



Step by step towards top performance

Dunaújváros – a game of chess

Everybody who is familiar with chess knows it. You have to think several moves ahead to be successful. Well, the game of chess that Project and Mill Manager Attila Bencs has played in Dunaújváros had completely different dimensions: There were 1,400 players on the board at the same time, it was € 200 million worth, and the game lasted 16 months.



This special game was called Dunaújváros PM 7, and Attila Bencs and his team accepted the challenge. His opponents were the well-known project risks: shortage of time, unforeseeable events and rising costs.

For a long time, Dunaújváros (formerly Dunapentele, later Sztálinváros) has been a small Hungarian village with just under 4,000 inhabitants. After the Turkish occupation, the ancient Roman settlement sank into a deep slumber until the metallurgical industry awakened it in the early 1950s. The paper industry followed ten years later. At first, pulp was produced from straw, but then, the range was widened to include paper production and converting. In 1990, the mill was privatized by the Austrian industrialist Thomas Prinzhorn, and since then, the local paper industry has been prospering.

In the 'New City upon the Danube', as Dunaújváros is translated into English, Hamburger Hungaria operates Hungary's largest paper mill. In the long run, base paper will be processed under the name of Duna-pack at two locations: in the south of Budapest and in Dunaújváros.

Ecological and economical paper

In total, the two machines in Dunaújváros – the old PM 3 and the brand-new PM 7 – will produce 600,000 tons/year. This means that the former Dunapack corrugated board base paper capacity is doubled, although two machines have been shut down at the Budapest-Csepel mill.



Facts and figures – Dunaújváros PM 7:

Wire width	8,600 mm
Design speed:	1,500 m/min
Production:	400,000 tons/year
Paper grade:	Testliner, corrugating medium
Basis weight:	70-150 g/m ²

Voith Paper scope of supply:

Stock preparation system including recycled paper feeding unit, complete paper machine, automation system of entire.

Crane operator Argon Csöszer was on duty during the PM 7 construction time.

“Yes, it might be a challenge to sell 300,000 tons/year more,” says Attila Bencs, Project and Mill Manager in Dunaújváros.

However, since the sales markets are located in Central and Eastern Europe, this task will not be altogether impossible. Logistically, Dunaújváros is in an optimal position in the center of Hungary. A new motorway was built, the capital of Budapest is only 30 minutes away, and the name giver of the city – the Danube – is just around the corner. Rail service is also available.

Now, if Dunaújváros paper mill produces what the market demands – that is high-quality, light-weight packaging paper – success is bound to follow.

The raw material for the machines – selected recovered paper – comes mainly from the domestic market. Attila Bencs believes that waste paper collection has still growth potential. Its organization is a long-term task and is the responsibility of a separate company. “Waste paper collection has another advantage in Hungary. Since local collection rates are still below those demanded in EU Directives, rates are increasing continuously,” explains Attila Bencs.

For the project manager, recovered paper is a very ecological raw material. Paper is made from material that would otherwise end up in the trash. Less waste is dumped, and this is exactly what the EU and the Hungarian government want.

“Light-weight packaging papers are the future. They are both ecological and economical products,” Attila Bencs explains the market development. The parent company, Hamburger Containerboard, attaches great importance to sustainability. Environmental protection and industrial safety certifications are under way. Within the shortest possible time, Hamburger Hungaria wants to meet the requirements of the standards ISO 9001 (Quality Management), ISO 14001 (Environmental Management) and OHSAS 18001 (Occupational Health and Safety Management), as well as the EMAS Regulation (for Eco Audit).

The team has made it

The PM 7 project was started early in 2008. Unexpected delays occurred

during the construction phase, among other things because of archaeological finds from Roman times. The Romans had founded a military settlement named Intercita in the place of today's Dunaújváros, and some remains are still found today. Nevertheless, the paper machine was set up on schedule. Installation started in September, and in October 2008, the topping-out ceremony was celebrated. Performance tests were made in April and May 2009, and the first paper was produced at the end of June. In the hottest phase, more than 1,400 people were on site at the same time. Many nations were represented, mostly Austrians and Hungarians, but also suppliers from Finland, Spain, Sweden, Germany, Slovakia and Switzerland.

Bencs' core team comprised approximately 20 people who were made available for the project. "Thanks to the Division Management, especially Harald Ganster, head of the Hamburger Containerboard Division, we were able to access the know-how of the entire Hamburger Group," emphasizes Bencs. Hamburger could rely on the skills of operators and other staff members who have experience of 30 years and more in the paper industry. Still, there has to be one person who keeps track of all players involved. This person was Attila Bencs. He explains how he did it: "Set priorities! Make sure that you have reliable colleagues and suppliers! These are the most important building blocks for well-planned and controlled construction. I would also like to thank the entire Voith team. Together we have made it, thanks to the good working atmosphere and cooperation."

Chess and the right players

Attila Bencs compares the project with a game of chess. "You always have to be one move ahead. And drastic decisions may also be sometimes necessary." The rules of the game must be clear to all people involved. Bencs confirms that correct task sharing is extremely important for a project of this size. In Dunaújváros, external experts were involved as well whenever it was necessary.

