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HELLER

The Magazine





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The ampersand on the magazine cover is a literal symbol of solidarity and partnership: it derives from the Latin word 'et', meaning 'and', and is a ligature between the letters 'e' and 't'. Like partnership, it creates a bond between two elements.



Dear customers, partners and colleagues

For all of us around the globe, the year 2020 has turned out differently than we could have ever imagined. With the outbreak of the Corona pandemic at the beginning of the year, the whole world has more or less come to a standstill. We at HELLER have also faced and are still facing enormous challenges.

However, one thing also became very clear in this exceptional and extremely complex situation: we can only meet this global challenge together. This global crisis has shown us once again how important and valuable long-standing relationships with customers, employees and business partners are. That is also why we are deliberately dedicating this issue of *HELLER the Magazine* to the topic of partnership.

Partnership is a core corporate value of HELLER and of highest priority to us, both internally and externally. It begins at the very start of professional education. We take you on a tour of the training workshop in Nürtingen established as early as 1913, but which, to this day, sets the course for the future. In our interview, COO Manfred Maier talks about his very personal definition of partnership and its significance for the global footprint of our company group.

Moreover, we introduce you to partner companies that play a strategic role either as part of the HELLER Group such as STS Maschinendienstleistung GmbH (page 24) or the sales agency Hans P. Greising GmbH (page 26) that has supported us as an external partner in the market for many years.

We conclude this issue commemorating Mr Hubert Heller whose passing away in May has deeply saddened us. Over many decades, he and his brother Berndt built close and long-term partnerships with customers and business partners around the globe that we still draw on today. You can read the obituary on page 68.

I hope this issue will provide you with many interesting insights and ideas. Stay healthy!

Sincerely
Klaus Winkler



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Among professionals

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part|ner|ship

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Word meaning/definition:

- 1. Partnership or a partnership is a relationship in which two or more people, organizations, or countries work together as partners.**
- 2. The persons associated in such a relationship**
- 3. Law: an association of two or more partners in a business enterprise**

Synonyms of partnership

Cooperation, association, alliance, sharing, union, connection, participation, copartnership

Origin

First recorded in 1570–80; partner + -ship;
'partner' = Middle English: alteration of parcener
'partner, joint heir', from Anglo-Norman French
parcener, based on Latin partitio [n] 'partition'.

Examples

successful partnership
enter into partnership, be in partnership

Source: Collins COBUILD / www.dictionary.com

The fact that partnership promises success as indicated in the aforementioned quote from Henry Ford, is illustrated by companies building on partnerships with other brands from around the world: ice-cream manufacturer Häagen-Dazs worked in partnership with liqueur producer Baileys, Lufthansa and Mastercard launched a Miles & More credit card together and Nokia incorporates Zeiss lenses into their mobile phones. So-called image partnerships in which both parties hope to make a positive impact on the other party's target groups exist, for example, between the global Coca-Cola Company and the music streaming service Spotify or the Bavarian automotive manufacturer BMW and US giant Apple. However, the so-called spill-over effect also works the other way round. In the worst case, one partner's image problems can negatively affect the other partner.

The topic of partnership is an integral part of our corporate DNA: we have set ourselves the goal to be authentic, honest and transparent. Both internally and externally, as part of the collaboration with our customers as well as with our partners and our staff. We are proud of our status as a family-owned business, where these values are handed down through the generations, and of our long-standing employees and long-term business relationships that have developed throughout this time.

In the 4th issue of HELLER the Magazine, Steffen Kirchner explains to our readers the four phases they have to go through in order to realise their visions. The motivational coach refers to partnerships as the key to success and in his blog explains why it is important to know the difference between a relationship and a partnership: in a relationship, the parties involved (only) join forces because one needs something from the other. The two are dependent on each other. The crucial point is: "if your main reason for entering into a relationship is to get something from the other, you are not creating partnership, you are doing business," says Kirchner. The expert for excellence is convinced that the quantum leap from relationship to partnership is necessary in order to create a real synergy of people's potentials, allowing them to create something bigger in cooperation. He defines 4 levels of collaboration, in which a genuine, productive partnership only begins once the 3rd level has been reached:

1. Working against each other
2. Working beside each other
3. Working together
4. Working for each other

The term 'solidarity' is inextricably linked to partnership. It refers to the unconditional cohesion between partners that is strongly promoted by credibility, loyalty as well as shared values and goals. The feeling of solidarity conveys a sense of security, which makes it easier to rely on the other partner, to share and to represent his views. Solidarity is firmly established in the programmes of almost all European democratic parties and an important constituent of all humanistic worldviews. Not without reason, 'solidarity' was the top search term on the Encyclopaedia of Values website 'wertesysteme.de'* in March and April this year when the Coronavirus disrupted social life and there was much discussion about the necessary measures.

* wertesysteme.de is an online encyclopaedia focusing on human values and the definition of values in the German-speaking world. For its value rankings, the website analyses and weighs the results of its own surveys, all searches on the website, the most successful Google searches resulting in visits to the site and the access statistics of the individual definitions in the encyclopaedia by 25% each.

A woman's profile is shown in a blue-tinted circular frame that occupies the left and center of the page. The woman has dark, wavy hair and is looking towards the left. The background of the entire page is a dark, textured blue.

Honesty wins

INTERVIEW **Marcus Schick**

“Coming together is the beginning. Keeping together is progress. Working together is success.” This is how automotive pioneer Henry Ford described the way to fruitful partnerships. Yet, how do we actually achieve this in everyday business or private life? We asked social psychologist Professor Dr Gerald Echterhoff of the Department of Psychology at Westfälische Wilhelms-Universität Münster.

Professor Echterhoff, humans do not like to be completely on their own. They seek closeness to other people and like to develop themselves within a community such as their families, circle of friends and colleagues or in clubs and organisations. Where does this need for partnership come from?

