Worker tends to a line at Sátoraljaújhely plant running filter cigarettes for the German market

Manufacturing from A to Z at CTG

Continental Tobacco Group (CTG) is a family owned "seed to smoke" operation that looks for market niches, then makes a product to fit. Flexibility and quick responses keep this small company in a market dominated by much larger companies.

Viewed from the street, CTG's manufacturing centre looks more like a college campus than a manufacturing complex. Red-brick buildings trimmed in yellow stand behind a fence of brick and iron. A stand alone brick tower resembling the castle, or rook, on a chessboard, is the substitute for academia's ivory tower.

About 300 people work in the factory in Sátoraljaújhely (pronounced Shator oliyah uwe hay), a town in a wine producing region of Hungary tucked just below the Slovak border. Sátoraljaújhely is about three hours by car, northeast of the capital Budapest. The plant is not a large complex and might even have fewer employees were it not for the size of CTG's product list.

More than 200 items from cigarettes to cigars, cigarillos, rolling tobaccos and accessories like MYO cigarette filters are made in Sátoraljaújhely plant. CTG sells to wholesalers, retailers and other tobacco companies. The tobacco used in their products is grown on land belonging to CTG owners the Sánta family, fields elsewhere in Hungary or on farms just about anywhere in the world that cultivate leaf. Processing that tobacco for own use and for clients is yet another page in CTG's do-it-all manual for manufacturing.

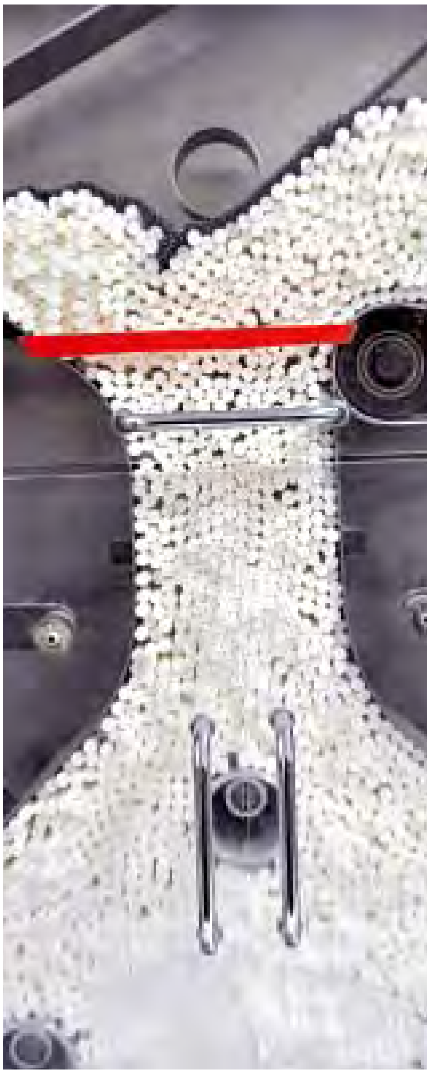
Managing Director Csaba Füzi

"We have two advantages", says János Sánta, group chief executive officer and the second generation of the Sánta family at the helm of CTG. "Wages here in Hungary are not as high as in the western part of Europe. Geographically, we are very much in the centre of Europe, not necessarily of the European Union, but Europe in the wider sense (read the full interview on page 116)."

Hungary ranks sixth from the bottom on an hourly wage comparison of 27 European Union countries by Eurostat, the EU's statistical agency. Missing from the list is Croatia, which joined the community last July.

Stripped of the agricultural and public sectors, the average hourly wage for Hungary in 2012 was EUR 7.50. Average wages have dipped 4.6 per cent since 2008. However non-wage costs, a statistic that encompasses employer contributions to state-run employee health and unemployment insurance plans, are on par with the EU-27 average.
Eurostat's hourly wage data points to a European market with huge differences in purchasing power. Sweden tops the list at EUR 39 and Bulgaria rides the bottom at EUR 3.70. But Bulgaria's average wage increased almost 43 per cent between 2008 and 2012; a sign that market is rapidly transforming.
Although CTG sells products to markets as distant as Japan, most of the more than two dozen countries the company exports to are in Europe. Distribution varies. Hungária cigarettes, for example, are packaged in Hungarian national colours and sold only at Budapest airport.
Matrix, a premium American blend cigarette or rolling tobacco, and Power filter cigarillos are products available in Germany. Momentos panatellas at 138 mm are both long and slim. Dover is a budget pipe tobacco. The Silverado brand applies to rolling papers and little cigars.
Essenze is a cigarillo with tobaccos from South America, Africa, Spain and Turkey. The CTG product list is a long one.
Maybe it wasn't just chance that it was a Hungarian, Ernö Rubik, who gave the world the 3-D cube that bears his name. Whether solving mechanical puzzles is a national characteristic or not, CTG depends on an experienced crew to hold setup times for all CTG's products to a minimum.
Because it's not possible to make more than 200 products in continuous cycle, production is broken down to between a dozen and 20 products at a time, said Managing Director Csaba Füzi. "We are small, and we have to be extremely flexible."
A vertically integrated business like CTG's starts on the farm, which creates a body of knowledge about the agricultural base that can be tapped again in later manufacturing stages, Sánta said. "We grow tobaccos, so we know which types of tobaccos have the most suitable properties."

