Aktie Bolaget Majornas Anghageri Robinson's Remodel Swedish Rye and Wheat Mill

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Milling journals of the past at The Mills Archive

On the river Gota, about three miles inland from the Kattegat sea, stands Gothenburg, which next to Stockholm is the largest and most important town in Sweden.

Now the largest port in Scandinavia, a January 1950 article in "The Miller" mentioned that the freeport had a population of nearly 300,000 people who lived in the residential area on the south bank of the river and worked in the industrial section to the north.

Gothenburg has a special advantage for shipping in that the free central harbour is rarely obstructed by ice, a frequent setback in Northern countries. Until the Second World War, all buildings were of wooden construction, but as fires had become so common, they were gradually rebuilt in more durable materials, with the result that by 1950 "the town presents an extremely modern and attractive appearance".

The more important industries then included ship building, foundries, refineries, breweries, and distilleries, as well as factories producing paper, margarine and wood pulp. Nowadays it is a centre for high technology with firms such as SKF, Ericsson and Volvo, but the 'blue-collar' industries are still important.

Flour mills featured prominently and one of the best known was the Aktie Bolaget Majornas Angbageri which was remodelled in 1949 by Thomas Robinson and Son of Rochdale UK.

This is a combined wheat and rye mill with its own bakery attached; an ideal arrangement for economy in running costs involving the processing of grain into a variety of products ready for delivery direct to the customer. There was no necessity for packing of products as the whole flour output of this seven-and-a-half sack per hour plant was delivered by conveyor direct to the bins in the bakery.

The cleaning capacity of the mill was 1500-2000 kilos per hour. As the cleaning system was a combined one for cleaning both wheat and rye, great care was taken in the size and types of machines for cleaning either each grain separately, or a mixture of both.

Every cleaning machine was thoroughly exhausted, and the exhaust air was driven suction filter dust collectors that discharged dust free air to the atmosphere.

The type DZm milling separator, provided a very efficient type for home grown Swedish wheat, the head and tail aspiration being exceptionally useful, and the bottom screen removed a large amount of sand and small seeds.

By means of careful planning

Prior to cylinder treatment the grain was passed through a 'Boxmag' Magnetic Separator, where any piece of metal fell into

pockets formed by the magnetic bars so as not to impede the grain flow. An emery scourer followed the cylinder treatment, this very efficient design of aspirating and deposit chamber was a notable feature of this machine.

The KBm type wheat brush provided efficient brushing and caused considerable interest. After final brushing the grain was weighed and sent to the grinding bin. In the case of rye milling, the grain first passed through smooth crushing rolls of 292mm (11 and a half inches) diameter. This was primarily to crush the rye which was then sifted to remove 'blue flour' - or flour contaminated by crease dirt. This crushing roll was bypassed when wheat was being milled.

The endosperm of rye is firmly attached to the outer bran, even more so than in the instance of wheat, consequently a seven-break system was adopted, the spiral, angle depth and number of flutes per inch of roll surface were carefully worked out to ensure that they would grind wheat as efficiently as rye.

There were also several alternative runs in the flow to suit the changing grist. The rolls themselves were all of 11 and a half inches diameter, this size proved most suitable for a combined wheat and rye plant. The roller mills were Robinson's well known 'JEm' type, 32 inches long.

All scalping and dressing was carried out by plansifters in accordance with usual Swedish tradition. For this purpose, the proved Robinson type 'JSm' sextuple plansifter with loose clothing frames and interchangeable boxes were installed to augment the dressing surface of the re-used ones existing in the mill. By means of careful planning, many of the existing worm conveyors were eliminated. The appearance of the floors and the power consumption was thereby improved.

The bakery was fully automatic and produced 30 different kinds of bread, cakes and biscuits. It had six travelling electric ovens and was one of the largest bakeries in Sweden.