Prof. G. Echterhoff: Partnership is a universal primal need of humankind. Compared to other mammals, humans are born in an extremely premature state and as such not capable of survival if left to fend for themselves. Throughout the first phase of our life, our existence depends on a close relationship with the mother or parents for protection and sustenance. This kind of ‘social womb’ is elementary for the ontogenetic development of humankind and increases its reproductive success with partnership being based on care, trust and affection.

One would think this to provide the necessary framework for an extremely harmonious and peaceful coexistence of humans. So, what is going wrong in reality?

Social relationships are not only built on harmony. From the evolutionary point of view, mutual differentiation, aggression and competition are also important factors. The culturally inherent ability of humans to collaborate and to cooperate ensures that such ‘maverick behaviour’ does not become self-destructive in the end. In social psychology, we use the term ‘shared reality’, which makes it possible to engage in cooperative activities with others based on shared goals and common intentions.

What ingredients are necessary to achieve ‘the right chemistry’?

It is difficult to answer this conclusively. After all, the starting ingredients for a good and lasting partnership can differ greatly. Research has shown that the saying ‘Birds of a feather flock together’ hits the mark better than ‘Opposites attract’. In most cases, the triad is based on the three factors: similarity, contact and familiarity that form a kind of control loop. In most cases, humans prefer what is familiar to them and safe to what is unknown and dangerous. Moreover, they balance the costs and benefits. Nobody wants to feel exploited in an unbalanced relationship likely to increase dissatisfaction very quickly.

How can a personal, private partnership relation be compared to a professional partnership, e.g. with colleagues or customers?

In many aspects, there is no difference between the basic principles and mechanisms of a cooperative partnership in private and professional life. Apart from theories of exchange, the focus is on the question of the divergence or convergence of interests. The greater the similarity between partners, the closer the relationship they can form. Questions about possible alternatives are raised. Are there others who may be able to offer me more? For example, more appreciation from superiors or colleagues. Or are there other suppliers who are able to offer me a more cost-effective product or better customer care? The willingness to switch suppliers depends on how much the individual has already

invested in a relationship. If the switching costs are high, both partners' tendency to maintain the partnership increases.

So does partnership primarily follow a sober rationality?

The give-and-take plays an important role in a balanced partnership, but it is not the only factor. When both parties emphasise the communal aspects, they stop offsetting at some point in favour of a long-term perspective. The individuals no longer keep a tally of what one is doing for the other. What prevails is the reassuring feeling to be of value to your counterpart. This development can be envisaged as two circles: the 'self' and the 'others' – the more the two circles overlap, or even perhaps perfectly match, the more successful, intensive and enduring the partnership will be. Then, the partners no longer have a distanced perspective towards one another but form a merged identity. However, not everybody is interested in this kind of partnership in the same way. Individualists like to go their own, nonconformist way and keep their distance to collectivist interaction.

How do the different expectations regarding the cooperation articulate?

As an ultra-social species, humans have antennae for social relationships. From a young age, we gain experience with this. When a child wants a piece of chocolate, it will learn quickly that articulating this desire by addressing its mother or father is often not enough. The child also has to know what they feel, what is likely to make them happy and what upsets them. And how their interests agree with the child's own interests. Therefore, it needs an empathetic strategy to achieve its goal to get the chocolate. In other words, communication is essential for a functioning partnership, both on the small and on a greater scale. What is just as important is the understanding of the transactional cost-benefit relation.

What does that mean?

The perceived balance of a relationship of mutual exchange is essential for relationship building. People who feel understood and well treated are more willing to get involved with the other and to forge a relationship. This can even result in fierce competitors becoming allies, all at once pursuing common goals in a very harmonious and successful way. From the psychological perspective, empathy and mutual trust are important pre-requisites for this. Being able to depend on one another is the goal and requirement of a functioning partnership.

What causes this kind of mutual trust to evolve?

One essential prerequisite is open, dynamic and honest communication, throughout which the goals and motivations of the other are transparent at any time. Partners want to know what the other partner wants and if there are any irresolvable and irreconcilable goals. Therefore, honest self-disclosure is an essential building block for mutual trust. This kind of disclosure often creates a new, positive constellation for a relationship – a cognitive consonance. We like people better after we have disclosed something about us to them, e.g. about our own family, our hobbies or preferences. Conversely, we tend to be sceptical towards a withdrawn, distanced person whose goals we do not know. We find it hard to endure that the other person might even use this unbalanced relationship to his own advantage.

**“Coming together is the beginning.
Keeping together is progress. Working together is success.”**

What are the most common reasons that partnerships fail?

They fail when commitment is lacking, when you no longer feel obligated to the partner, when you are no longer on eye level with him or her if there are possibly more attractive alternatives. In the 1960s, American psychologists vividly illustrated the failure of what was originally a functioning relationship by means of the 'Trucking Game'. In this example, two trucking companies try to optimise the efficiency of their transport routes. The starting and end points were connected by a single-lane road and it was impossible for the companies' trucks to pass each other on this road, which created an incompatibility in routes. When the companies started to focus on their own advantage and to threaten each other, the system broke down and both companies made heavy losses. The lesson we learn from this: cooperating and being honest with each other brings clear advantages in reaching your own goals.

What effect do cultural differences have on the quality of a partnership?

Knowing intercultural differences and treating them in an empathetic way is essential for communication and for building closeness and familiarity. However, this is rather a wide subject, in which special intercultural training courses are offered that are very useful for building partnerships in a globalised economy. For instance, it makes a difference if the person sitting at the negotiation table is a more introvert and taciturn Finn or a direct, cheerful US-American. It is also useful to know that in Asia, business success is not attributed to the ingenuity of an individual, but always to the entire collective. Mindfulness, respect and cosmopolitanism as well as approaching one another in a communicative way are helpful door openers in any case.

How much physical proximity does a good relationship require?

