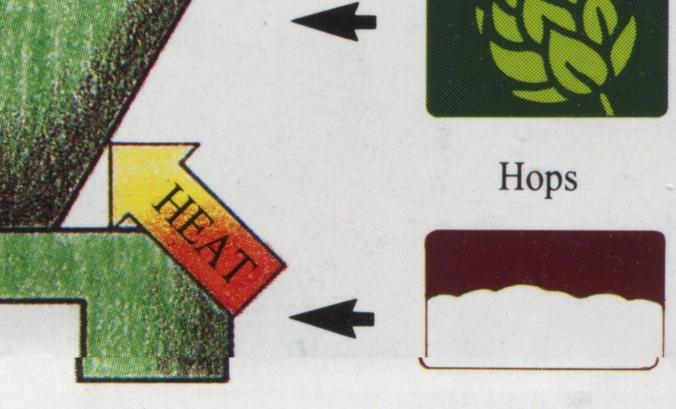
WHIRLPOOL

Protein is allowed to settle out.



KETTLE

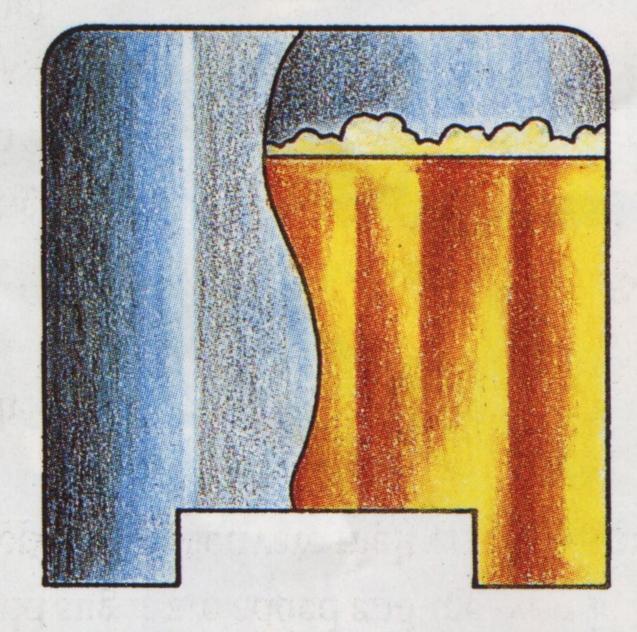
... the hops and liquid sugar are added to the malt extract or "wort" and boiled.



Sugar

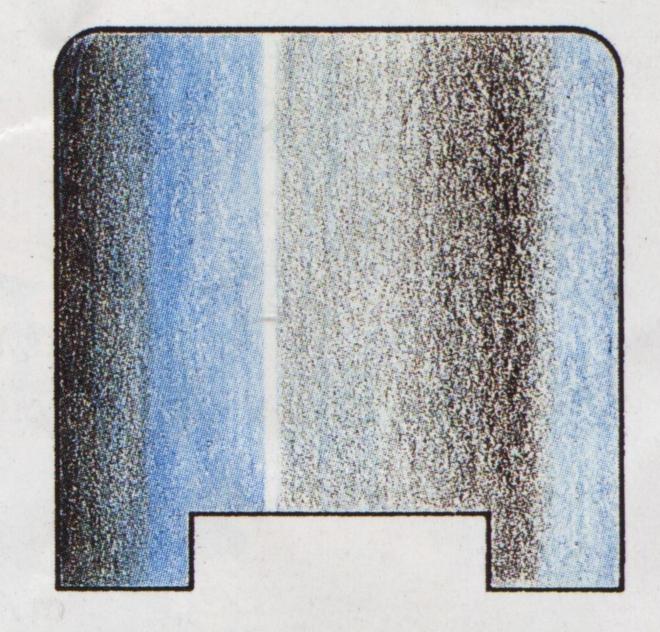


Yeast



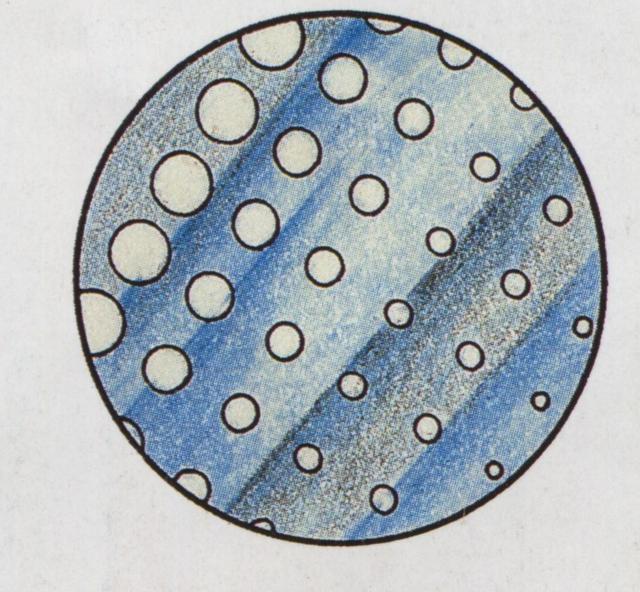
FERMENTATION

Yeast is added and fermentation takes place as the yeast converts sugar to alcohol and carbon dioxide.