János Sánta's family acquired the Sátoraljaújhely plant in 1997 from RJ Reynolds, when the US tobacco company closed out its Hungarian venture prior to divesting the rest of its international business. A couple years prior to purchasing the factory, the Sántas in a privatisation sale acquired a processing plant at Szolnok, Hungary. Dofer Corp has a history that goes back further than the plant in Sátoraljaújhely. It was founded in the 1860s.
CTG also runs a distribution arm (Tabán Trafik) in Budapest and subsidiaries in Germany, Slovakia, Italy and Romania.
About 200 people are employed at CTG companies not located in Sátoraljaújhely, which places the total workforce at just above 500. The most recent additions are 25 positions added to operate a Dry Ice Expanded Tobacco (DIET) line that was put into service at the Sátoraljaújhely manufacturing plant in January.



With DIET on site, CTG will be able to do custom blending instead of relying on outside purchases, said CEO Sántas. "I wish we had had it years ago.

Expanding with DIET

Flanked by storage tanks and standing 12 metres high, the newest addition to the CTG plant expands tobacco by injecting it with pressurized liquid CO_2. When the pressure is reduced, the liquid in the cut filler turns to dry ice. Then the frozen tobacco is heated, causing it to expand.
Airco DIET, the Danish-based company generally acknowledge as the world leader in dry-ice expansion of tobacco, supplied the unit, which has a capacity of 300 kg an hour.
A subsidiary of CO_2 plant specialist Union Engineering, Airco built the first DIET plants in 1987 in a joint venture with cigarette maker Philip Morris. The basic process hasn't changed, but today's Airco DIET plants bear little resemblance to their forerunners.
Pressurized liquid CO_2 is fed into a metal vat called an impregnator that has been loaded with tobacco fed into it via conveyor belt. At Sátoraljaújhely plant, the impregnator load is 85 kgs of tobacco.
A door on the bottom of the impregnator allows frozen tobacco to fall through a transfer chute to a de-clumper that returns it to a flowing state before hot gasses are used to heat the frozen tobacco cells. A hotter temperature produces more volume and less aroma. Lowering the temperature reduces volume, but preserves taste. Doubling volume and more is possible.
CO_2 is retrieved and reused. The heating gases are recycled.
Until very recently, DIET plants built by Airco have been much larger than the one in Sátoraljaújhely.
Airco's first 300 kg line went operational only two years ago, in 2012. Until then, the smallest stock unit on offer had twice the capacity of the 300 kg unit. Airco's biggest stock unit on offer can produce 2,400 kg an hour. That translates into an annual capacity in excess of 17,000 tons, based on three shifts working 300 days a year. It's an awful lot of expanded tobacco.

The DIET impregnator lid closes on a load. Peter Steinhauser, electrical and primary maintenance manager, demonstrates how cold DIET expands in response to the warmth from his hand.

Capacities like this, and the accompanying initial capital investment, is high enough that only very large tobacco companies can afford them.

Product made available to smaller manufacturers in Europe in past years amounted to several stock grades of expanded tobacco suitable for fill, but short on aroma, said Rainer Busch, a managing partner at NewCo Group and long-time observer of the European tobacco market.

Last summer, the only DIET unit in Europe selling to smaller companies shut down, he said.

A niche is born

Busch and Birgul Sandal, partners who co-manage NewCo Group, could be dubbed the guiding lights behind the DIET line at CTG.

“We heard about DIET. We thought about DIET”, and had begun talking to Airco DIET about a unit, Busch said. The search for a potential partner began as the unit acquisition drew closer. It was a chance meeting at a trade show (World Tobacco Asia 2012) that tipped the project to CTG.

LeafNewCo Kft is the name given the Hungarian joint venture, which was more or less a 50-50 investment..

“We are a small company, and it's not easy to make an investment of six or seven million euros”, Sandal said.

EUR 6 million (USD 8.2 million) is what set-up cost. The DIET project qualified for a European Union regional development subsidy amounting to 22.5 per cent of the project.