Physical proximity is always a positive amplifier. Studies have shown that, for example, holding hands is a measurable stress buffer in an intimate relationship that keeps it healthy and increases resilience. However, even without direct physical contact, closeness has proven positive effects. For example, facial expressions and gestures – a smile or an inviting hand gesture – serve as 'social cement' and increase the commitment to group standards. Despite the increasing quality and availability of communication media, which have proved useful during lockdown, having direct personal encounters remains vital.

In how far can learnings from the corona crisis contribute to re-evaluating partnerships and to possibly improving their quality?

The conferences using Microsoft Teams, Zoom or Skype have helped to hold relationships together that would otherwise have been completely blocked during lockdown. The benefits for the communication within a group quickly became obvious. During our own online sessions with students, I learned that having to raise your hand before speaking and chat functions helped to encourage the contribution of ideas to the joint discussion that would probably have been lost in 'real-life' meetings with very active and dominant participants. However, I do not think that online meetings could replace personal meetings. To us as a hyper-social species, physical presence, or 'embodiment', is indispensable in order to sustain lasting and resilient partnerships. For example, when we want to commit people to working towards a common goal.

**One essential prerequisite
is open, dynamic and
honest communication.**

It is similar to a musician playing a perfectly practised piece again in front of an audience in a completely different – energised – quality. We should not neglect this potential.

And what about digitisation and artificial intelligence: would these technologies not be able to make much faster and better decisions than humans in a partnership?

Artificial intelligence, algorithms and deep learning allow machines to collect information and to compare standards much better and faster than humans can, thus providing a basis for decision-making. However, when it comes to understanding and approaching one another and interacting in a spirit of trust, humans as social, empathetic beings are the final authority. Based on their knowledge, cultural and social experience and values, humans are able to make and defend a decision in a believable way that allows them to convince and enthuse others. Based on the current state of the technology, machines are unable to do this. They lack the immaterial ingredients of a partnership: care, trust, affection and empathetic sensitivity.

Cooperating and being honest with each other brings clear advantages in reaching your own goals.



In profile

Prof. Dr Gerald Echterhoff, born 1969, studied psychology in Cologne and New York. His scientific career then took him to the universities of Bielefeld, Bremen and Münster where he became a professor of Social Psychology in 2010. As part of his research, Gerald Echterhoff investigated the synergy of cognitive, motivational, interpersonal processes under consideration of their physiological-physical anchoring. He has been a full member of the North Rhine-Westphalian Academy of Sciences, Humanities and the Arts since 2018.



In focus: partnership



It is the stuff that fairy tales are made of: the emperor falls in love with a young princess and takes her into his castle. Authors of light fiction glorified

Franz Joseph I. of Austria and his wife Sissi

as the dream couple of the Austrian monarchy.

Kevin Richardson is

‘The Lion Whisperer’:

The South African who became known through the TV series of the same name is a zoologist, animal rights activist and runs the ‘Kingdom of the White Lion’ park in South Africa’s Gauteng Province. Committed to the protection of the animals for many years, he developed an exceptional relationship with the big cats and has been accepted into several clans of lions.



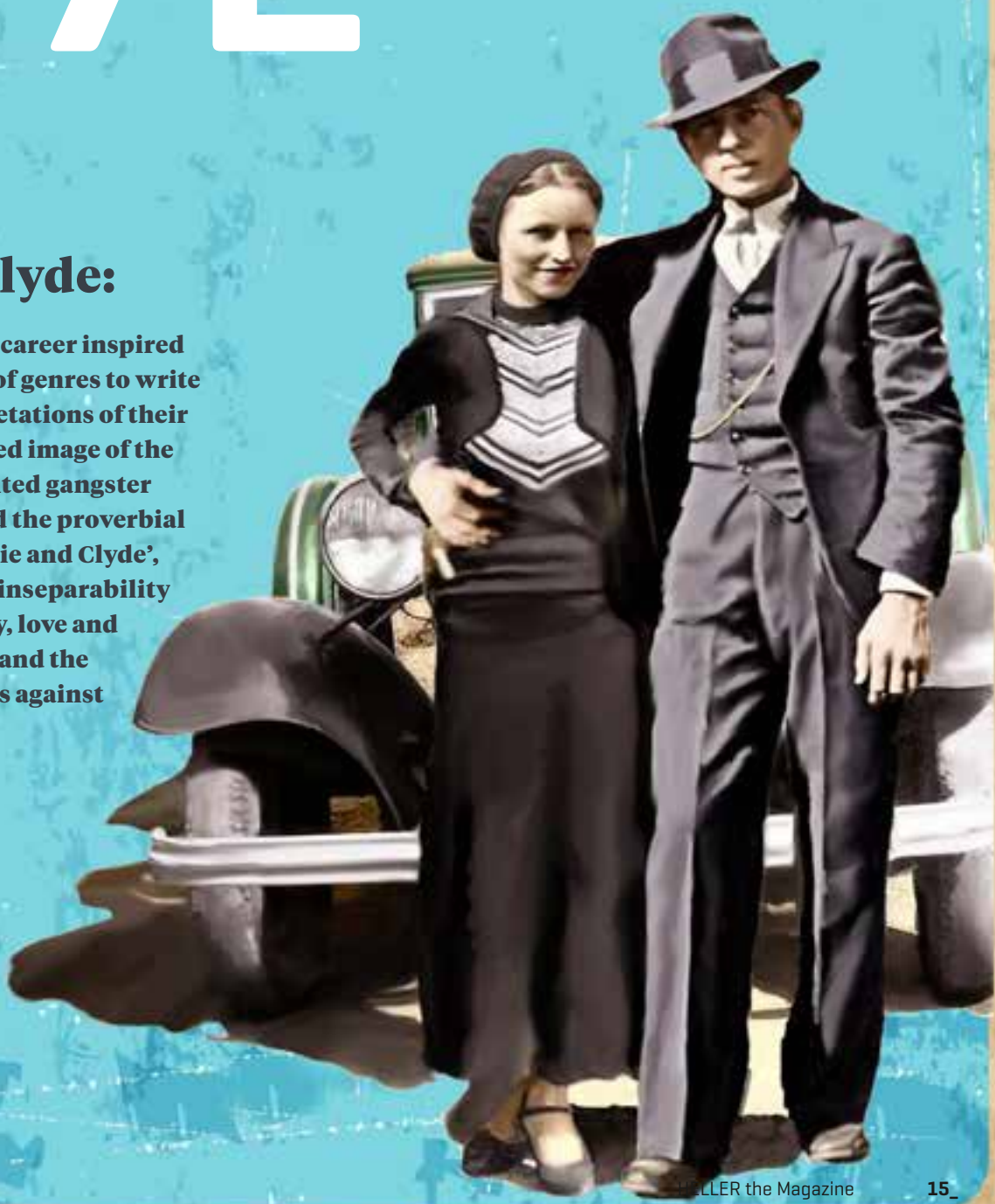
A large, stylized background image of a wandering albatross in flight over a blue ocean. The bird is white with dark wings and a long, hooked beak. It is shown in profile, flying towards the right. The ocean is a deep blue with white-capped waves. The entire scene is framed by a light blue border.

