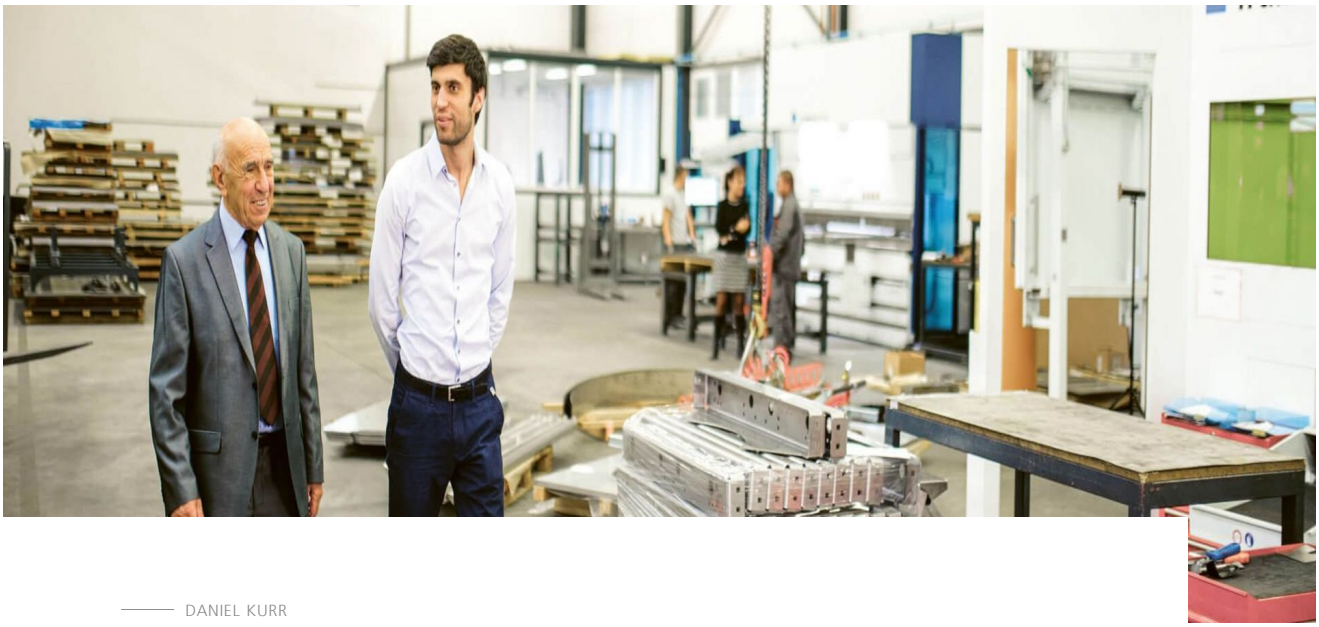

DANIEL KURR

A Smart Factory thanks to grandpa's entrepreneurial spirit

Robert Áncsán was just 20 years old when he founded AR-Robotics in the Hungarian city of Debrecen. He started out providing design engineering services for sheet steel products. Since then, his company has expanded to cover the entire sheet metal process chain. Today, his smart factory places him firmly as a leading innovator in Eastern Europe – all thanks to his resourceful 84-year-old grandfather.

Robert Áncsán leans back in his chair: "The less human intervention you have in production, the lower the chance of error," says the 28-year-old entrepreneur. "Conventional manufacturing was never where I wanted to be; AR-Robotics focused on automation and software right from the start." Áncsán even chose his 16 highly qualified employees based on their shared philosophy of a highly efficient smart factory. Yet, without his grandfather, it might all have come to nothing. Robert is so determined and loves creating things. That's why I backed his plan to expand his company by adding a job shop to produce sheet metal parts."

His grandfather taught Robert Áncsán that strong partners are the cornerstone of success.

The young founder has focused on automation from the very beginning.