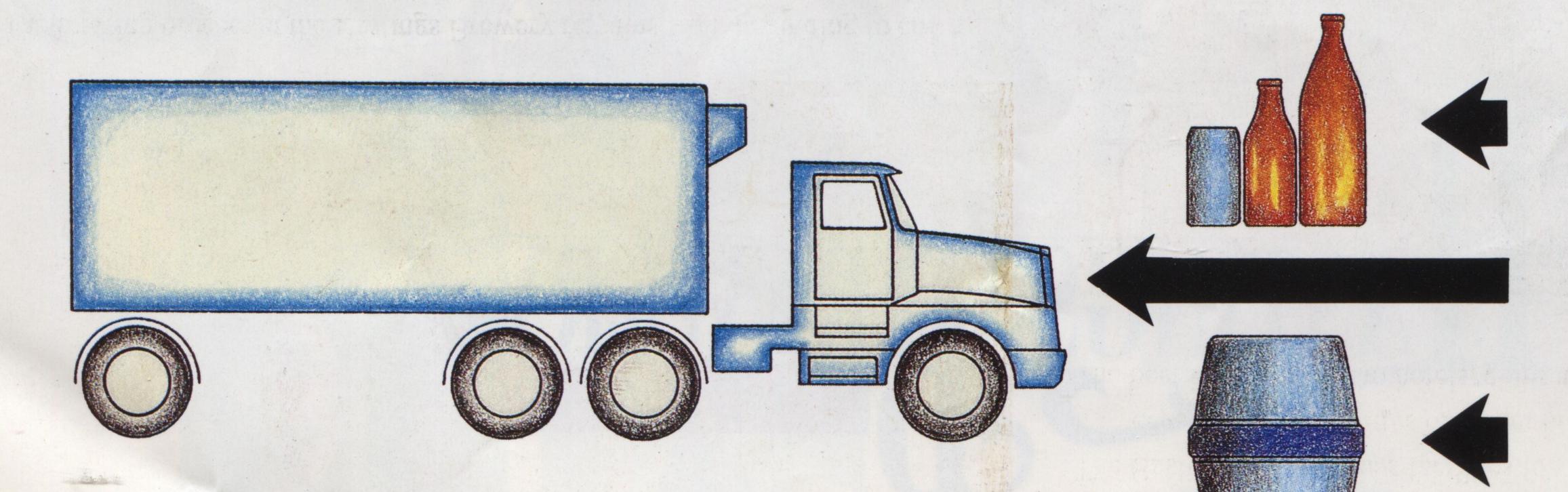
STORAGE

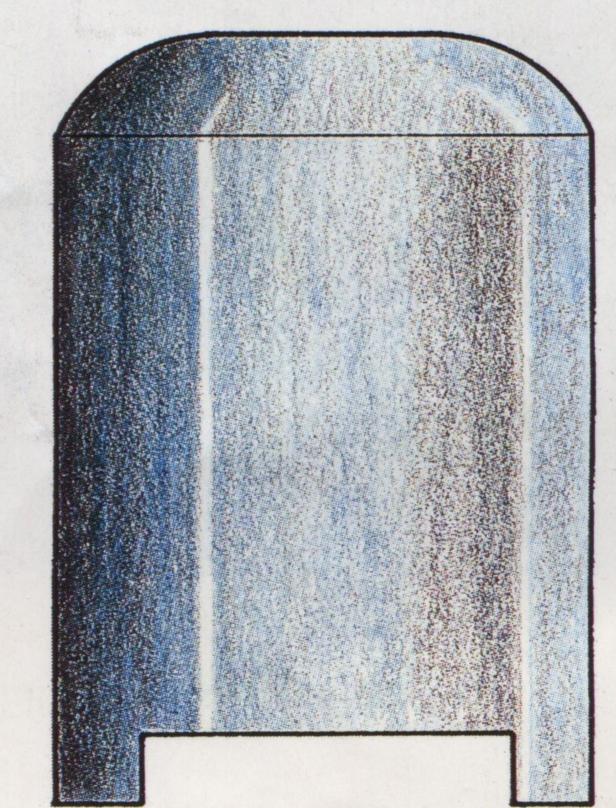
The flavour matures in the storage tank where a very slow secondary fermentation takes place at 0°C.