The wandering albatross flies thousands of kilometres across the Antarctic Ocean -

72
According to statistics from 2012,
72 % of Germans believe in love that
lasts a lifetime.

Bonnie & Clyde:

The couple's criminal career inspired authors from a range of genres to write more less free interpretations of their story. The romanticised image of the vagabonding and wanted gangster couple has occasioned the proverbial expression 'like Bonnie and Clyde', conveying the idea of inseparability in the face of adversity, love and solidarity until death and the notion of 'the two of us against the world'.

A black and white photograph of Bonnie and Clyde. Bonnie is on the left, wearing a dark dress with a light-colored chevron pattern on the bodice and a dark hat. Clyde is on the right, wearing a dark suit, a white shirt, a tie, and a fedora. They are standing next to a vintage car, with the front wheel and headlight visible. The background is a light, textured surface.

mostly alone. However, every two years, the albatrosses meet with their partners on a Subantarctic island where the female lays an egg that the two



The married scientists:
despite adverse circumstances,
Pierre & Marie Curie
carried out groundbreaking
research in the 19th century.
The discovery of radioactivity
and various radioactive elements
made them pioneers of
nuclear research.



Plant lover Uli Hoppe, who enjoyed a moment of fame in the 1970s as RammaDamma, the 'Singer from Another Planet', married a pineapple plant in the famous Scottish wedding destination Gretna Green in 1975. The locals were so thrilled that they filled every pew at the ceremony that was even attended by representatives of press and television networks from London. However, the honeymoon the couple had planned to spend at Loch Ness had to be cancelled as the BBC flew Hoppe to London to appear in a TV show.



birds hatch together. Despite or because of the long separation phase, the albatrosses' relationship lasts a lifetime, which can span 50-60 years!

The scientists Lois Verbrugge and James House found out that

happily married

couples have an approx.

35 % lower risk of disease than

unhappily married

couples.



The oldest supranational and intergovernmental alliances are the UNESCO, the UN, the International Monetary Fund (IMF) and the World Bank – all founded in 1945.

Grace Kelly & Rainier III. of Monaco:

The Hollywood star brought a new era of glamour and advancement to the mini-state on the Riviera, turning it into a magnet for tourists, investors and VIPs from all over the world.



PORTRAIT

what w

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for the transformation



HF

Gen2

3500/5500

A new dimension of metal cutting: also at



New Dimension
V-CON 2020



Second generation providing increased productivity and versatility

HELLER first presented the 5-axis machining centres from the HF series with the fifth axis provided by the workpiece in 2016. Providing powerful dynamics and significantly reduced idle times and the unique selling proposition of AB kinematics in combination with the counter bearing, the series has been proven in practice for years now. HELLER sees the application of the series' first generation – usually ordered with pallet changer – primarily for medium batch sizes in series production and for productive machining. For the second generation, HELLER has now expanded the machines' range of application. The goal is to provide greater universality, including single part manufacturing, combined with the HELLER genes of productivity, precision and reliability. Among the most significant changes on the second generation are the new machining units providing even higher performance and the optional use of a second drive in the Z-axis.

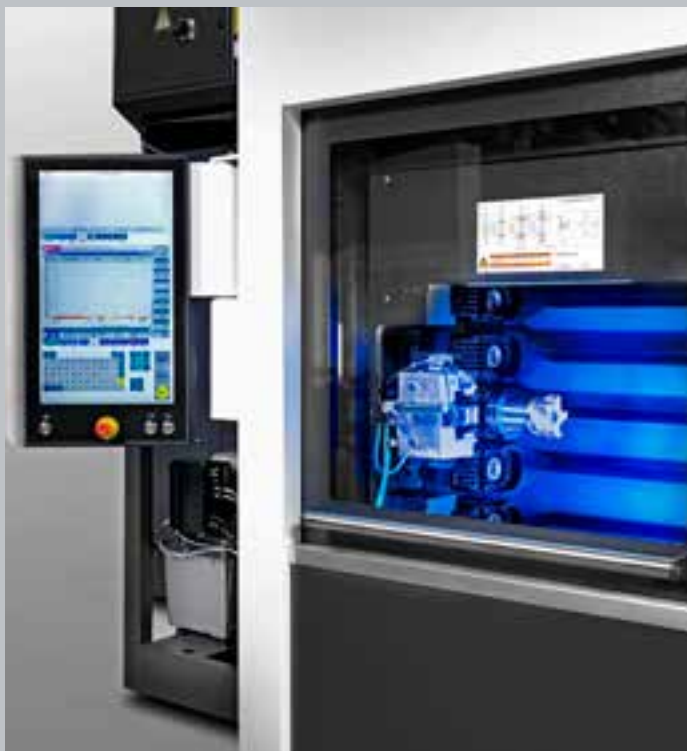
TEXT **Manfred Lerch** PHOTOS **Jens Gelowicz**



A key component of the second generation of the HF series are the new machining units. The goal was to combine the benefits of the HSM spindles already known from the H series with the advantages of a motor spindle. The machining trials carried out so far and the technical data show that this has been achieved. The second generation of the HF series comes equipped with the newly developed HELLER Spindle Units [HSU] in in-line design. These spindles are 'Made by HELLER' and produced on the company's own high-precision manufacturing line.

