

WUDELI makes good on promise



Chinese company has doubled milling capacity since 2012, with plans for similar growth in the coming years

by David McKee

How did a small family-owned enterprise in an out-of-the-way place in rural China become in less than 30 years the world's largest wheat miller? *World Grain* recently visited the headquarters of Wudeli Flour Group to seek the answer.

When our magazine last profiled the company in late 2012 it was already China's No.1 flour producer with 20,000 tonnes of daily wheat grinding capacity and a 7% domestic market share. Mill expansions and new facilities under construction at that time targeted a 100% increase in output.

Six years later, chairman Dan Zhimin said his company is now nearly fully utilizing 42,000 tonnes of daily capacity at 14 locations in six provinces of northern China. Wudeli Group's national market share has reached 15%, he said. Furthermore, the company is building five new greenfield plants and expanding six existing locations to double daily capacity yet again to over 80,000 tonnes.

Growth of such magnitude by a single company is, of course, unprecedented in the annals of milling history, just as the scale and rapidity of China's economic transformation has surpassed anything that came before.

Remarkably, Wudeli's expansion has been entirely organic — without the acquisition of existing mills or milling companies — in line with a single-minded strategy to locate ever larger and more efficient plants in key wheat production zones.

The five new locations make up half of the current expansion program. They consist of one factory of

Wudeli's earliest 200-tonne-per-day mill symbolizes the humble beginnings of the company in Daming in the 1990s.

Photos by David McKee.

5,500 tonnes per day; three of 4,000 tonnes; and one of 3,000 tonnes in Handan, a large city and regional administrative center for Daming, which is one hour by road to the southeast.

Qingdao is the site of Wudeli's third milling complex in Shandong province, and the first factory to be located in a port city and outside the main wheat production zone. It will make use of imported wheat for much of its output.

Another 24,000 tonnes of new capacity is planned at existing locations, though the project sizes are subject to change. In Dongming, Shangdong Province, the company will add two matching 4,000-tonne mills at a new site near its existing mill to create its largest single location. An 1,800-tonne mill nearing completion in Daming will bring total daily capacity to 7,000 tonnes at the seven plants scattered mostly around the southeast quadrant of the town. In Jiangsu and another location in Shandong province, two mills will undergo 4,000-tonne expansions, and in Henan and Hebei provinces, another two locations will add milling lines of 3,000 tonnes each.

When the current phase of growth is completed, Wudeli Group will have 19 locations in the same six provinces as before.

In 1988, the company started with a 15-tonne short mill similar to thousands of others that were launched by local entrepreneurs at the time. It was not until 1996 that the company could build its first 200-tonne-per-day plant. Two more of that size were built before

the company scaled up again. The 200-tonne-per-day mill still operates profitably in Daming.

Dan pointed to a simple, time-worn formula underlying his company's success: high quality flour produced at the lowest possible cost. The economies of scale already achieved have driven down unit operating costs, allowing Wudeli to profitably underprice its competition and generate cash to fuel expansion. Wudeli mills operate at about 90% capacity utilization, including maintenance, according to the chairman, while the average rate for all mills in China is just 40%.

Total employment is around 5,000, equivalent to 8 tonnes of wheat milled per worker per day. That will increase as much greater output is spread over a slightly larger administrative staff. Thanks to this high productivity, Wudeli is able to pay above average wages for the industry. And its inland location enables it to avoid some of the compensation for workers of China's booming coastal region. About 20% of employees are women, working mainly in finance and laboratories, including a large central one.

Dan noted that early in its history the company made a strategic decision to invest in the most advanced milling machinery and embrace automation wherever possible. Since 1995 the company has relied on Bühler Group as the principal technology partner for all of its mills.

WHEAT SUPPLY

Wheat supply is a key competitive advantage. Wudeli is based in Daming County in the southeastern corner of Hebei Province in the heart of the north China Plain, the world's greatest wheat production zone. Less than 30 kilometers to the south is Henan Province with annual output of 37 million tonnes, and an equally short distance eastwards, Shandong province ranks No. 2 with 25 million tonnes. Home province Hebei, and Anhui and Jiangsu provinces occupying the southern and easternmost parts of the Middle Kingdom's wheat belt combine for another 43 million tonnes to round out China's top five wheat producing provinces.

The multi-province region is now crisscrossed by a modern network of divided motorways that mostly did not exist 10 to 20 years ago. Traders can quickly deliver wheat to mills in bulk trucks of 34

Wudeli uses a state-of-the-art plant control system inside the company's mill in Daming, China.



tonnes net. The company still accepts direct delivery from farmers as well, even when transported in bags, which has become rare.