FILTRATION

All suspended matter is filtered from the beer.





**BRIGHT BEER** 

The beer is held in bright beer tanks prior to packaging or delivery by tanker to hotels.



The entire brewing process is monitored by computer.

wort.

The brewing process at the Hastings Brewery remains from beginning to end a natural process involving water, malted barley, hops, yeast and pure sugar.

Malt is lightly crushed and mixed with hot water to form a mash. Natural malt enzymes convert this raw material into a liquid extract known as wort.

The wort is then filtered from the lauter tun into the kettle. The spent grain is sold as cattle feed. Hops and liquid sugar are added and the wort is boiled vigorously to draw the flavour from the hops, to de-activate malt enzymes, and to sterilise the

The boiled hopped wort is then settled in a whirlpool, cooled, and transferred into tanks for fermentation. As this transfer occurs, a pure yeast culture is 'pitched' into the wort and fermentation commences – at this point the wort becomes beer.

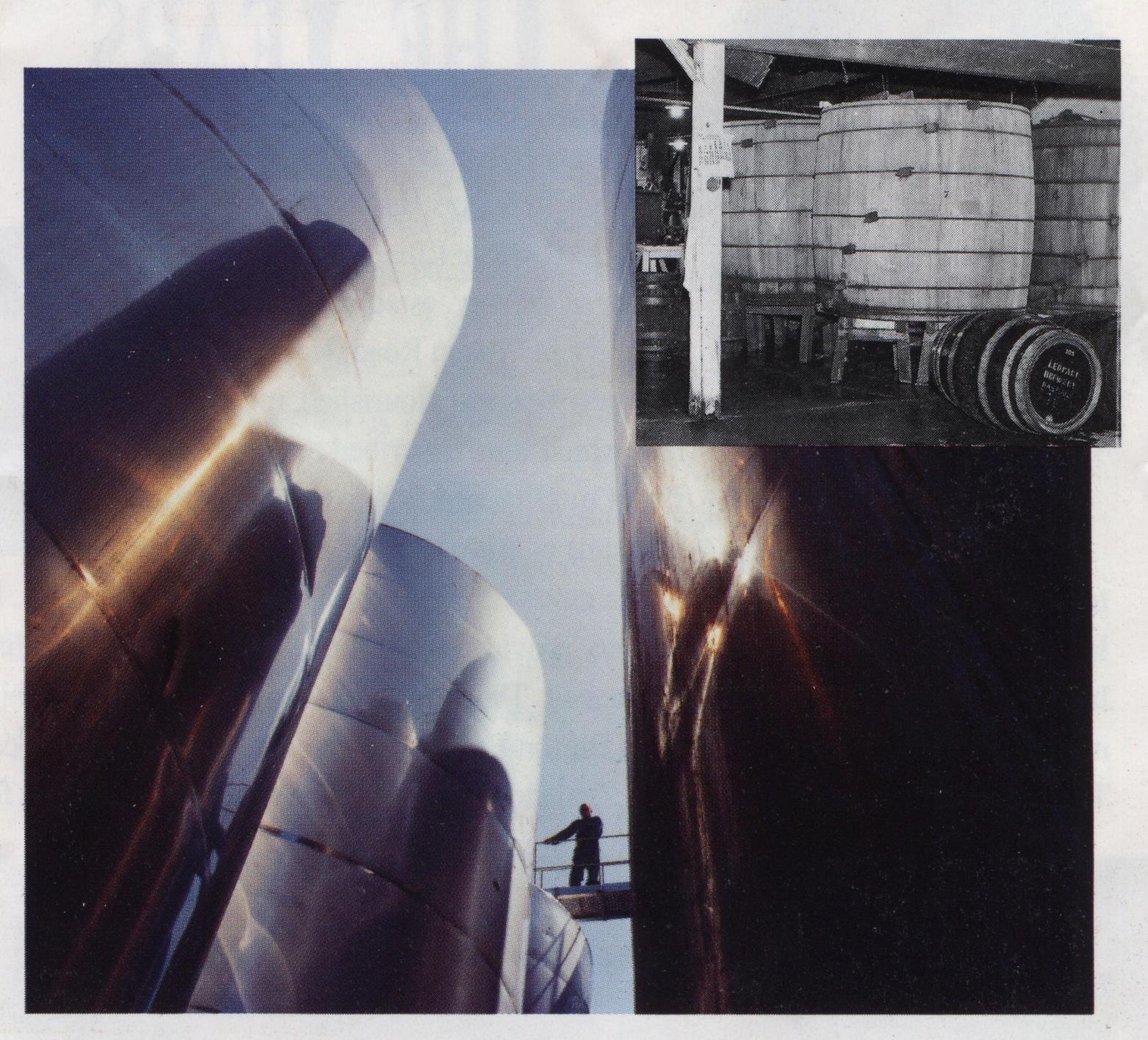
During fermentation under rigid temperature control, the yeast converts the wort sugars to alcohol and carbon dioxide. After several days the temperature of the beer is lowered and the yeast settles, to be collected for re-pitching or drained away and sold as a by-product.