HSU spindles are set to zero dimension, allowing quick and cost-effective replacement of the zero spindle if service is required, providing low Total Cost of Ownership [TCO] for the customer. Compared to the previous motor spindles, the HSU spindles are also more robust and powerful in terms of their machining behaviour. The new Power Cutting [PC] machining unit, for example, provides 12,000 rpm speed and 228 Nm torque in combination with an HSK-A 63 tool interface. The Speed Cutting [SC] version allows speeds of up to 18,000 rpm and 103 Nm torque combined with a short run-up time. The two Dynamic Cutting [DC] machining units are brand-new. The HSK-A 63 DC spindle has been specifically designed for a different workpiece spectrum, for increased universality and flexibility and provides speeds of up to 16,000 rpm combined with a high torque of 180 Nm whilst enabling up to 400 Nm in combination with an HSK-A 100 tool interface.

Another important factor in practical application or series production are the run-up times causing non-productive times. In this regard, HELLER has succeeded in achieving a massive reduction with the new machining units. Moreover, the different available versions Power, Speed and now PRO – for the second generation – provide the optimal choice for each application at hand.



New additional functions at the launch

The first generation of the HF series already provided extremely high milling stability and precision – also due to the counter bearing at the swivel rotary table. With the 'PRO' equipment variant, the second generation of the HF series also offers a classic gantry drive in the table axis [Z] with two physically separated axes in the control and two direct measuring systems. A major advantage resulting from the extra rigidity in the table axis is the ability to absorb maximum process forces in Z direction. This is a useful option, e.g. in combination with the high-torque DC machining units, or if the machining centre is to be used for more universal applications – for example, for single part manufacturing with maximum 5-axis precision and contour accuracy or, if it is planned to equip the machining centre with a turning function, using a high-speed rotary torque table. In addition to the gantry drive, the new HF series will come with further new functions at the launch, including the HELLER out-facing head system. An additional machine axis [U] integrated into the machine control allows easy and highly productive turning of complex inner and outer contours.

Productivity for universal and flexible applications

In addition to the benefits the new generation offers for series production, it also provides measurable advantages when used for single part manufacturing. In total, the new generation HF series will not only provide higher productivity and robust precision through its universal and flexible use but will also significantly expand the spectrum of potential buyers – especially as reliability and robustness have been increased through numerous optimisations and through increased rigidity of key components and shortening the distance from the spindle front edge to the rotary centre of the B-axis. Moreover, a design for table loading available in the future will make it possible to automate this series in an optimal way.



Strong partner with HELLER DNA



TEXT **Lukas Schult** Photos **Tanja Kasten**

The city of Metzingen in Baden-Württemberg at the foothills of the Swabian Alb mountains is primarily known as a shopping paradise. The self-named Outlet City with a population of 22,000 is home to numerous fashion labels, attracting more than 4 million fashion enthusiasts every year. Since autumn last year, it also has a used-machine outlet operated by STS Maschinendienstleistung GmbH. However, the company belonging to the HELLER Group has much more to offer than an attractive window display. We paid a visit to Marcus Genkinger and his team.

At the beginning of November last year, STS Maschinendienstleistungen GmbH (STS) located in Metzingen's industrial estate had cause for a celebration. With a two-day open house, the company successfully inaugurated its new used-machine outlet. The new showroom offers plenty of space and the perfect setting for the fully reconditioned HELLER machine tools to shine in new splendour. "A lot of hard work and extensive know-how goes into the reconditioning of each machine," explains Marcus Genkinger, STS founder and Managing Director.

Yet, before the process can begin, the machines first need to find their way to Metzingen. This is done either by purchasing them directly from the customer or via contacts at HELLER Sales. "We also have rental machines from the HELLER4Use programme."

Following a comprehensive incoming inspection, a decision as to what work is required is made on a case-by-case basis. One key area of the subsequent reconditioning work is the machine geometry, which is confirmed in a geometric protocol at the end of the process. "Moreover, we are able to respond to specific customer requests, for example, to incorporate additional options," explains Genkinger. Following final acceptance, the machine is transported to customer site for commissioning and on-site training of the operators. Furthermore, Genkinger and his team offer support in finding the right type of machine for the application in order to provide customers with the best possible solution in each case. In addition to the purchase, sale and reconditioning of used machines, STS also offers complete machine tool retrofits. For this purpose, the machine tool is dismantled down to the last nut and bolt, thoroughly cleaned and rebuilt from the ground up. "All parts affecting quality such as spindles or pallet changers are fully re-assembled. That is also why we provide a new manufacturer warranty at the end," explains the 54-year-old father of three.

Quite generally, Marcus Genkinger is a calm, level-headed and straightforward person. In 1983, he completed his Machine Fitter apprenticeship and then obtained additional qualifications as an Information Electronics Technician at HELLER in Nürtingen where he subsequently held a managerial position in the service department before going into business for himself at the beginning of the noughties under the name STS – Service, Training, Software. Initially self-employed, he founded a limited company in 2011 employing two staff. Since then, the company has seen continual growth and now employs approx. 30 people to support more than 300 customers from 22 countries.



Over the years, the company has steadily developed its range of services. Whilst initially the focus was only on machine service, the portfolio was later expanded by retrofits of used machines with the company developing more and more into a control technology provider offering everything from a single source – from planning, control cabinet construction and software development through to commissioning.