"To be honest, my mailbox was always full. I got 200 e-mails per day on average. Still, dinner with my family was often possible, even when the days were long. It was an extraordinary time, no question. I had to cut down other tasks, but I will have enough time to take a break later," explains Attila Bencs, with a laugh.

What was the highlight of this project? Bencs does not need much time to think: "The first paper! When the paper machine actually comes to life after 16 months – even if all goes according to plan. That was the absolute highlight." The moment came even a

little earlier than expected. The champagne that the team had brought along, was still warm. "We had put it in the fridge at about 3 p.m. No one thought that the very first paper would be produced already on this day, the 19th of June 2009," remembers Bencs. To be on the safe side, the drinks for the first turn-up were put into the fridge at once.

Location

Hungary



Dunaújváros is located about 70 km south of the capital Budapest in the region of Central Transdanubia. The region has been inhabited since the Bronze Age. Dunaújváros is a university city and has approximately 53,000 inhabitants.

Contact



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Project Manager Attila Bencs of Dunaújváros (right) and Günther Prinz of Voith Paper meet every day to discuss current topics. Attila Bencs has been working for Hamburger Containerboard for more than ten years and has spent almost half of this time abroad.



Daily routine at a construction site

In the land of goulash and paprika

It takes several months for a new paper machine to be installed until it can finally be put into operation. During this time, many hands and heads work together to ensure smooth work progress on site, just as in Dunaújváros, Hungary.

The paper mill is one of the major local employers.



In this phase, many different people come together, and each of them has his own history, of course. Voith Paper Senior Fitter Anton Kreimel is one of them, for example. Dunaújváros is going to be his last site. Kreimel will enter his well-deserved retirement after 22 years of service at Voith.

He has been gathering an abundance of experiences and knowledge, as well as a certain amount of vocabulary. "I always learn some words of the national language, no matter where I am," says Anton Kreimel and orders a goulash for lunch in fluent Hungarian. By the way, the real name is 'pörkölt'. You can also get it in a tiny restaurant near the paper mill, which could not be more cosmopolitan. At noon, every table is occupied by men in overalls revealing where they come from. Today, the color blue is dominant. The menu is hand-written, the selection is local. On the pizza, there is a large dose of paprika.



Big joy – the first parent roll is finished.

Back on the building site: Kreimel is one of those nomads wandering from site to site who know Beijing, China, better than their home in St. Pölten, Austria. The past years in Russia, Iran, China and other countries have shown him how to get through in the respective country and to make the most of it.

The large-scale project PM 7 had kept the Hamburger staff busy even before the supplier came into play. Dunaújváros Project and Mill Manager Attila Bencs and his team had done a good job by the time the Voith crew arrived in Hungary to start building the production line. But the first Voith man, Site Manager Martin Weiss, had been on site long before that. "I arrived in Dunaújváros on Monday, September 8, 2008. And I was the last one to go," he says.

Weiss is the one supervising who works where and when. About 40 Voith Paper staff members are employed on site during start-up. Weiss has his headquarters in a container beside the PM hall just as all the other external companies. The equipment and interior furnishing resemble an electronic shop with a touch of changing room. There are many things that come in handy on a building site.

Some employees even change sides for some time: Hannes Lagler has hung up his blue jacket and put on a beige one. He works as a site coordinator during this project – for Hamburger. As soon as everything is in place and installed, the start-up engineers are next in line. It is the responsibility of Helmut Widauer and

his team to ensure that the paper machine runs at least as well as the customer expects. Widauer is in a hurry. There is always something that needs repairing, adjusting and improving. The responsibility is heavy and the expectations on the team are huge. But the start-up personnel did not sweat in vain: PM 7 starts with a speed of 1,225 m/min, thus breaking another record. When the first paper is wound on the reel, everybody is enthusiastic and cheers – it is a tremendous concerted effort of all people involved.

What Helmut Widauer is for the paper machine, Clemens Zöllner is for the complete stock preparation system. The automation system also had its own commander-in-chief. Bernhard Sekyra has made sure that the control system of the entire production line works perfectly. That's how it goes for the customer as well. For every important task, there is one specialist in the project team who closely works

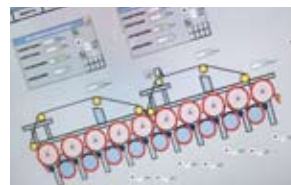
together with the suppliers and other partners. György Szilas, Bela Kurucz, Attila Solymosi, Josef Hruby, Jenő Vass, Pál Adamik, János Ecsedi, Szabolcs Dobák, János Paulik – without the Hamburger playmakers, the whole game would not have been so smooth.

In a large-scale project, it is extremely important to have the same contact person throughout its duration. The central figures are the two project managers: Voith Paper Project Manager Günther Prinz has – just as his equivalent in Dunaújváros, Attila Bencs – the overall responsibility. Therefore, good communication is ensured on both sides and excellent teamwork is made possible, as the successful start-up of PM 7 demonstrates.

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PM 7 has been equipped with many innovative products and solutions.



Anton Kreimel has 22 years of experience.

(F.l.t.r.) Vladimir Shpak and Bernhard Sekyra from Voith Paper and Gerald Schröck from TBP are happy with the first turn-up.