The beer is then chilled almost to freezing point and stored to stabilise the flavour and to settle remaining yeast and other particles. This is carried out in large tanks which provide a total capacity of 2.4 million litres. The matured beer then goes through a modern filtration system where it is clarified, chilled and carbonated. The entire brewing process is monitored by computer. More than a dozen people

are engaged in quality control carrying out more than 60 different tests for each batch of beer. Many of these tests are performed directly to ensure on-the-spot control, while more sophisticated analyses are performed by experienced chemists, micro-biologists and technicians.

The Hastings Brewery has facilities for filling some 180,000 bottles and, 750 50-litre kegs and 100,000 litres of tanker beer each day.

The beer is despatched to hotels, clubs and taverns throughout the North Island.



Yesterday's oak replaced by today's stainless steel - and the result is award winning beers.

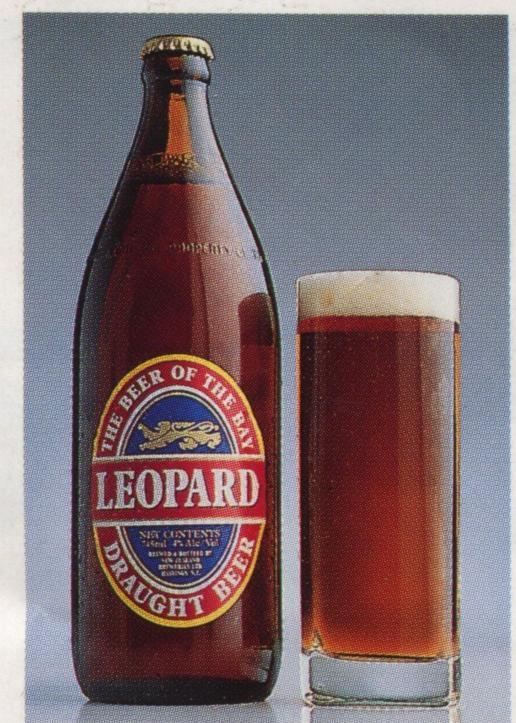
### PRODUCT RANGE



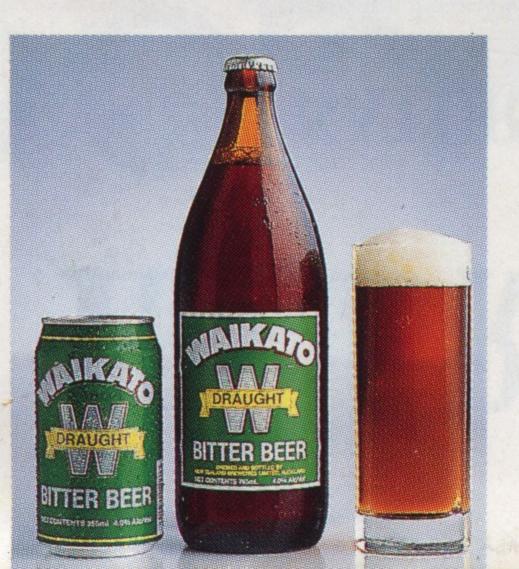
The Hastings Brewery produces a range of New Zealand's best known beer brands. All our beers are produced by traditional batch brewing methods using natural ingredients and modern quality control systems.











# Actives Figure 1

- The Hastings Brewery has a total production capacity of 50 million litres of beer each year.
- The Hastings Brewery employs 108 staff.
- The Hastings Brewery was New Zealand's first brewery to can beer.
- The Hastings Brewery was the first brewery to receive a Government Export Award.
- The Hastings Brewery was the first brewery to introduce 50 litre beer kegs and "ice-bank" units for dispensing beer.
- The Hastings Brewery was the first brewery in the world to achieve registration under the International Standards Organisation (ISO) 9002 series of standards for Quality Management Systems, in September 1990.



407N Warren St., P O Box 687, Hastings Tel: (06) 878-5199

A division of New Zealand Breweries Limited.