Another crucial factor for the company's success is the partnership with HELLER. As a part of the HELLER Group, STS is making a significant contribution to the overall development of the company. "To me, partnership is a give-and-take relationship. Loyalty plays an important role in this context. And this is exactly our experience with HELLER. My goal is to contribute to the success of the entire Group."



STS
Maschinendienstleistung GmbH



Hans P. Greising GmbH

being *right* at the heart of the game

Systematic, sustainable, in partnership – these values provide the foundations of HELLER's corporate philosophy. The HELLER distribution partners make an important contribution to implementing these values. The independent sales agency Hans P. Greising GmbH in Rottenburg has been a trusted partner of HELLER for decades, providing local contacts, customer proximity and optimal customer support in Baden-Württemberg. A partnership that brings added value to both companies because the brothers Peter and René Greising are true 'HELLER boys'.

TEXT Manfred Lerch PHOTO Jens Gelowicz

Following their vocational training in Tübingen, the two worked at the HELLER test department. They know the machines and identify with the HELLER brand. According to DACH Sales Manager Stefan Benz, this partnership is not limited to the sale of machines: "Our distribution partners are also brand ambassadors. They communicate our philosophy, the attitude towards customers and the high significance of service to HELLER. Some of our customers are very discerning, having very high requirements or expectations. Therefore, it is important to us for customers to have competent contacts that keep in constant touch with them, using the feedback they receive to shape our future."

The fact that the brothers Greising do this with pride and passion is illustrated by the continually growing market penetration and brand awareness throughout Baden-Württemberg. The two, for example, have succeeded in doubling the share of machines from the HF series sold. What is interesting about this is that the sales agency Hans P. Greising focuses on small and medium-sized companies, contract manufacturers and suppliers from almost all industries. With a 50:50 ratio of new customer acquisition and support of existing customers, their formula seems to add up.

Combined expertise and direct communication

HELLER thinks globally whilst providing a strong regional presence. For the region of Baden-Württemberg, this means that any feedback, market requirements or possible problems are collected and forwarded to the respective departments at HELLER. To René Greising it is the ideal constellation: "In practice, the focus is primarily on reliable machines and high outputs of the machining centres. In this regard, HELLER is clearly at an advantage. Already during the initial consultation, we are able to give specific guidance and make recommendations based on our experience and expertise. As far as automation solutions are concerned, we are on very good terms with the respective departments at HELLER. However, we only contact the individual technical departments when

details such as interfering contours need to be considered." This combined expertise and direct communication with Nürtingen also brings added value to existing HELLER customers, because the Greising brothers have a seat at the table and participate in Sales meetings whenever the technical course for the future is set. This puts the brothers right at the heart of the game. The same holds true when quick service support is needed in a specific case.



Delivering realistic data

Considering the many different industries HELLER works with, it can be difficult to implement technical requirements at short notice. However, that is not the task of the distribution partners. Rather, their task is to challenge pre-conceived opinions by convincing customers and overcoming preconceptions such as "HELLER machines are good, but we cannot afford them". In these cases, Greising

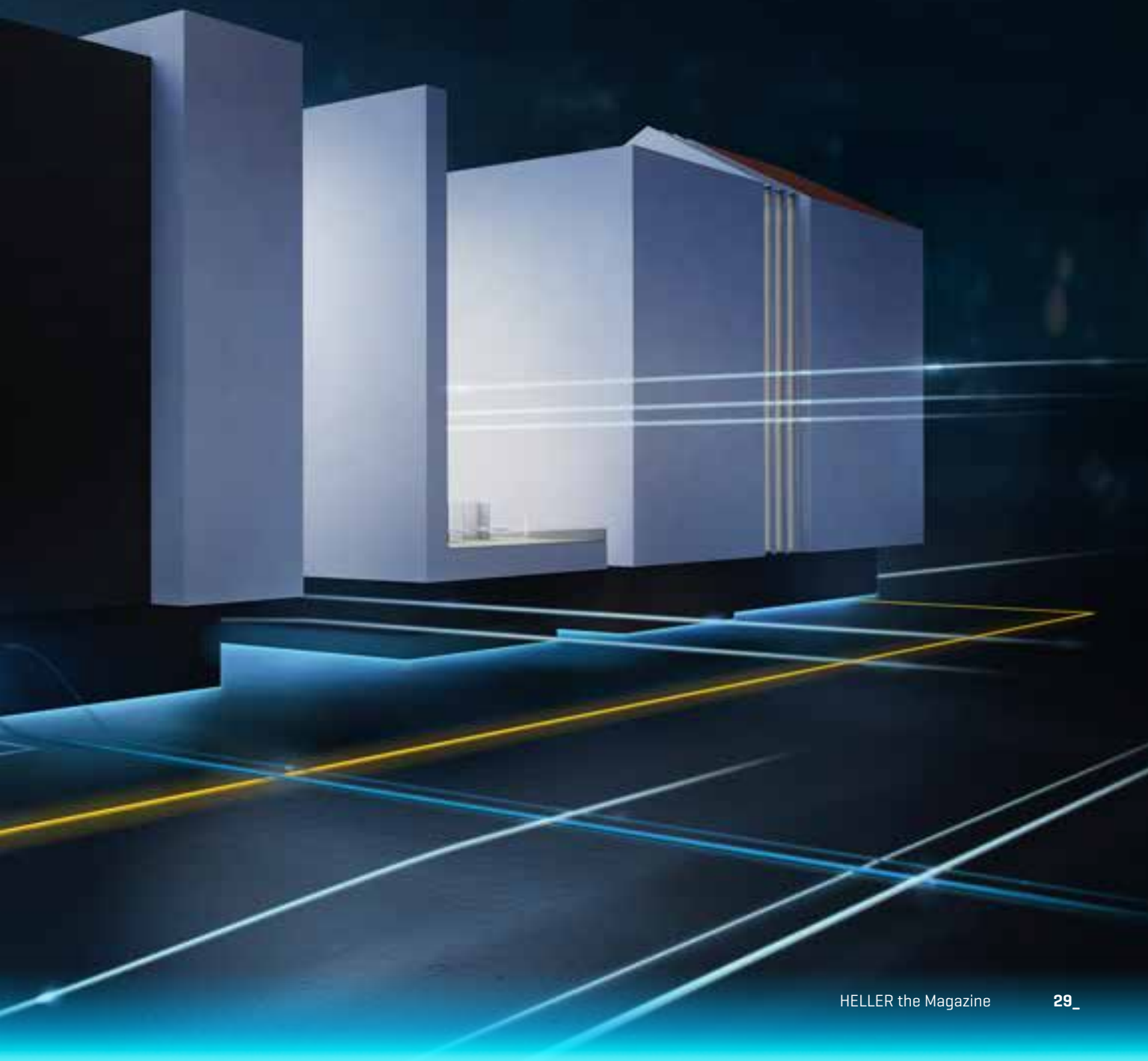
GmbH has to illustrate the benefits and to highlight potential future capacities. When a customer adds up all the benefits, the investment may be higher than with lower-cost machines, however, it quickly pays off in terms of quality, reliability and delivery capacity. Therefore, Peter Greising is quite clear when it comes to countering arguments that appear to argue against HELLER: "The HELLER genes are widely known today. Despite this, there are projects where we are competing against technical data that only exist on paper. In fact, theoretical data are not what is important. What matters is the output the machine is able to deliver and its degree of reliability and availability. In these regards, we are at an advantage, consistently delivering realistic data."