Dan said almost all wheat farmers, however small, sell all of their production at harvest and buy flour for household consumption year-round. The north China plain is densely populated and staple foods like buns and noodles are wheat-based. Thus, the wheat zone is a major market for Wudeli's flour. Raw material and finished product transport costs are low over such short distances on good roads, keeping costs and prices down.

Stable wheat prices resulting from predictable government purchases make business planning easier. China's state grain agency, Sinograin, buys a large part of the harvest at a minimum support price in order to guarantee farmer incomes. The 2019 price is 2,240 RMB (U.S.\$336).

The government's large wheat reserves are rotated via regular auctions with an average price of 2,500 RMB that both depends on and influences the overall domestic market price.

Wudeli sends staff to take samples from the local storages owned or leased by the government grain organizations. Bids are placed online. Payment is immediate. At times the government wheat may be three years old, but Wudeli's technicians can manage it.

By buying and storing wheat and selling mostly on a steady as-needed basis, the government significantly lowers the financing and working capital requirements of the private milling sector. Wudeli's 3,000-tonne-per-day mill in Daming, for example, has storage for 90,000 tonnes, just one month of inventory.

SALES AND MARKETING

Until recently, all production was sold under the Wudeli brand, which has become a household name in many parts of China. The brand encompasses the 20 to 30 types of flour on offer. These differ mainly in protein levels, ash content and functionality to meet the varying requirements of traditional noodle and steamed bun makers as well as western-style bakeries and households.

Wudeli Group consists of subsidiary companies by location. A sales center at group headquarters processes all orders from the 2,000 wholesale distributors that account for 80% of turnover. Some customers send their own trucks to the mill gate, but independent trucking companies are outsourced to deliver 34-tonne loads to distributor warehouses. Thus, the lack of need for a truck fleet either for wheat supply or flour shipments further simplifies Wudeli's business model.

Rail is used to move flour to more distant destinations such as Shenyang, the largest city in the northeast.

Dan estimated a 50% market share for Wudeli brand in Beijing, and 25% share in Shanghai, China's two largest cities.

MANAGEMENT UPGRADES

Dan said the ambitious implementation of SAP enterprise resource planning software in July 2017 has heightened management capability for sales as well as inventory and processing operations.

Wudeli's managers also cited the decision-making authority given to plant directors as a reason for superior results. The top person in each mill takes sole responsibility for its operations. This contrasts with the majority of state-run enterprises where most decisions are taken by committee, slowing response time and diffusing accountability.

WUDELI'S COMPETITION

Two other major agribusiness

Dan Zhimin, chairman of Wudeli, has helped guide the company to unprecedented expansion over the last decade.



companies in China have pursued aggressive expansion strategies to increase market share in wheat flour but have struggled to keep up with Wudeli's pace. Dan estimated that Singapore-based Wilmar Group's wheat flour production is about two-thirds of Wudeli's level, while state-owned COFCO is about one third. The top three companies combined now account for 30% of the wheat that is milled for human consumption in China, said Dan.

Neither company has Wudeli's concentrated focus on wheat milling. Wilmar is China's No. 1 operator of soybean crushing plants and seller of branded soybean oil. It launched a national wheat and rice milling strategy more or less simultaneously when its market share in cooking oil was unofficially capped over 10 years ago. COFCO is a kind of agribusiness national champion that has to some extent replaced global giants like ADM, Cargill, or Bunge for overseas sourcing of soybeans and grain. Wheat milling is a relatively small part of its overall business.

Wudeli uses Bühler roller mills to grind wheat into flour.



WORLD

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FUTURE OUTLOOK

Dan and his brother, chief executive officer Dan Zhiguo, the second generation of company leadership, are only 50 and 47 years old, respectively, so much could yet be expected of them based on their historic track record.

But China is a mature flour market. Dan Zhimin estimated national per capita daily consumption of 200 grams. This is unlikely to go up as increasing prosperity brings more and more dietary diversity. The country's population also has stopped growing. Thus, when Wudeli's doubled capacity gets fully utilized,

its market share will rise to 30%, twice the current level. Down the road will the competition authorities allow further dominance, say to 50% market share, as is the case for the largest millers in some developed countries like the United States? Only time will tell.

The first mill at a port and introduction of a new flour brand, "Haomianyuan," constitute only a minor deviation in the company's strategy of the last 30 years.

Overseas expansion is a possibility, but it is difficult to name another country where Wudeli could operate at anywhere near the same scale as it does in China.

In any case, with 40,000 tonnes of new capacity to build and use at home, the world's largest miller already has much on its plate for the next few years. **WG**

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