



Huppmann built the new pilot plant at Grolsch



Even great beers started from humble beginnings

"The brewing industry", as formulated in the vision statement of Royal Grolsch N.V., "has not reacted quickly enough to changed customer drinking desires. This has resulted in a monotonous branch that has come under severe pressure from other drinks. Grolsch believes in the strength of beer on the drinks market. "We are going to break the monotony and restore beer's premium status." >



Those nailing this as the corporate mission to their masts know all too well that apart from brand strength and excellent beer quality, innovative efforts form part of any success model and that new paths in product range policies and in marketing have to be taken.

The world wants new beers – and Grolsch has prepared for that

In the new brewery all Netherlands brewing activities of Grolsch have been concentrated since April 2004. This entails closing in stages the historic brewery in Groenlo (since 1615) and the "younger" site in Enschede-Nord (since 1895).

The latest jewel in the new Enschede brewery is totally oriented towards innovation and diversification: the pilot brewery – a complete brewery within the brewery – with everything needed but on a smaller scale. It has a capacity of over 20 hl and serves two purposes: the development and optimization of new kinds of beers and the pro-

duction of small batches typically required, in particular, for seasonal products or for special event products.

An event – a beer

From Enschede's point of view Belgium is not far away and drinks that are still considered sacrilege by purity law apostles in Germany have been successfully sold in Belgium for some considerable time now: beer with a hint of cherry or raspberry flavour, perhaps liquorice during the carnival season, something particularly light for summer and for the Christmas season a dash of cinnamon or coriander. Elsewhere as well more and more curious customers are discovering the changes in taste.

A pilot plant provides the optimum precondition for both developing and optimizing niche products quickly and at low cost and also for producing them continually in the required small batches. In practice it need not come down at all to adventurously exotic recipes. At Grolsch, a company with a purely bottom-fermented brewing tradition, the pilot brewery was commissioned in proper style with a top-fermented beer. This is a wheat beer brewed according to the Bavarian purity law which was tapped to the delight and sensory enjoyment of the (largely German) visitors at the 92. Brewing and Technical Convention of the VLB 2005 in Enschede.

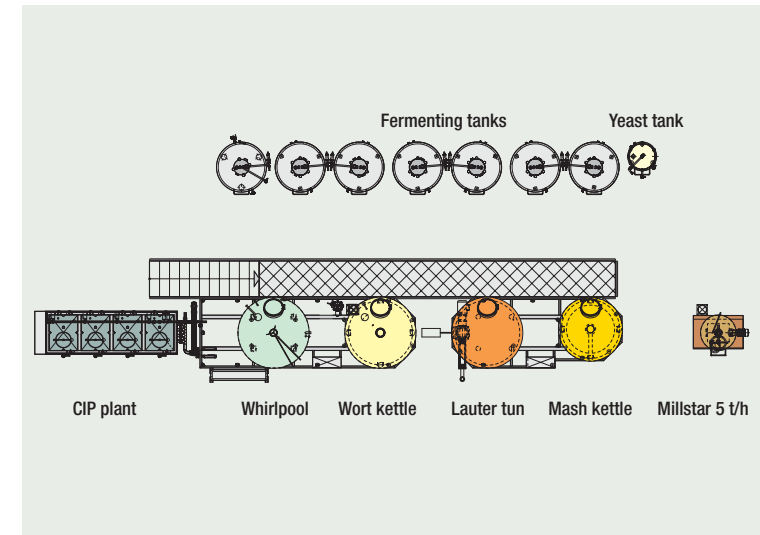
In this way some 35 hl of beer met

an entirely enthusiastic expert audience.

This first beer was brewed by Lars John, the Huppmann brewmaster responsible for commissioning the pilot brewery, and whose wheat beers have already caused considerable commotion elsewhere. His recipe for the Russian Baltika brewery (the first wheat beer, by the way, to be brewed in Russia) was rewarded straight off with a bronze medal at the Brewing Industry International Awards. However following this debut success at Grolsch no final decision has been taken if a wheat beer will be a permanent part of the product line in future. Even so, the pilot brewery has passed its baptism of fire with flying colours.

One of the greats even in small plants: Huppmann

Although pilot breweries represent small editions of a large one, they are anything but a toy and cannot be compared to traditional pub breweries. They are, in complete contrast, sophisticated instruments of an innovative (and highly cost-conscious) product range policy. That is why it was important for the Netherlands investors to contract the planning and implementation of the pilot brewery to an engineering partner with an extensive track



Basic plan – Enschede Pilot brewhouse.

record in turn-key plant construction, who could provide the most up-to-date technology to any scale and use sustainable automation and control technology for equipment purposes – with everything carried out quickly and to highest quality standards.

The Grolsch managers thought that Huppmann would be best able to realize this requirements profile. This is how the pilot plant in Enschede arose as a Huppmann brewhouse involving the most up-to-date Huppmann technologies. The entire planning, production, installation and commissioning of the pilot plant was in Huppmann hands – from the brewhouse itself with dynamic low-pressure boiling, to the Lauterstar, CIP plant (for brewhouse and cold area), yeast

propagation up to the complete piping and installation of a working platform.

Based on Huppmann specifications, the fermenting and storage area was manufactured by Kaspar Schulz, a Bamberg company and cooperation partner specializing in producing small plants.

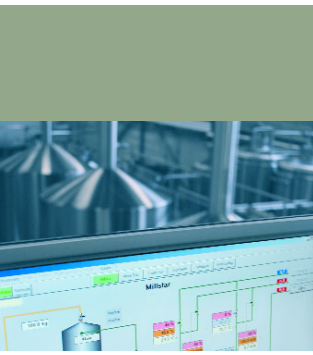
Good things come in small packages

The pilot brewery is of a smaller dimension than a "normal" plant but is otherwise the same and that down to the final detail (including all things optical). Even the vessels are smaller editions of the standard sizes – i.e. consciously built to resemble the larger versions from the geometrical angle. >

From the left: mini Lauterstar and inspection sight-glass with Huppmann logo on the low-pressure wort kettle.



The six fermenting tanks can also be supplied with wort from the two large brewing streams. Alongside on the right a small filter unit with candle filter.



The brewer's objective is to develop and optimize new recipes in the pilot plant so that they can be transferred to the large plant without the necessity for any further adaptations (except of course for the larger quantities). This required a far-reaching parallelism of the plants. Only on this basis products can be transferred on a 1:1 basis from one plant to the other and development times (and of course development cost) for new brands drastically cut. For this very reason, the pilot brewery in Enschede also runs under the same automation system that is controlling the com-

plete production in the larger plant. brewmaxx, the tried-and-tested process control system in Version 7, is employed. The master brewers find the same operating panel and exactly the same scope for control on both the small and large plants – something that additionally simplifies transfer from one to the other.

Furthermore a number of hand-over interfaces from the pilot brewery to the large plant have been installed. Thus, for instance, wort can be drawn from the large plant for special further processing in the pilot plant – something that expands the scope for experimentation.

In record time

As happens so often, Huppmann ensured that everything was realized in record-breaking time. In September 2004 the contract was signed, deliveries were made in January 2005 and as early as 22 February 2005 the first brew of wheat beer was foaming in the glasses. There was no time for a test brew. The precision landing was handled with absolute mastery by Lars John. Lars John also undertook the second brew but already the third was brewed by the Grolsch team on their very own. ■

We are all eager to know which recipes Grolsch will be using in future to quench our beer thirst.