Sharing the same values

The collaboration with the sales agency Hans P. Greising is in accord with the HELLER corporate philosophy: systematic, sustainable, in partnership. Systematic, because they respond to customer requirements in a targeted manner, providing measurable added value. Sustainable due to the long life cycle of the machines and comprehensive after-sales support that also applies to service. And finally, in partnership between HELLER and Greising, characterised by trust, understanding and shared goals.

Connect to







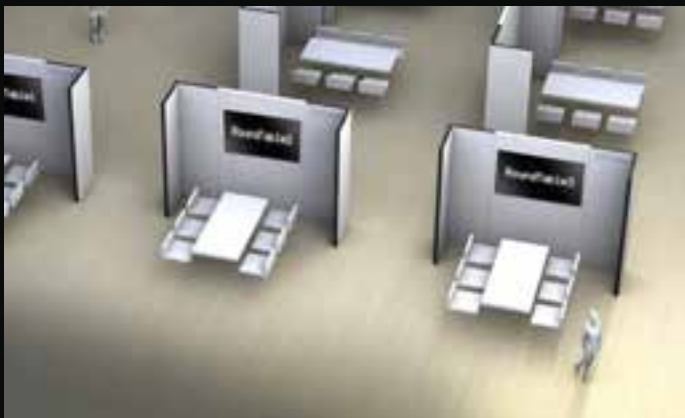
A new dimension of metal cutting

Time for a new generation of horizontal 5-axis machining centres: discover the evolution of our proven HF series in virtual format at V-CON – along with numerous possibilities to make your production even more reliable, more precise and more productive.

Expert know-how for your production

Several times a day, our TalkPodium will give you the opportunity to attend insightful and informative technical lectures live. Our digital event format allows you to ask questions in a simple and easy way during the presentation using the chat function and the speaker will answer them following the lecture.

You can view the programme online from October – and put together your own personal agenda with ‘must-see’ presentations for your visit.



From practice – for practice

Our RoundTables provide an opportunity for a live exchange on relevant topics from practice with selected industry experts and other users. Benefit from their real-life experience and the experts' assessment of your specific questions.

The scheduled discussion rounds will be available online from October. From then on, you will also be able to reserve one of the limited places and add the RoundTables dates to your agenda.

the world of

A virtual world full of solutions

We take networking to the next level – with V-CON 2020, our new virtual, interactive & international event format. Unlike the usual online formats, you will be able to move around freely through an interactive experience not bound to a specific location – at your own pace, on your own or together with a HELLER employee.

For this event, we looked at all the benefits of a physical trade fair – and have enhanced your experience using the digital format: save travel expenses, meet relevant contacts with just a few clicks, enjoy access to about 200 experts from HELLER and its partners and their know-how, communicate easily and efficiently via chat or [video] call, have direct access from the machine to related solutions, ranging from tooling through to measurement and inspection technology and automation, attend technical lectures and round-tables or join the discussion live – using these and other features to spend your time at the trade fair more effectively than ever.

Discover our virtual, multi-dimensional world of manufacturing solutions with the concentrated expertise from the entire HELLER network – and look forward to a unique trade fair experience.

f solutions





Services at your fingertips

Our services as you have never experienced them before. Our three-dimensional trade-fair world provides you with an overview of all solutions we offer to support you following the purchase of a machine. Seize the opportunity and let the benefits of the proven HELLER Lifetime Partnership convince you.

The all-round HELLER experience

You have always wanted to take part in a guided plant tour in Nürtingen? V-CON gives you the chance to do this. Our digital event format takes you on a virtual 360° tour through our headquarters. Join us and experience our 'Made by HELLER' quality seal up close.



Concentrated expertise from our network

Having understood the significance of synergies, we work with a number of strong partners to expand and complete our portfolio. Get to know the HELLER Group and our partner companies through their trade fair presentations at V-CON and initial discussions – and experience first-hand the added value our partnerships offer you.