CTG and NewCo will operate the plant together, while maintaining separate commercial interests. Busch said. NewCo's Willi Bauer will oversee his company's interests in the venture.

Contractually, output too will be divided more or less equally between NewCo and CTG. However it is an agreement both parties said would be interpreted flexibly. DIET capacity will be allocated based on which partner has generated the demand.

NewCo began operating in Europe in 2005 and has sold more than 100 million kgs of tobacco since. NewCo Asia, with head offices in Singapore, expanded the company's reach.

Sandal and Busch offer clients a combined half-century of tobacco experience and contacts around the world. The DIET plant in Sátoraljaújhely marks a change for the company in that is NewCo's largest investment in a fixed facility to date.

“We are independent and we are not a cigarette manufacturer that could be viewed as a competitor”, said Sandal. “We are primarily a supplier and a services company”, and secondarily a leaf merchant, Sandal said. Client interest in the DIET line began before installation, she said.

“We want to be as flexible as possible with our customers”, added Busch. “We want to service the medium to smaller size customer who cannot afford today in Europe to make an investment of this type, because they are not able to run it on full capacity,” said Busch.

“We will fill up this machine basically by renting capacity”, he said. “We will not, probably, end up supplying a lot of DIET tobaccos.

“(Clients) can rent, and bring their own tobaccos here. We can make a blend for them or work together with them. We are happy to share our knowledge with clients, to either maximise filling power, or the aroma.”

On the CTG side of the venture, Csaba Füzi, said DIET testing was underway almost before inauguration ceremony guests were back outside the factory gates. “I am pushed by the market to put products on the market”, the factory manager said.

Beyond the obvious advantage of using less tobacco in their products, manufacturers have turned to DIET as a means to reduce tar and nicotine levels.

Wet product feeds into a drying unit

Lighter DIET tobacco improves air flow in products like ultra slim cigarettes. Premium cigarettes can contain 30 per cent expanded tobacco, says Airco.

Expanded tobacco can be aromatic enough to be used as the sole tobacco in cigars. Rolling tobaccos, both roll-your and make-your own, use expanded tobacco.

CTG makes most of the products described in the last two paragraphs.

Staying competitive without using expanded tobacco is difficult, because its use has become so widespread, Füzi said. Now that tool is available 50 metres from his office at Sátoraljaújhely plant.

State Secretary for Employment Sándor Czomba and Richárd Hörcsik, the local representative to Hungary's parliament, the National Assembly, were among the speakers at the January ceremony inaugurating the new DIET line.

Addressing a crowd that included representatives from the tobacco industry, local and international media, they talked about the jobs that would be created, and the hopes those positions would bring spin-offs to a regional economy a little short on opportunities.

In addition to creating 25 jobs, Füzi said the DIET line will help preserve the 300 existing jobs at Sátoraljaújhely plant by making CTG more competitive and by adding more balance to what the company is able to produce.

"Smaller factories like ours that are mainly family companies could only buy volumised tobacco in a limited amount and at a higher price. The factory that closed last summer (in Cadiz, Spain) was the only European source for these products," Füzi said.

"Due to its high investment value, previously (DIET) was only affordable for multinational companies strong in capital," he said. "This meant a great competitive advantage for them."

Four multinationals control most of the tobacco markets in which CTG is a niche player. Competing with the likes of Philip Morris, Japan Tobacco, British American Tobacco and Imperial would seem a lost cause. But CTG makes no pretense about going head-to-head with the majors.

"We are a very entrepreneurial company", said CEO Sánta. "We always try to find niches, market niches, and opportunities. I'm pretty sure we will have very good use of the DIET line for the next couple of years."

British American Tobacco supplies more than 42 per cent of tobacco products sold in CTG's home market from a factory in Pécs. The plant is Hungary's largest tobacco factory, according to a report compiled by the consumer research agency Euromonitor.

Philip Morris International, Hungary's second largest tobacco company, and Imperial Tobacco closed their Hungarian manufacturing operations between 2004 and 2006. They retain substantial Hungarian market shares with products made at sites in other countries.

Thus, CTG is a niche player even in its home market. But a vibrant niche may be a safer bet than dominating a market in decline, as evidenced by sharp volume declines reported by big cigarette makers.

Anheuser Busch InBev has 150,000 employees in two dozen countries. Its beer sales last year were nearly USD 40 billion and it controls about 48 per cent of the US market.But microbreweries, a vanishing breed as late as the 1990s, are where the action is today in the US.

Agricultural mass production has fallen from favour in many parts of Europe, prompting consumers to think small.

Being small requires flexibility, says CTG's Füzi. Then a company can expand like warming DIET.

Joe Mapother

Trouble shooting in a tight spot