Metal in his blood

Even today, 84-year-old Mihály Áncsán is still an active and important figure in the Hungarian metal business. In 1990, he set up the company Techno-Trade in Debrecen to supply customers with raw sheet metal. Techno-Trade works closely with a steel mill in nearby Košice, enabling it to supply blanks in a range of custom sizes and material compositions. Recently, more and more of his customers had been asking Mihály Áncsán for help with CAD part design. Thinking that might be a good option for his grandson, who had studied electrical engineering, he said to Robert: "Why don't you just set up a company on your own?" Robert was only 20 at the time, but, keen to give it a go, he launched AR-Robotics as a one-man design engineering company. A few years passed, and Robert Áncsán decided he wanted to start producing parts as well as designing them. "Robert is so determined and loves creating things," says Mihály Áncsán proudly. "That's why I backed his plan to expand his company by adding a job shop to produce sheet metal parts." For Robert, this was the perfect solution: "Techno-Trade and AR-Robotics work closely together. My grandfather has so much experience in this business – and his connections to other companies made it far easier for me to get my job shop up and running."

Primed for data

In 2018, Áncsán began fabricating parts with two flatbed laser machines and two press brakes – all of them made by TRUMPF. "Many of my grandfather's business partners use TRUMPF machines." he says. "They told me the machines were robust and reliable, and their enthusiasm won me over." But his entrepreneurial spirit was focused on more than just good machines. He has a keen interest in innovative software that makes manufacturing faster, more efficient and more transparent. So he approached TRUMPF to get detailed advice on their digitalization solutions.

The modular TruTops Fab manufacturing execution system immediately caught his eye, but it hadn't yet been released in Hungary in 2018. "The experts at the TRUMPF subsidiary in Hungary recommended that I should start by creating an interface between my existing ERP system and the TruTops Fab bus system," says Robert. That enabled me to install TruTops Monitor and hook up my existing machines." TruTops Monitor provided the basis for Robert Áncsán to establish his first smart factory solution on the shop floor. This employed a condition monitoring module to record and analyze machine data – such as error messages, causes of faults and stoppages – and use that data to avoid downtime. But that was only the beginning.

I want to keep investing in machinery and automation components, because that's where the future lies.

Robert Áncsán, AR-Robotics Gründer

Machines at full capacity, paperless manufacturing

The next step came in June 2020 when Robert became one of the first customers in Hungary to incorporate the TruTops Fab Quick- job module in his production process. "Our company was success- ful right from the start," he says. "But with so many orders and such a complex mix of materials and parts, we were starting to experience processing bottlenecks, a lack of transparency and underutilized machine time. Quickjob improved the situation from one day to the next." The TruTops Fab Quickjob module controls and manages production jobs, with machines automatically reporting back on their job status to ensure the best use of available machine capacity. To maximize his opportunities right from the tender stage, Robert Áncsán also opted for the TruTops Fab module Calculate. "This stores all the relevant data such as the machine hour rate, the overhead rate and technology data," he explains. "The part cost calculator takes all that into account automatically, which saves a lot of time when we are calculating costs."

With his latest addition – the TruTops Production module – Robert Áncsán now has better control over all his production operations, from programming, laser cutting, bending and welding to assembly and quality assurance. Áncsán is delighted with the results: "We've now gone completely paperless. We have a well-structured workflow, optimized machine utilization, plus the end-to- end transparency we need to accelerate our manufacturing processes. Obviously my employees had to learn

how to use these programs, but they are delighted with how quickly they have improved our manufacturing processes." Áncsán's customers are equally enthusiastic when he takes them on tours of his produc- tion facilities: "Using modern processes builds trust – that's how we've managed to acquire some major international customers even though we're such a young company."

On the same page: Mihály and Robert Áncsán both believe that modern machines and a high degree of automation are what you need to achieve success on the inter- national stage. They are taking a rapid, step-by-step approach to digital transforma- tion at AR-Robotics.

Experienced advisor: 84, but with both feet in the middle of sheet metal production, Mihály Áncsán encourages and supports his grandson Robert in setting up his Smart Factory.

Digitalization is the future

As well as introducing new software, AR-Robotics recently added another bending machine and a TruMatic 6000 fiber. Robert Áncsán still has a lot of plans, so all the machines are equipped with automation interfaces: "I want to keep investing in machinery and automation components, because that's where the future lies." Last year, another TruTops Fab module – Storage – came into use. In tandem with the warehouse management software, Áncsán soon hopes to hook up his machines to a Stopa storage system. "In recent months we've taken a rapid, step-by-step approach to the digital transformation of our production processes," he says. "There's no way this would have happened so quickly, and so smoothly, without the advice we received from our expert partners at TRUMPF. My grandfather was right when he taught me all those years ago that strong and reliable partners are the backbone of success."

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