Save the date:

10.-12.11.20

Register now:

www.v-con2020.com



HELLER China

An important location of the HELLER Group



China was the first country hit by the COVID-19 crisis. As the outbreak began in Wuhan, the city went into lockdown from 23 January 2020 onwards. In the following, the whole country went into suspension. As the virus spread to the rest of the world, billions of people were sent into lockdown. There were no relevant prior experience and plug-and-play instructions from any authorities under the unpredictable pandemic, so we tried our best to create the clarity and security for our employees and customers proactively. We closely connected with the local

government, customers and employees, fulfilled all the requirements regarding the travel restrictions, prevention materials, disinfection etc. HELLER received approval to reopen as early as possible on 13 February. Clearly, each local situation is different. Therefore, we adapted our recovery strategy according to location and constantly review our efforts. We use online tools to coordinate employees and partners and relocate labour flexibly to different activities. Under the low workload we also got the chance to develop our employees' professional skills with video and on-the-job trainings organized department by department. By the beginning of May we saw that the virus was under control in China. We admire the efforts made by the Chinese government and people. China is leading the economic recovery. Quite clearly, we expect the market in China to resurge soon and are underlining our commitment to the China and Asian market.

Andrew Parkin, CEO HELLER China



庚寅

1950

The first HELLER machine reaches China.



甲申

2004

The HELLER Shanghai Trading Company is set up in the Waigaoqiao Free Trade Zone.



己丑

2009

HELLER establishes the company's own Application Engineering and Technology Center as well as a local spare parts warehouse in Shanghai.



壬辰

2012

HELLER starts with the construction of a production facility in Changzhou. It is based in the dynamic Jiangsu market and intended to service our local Chinese and global partners.



In 1950, the first HELLER machine crossed the ocean and was delivered to a heavy-duty truck manufacturer customer in China. This was more than 65 years ago. Since then, HELLER has achieved a great deal, from the set-up of a representative office in China to the establishment of HELLER Shanghai Trading Company in the Waigaoqiao Free Trade Zone through to the construction of the Changzhou production plant. From the delivery of the first machine to currently 1800 machines running, it has been an extraordinary journey.

癸巳

2013

The Changzhou production site is officially opened. The wholly owned subsidiary HELLER Machinery (Changzhou) Co., Ltd. with 24,000 sqm plant floorspace has been the company's headquarters in China since June 2013.

甲午

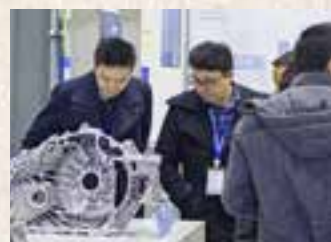
2014

HELLER starts the CBC machine production for Chinese and Asian customers at the Changzhou plant.

丙申

2016

In April, HELLER and Kennametal hold an open day at the HELLER Technology Center in Waigaoqiao. In June, another large open day is held by HELLER, STON, SECO, HAIMER and FUCHS at the HELLER Changzhou plant.



丁酉

2017

HELLER welcomes 120 guests from CRRC in Changzhou. Their visit provides a good start to setting up close relations with the Chinese locomotive company.

戊戌

2018

HELLER China holds a three-day automobile open day at the Changzhou plant. More than 300 customers and prospects from all over the country participate in the event. Government leaders are present to give a congratulatory speech on site.

己亥

2019

In order to meet the local market requirements, HELLER starts to assemble H 6000 machining centres at the Changzhou plant.



Concentrated expertise at close proximity

TEXT **Lukas Schult**

The most recent HELLER service base is located at the foothills of the Alps, with easy access to the Autobahn A8 close to the Inn-tal-dreieck and within easy reach of our customers in Austria. The new HELLER service base in Beyharting near Rosenheim was inaugurated at the end of 2019. A competent, experienced and reliable team under the leadership of Location Manager Patrick Klement offers customers from Bavaria and Austria comprehensive support in all service matters regarding the HELLER product portfolio from the Chiemgau region. You can find some facts and figures below. In our short interview, Location Manager Patrick Klement talks about what customers can expect from the new location.



Founded: 2019

Floorspace: 140 sqm

Management: Patrick Klement

Employees: 3 office staff and
7 service engineers

Services: full range from the
HELLER after-sales product portfolio

Responsibility: Bavaria & Austria
[excluding Vorarlberg]

Contact:

HELLER Services GmbH

Maxlrainer Straße 31

83104 Tutenhausen-Beyharting

+49 8065 90917 0

+49 8065 90917 2929

services.rosenheim.de@heller.biz

“The new service base helps us to stay in closer contact with our customers.”



Three questions for location manager Patrick Klement

Mr Klement, why was the Chiemgau region chosen to establish the service base?

When choosing the location, we primarily focused on being geographically in the centre of where our customers are located. Our goal was to provide all our customers in Bavaria and Austria with quicker on-site service.

What are the benefits of the new location to customers?

Apart from the geographical proximity mentioned, the additional on-site presence of HELLER in the southernmost DACH service region allows us to offer our customers enhanced and extended support. The new service base helps us to stay in closer contact with our customers. Having a service base in Bavaria also means that we are able to cater more closely to local requirements and allows us to make quick decisions together with the customers.

What do you expect from your local team?

We want our customers in Bavaria to feel well looked-after and well-advised. This applies to both the technical expertise of the service hotline and our service engineers as well as the on-site presence of the location's management.

Globally local:

Partnership as a key corporate value

An interview with Manfred Maier, COO of the HELLER Group

INTERVIEW **Lukas Schult** Photos **Tina Trumpp**

What does partnership mean to you personally?

To me personally, it means embarking on a common journey, sharing tasks and resolving issues together whilst experiencing joys and successes that I would not have been able to achieve without this partnership. Partnerships thrive on the fact that each partner benefits from the other.

How would you define partnership from the perspective of HELLER, especially in the global context?

In principle, my personal definition of partnership can also be transferred to the company. As part of an organisation, people working in a spirit of partnership go on a journey together pursuing a common goal. From the outside perspective, HELLER maintains long-term partnerships with customers and suppliers that form an important core element of our entrepreneurial activities. From the inside perspective, the various organisational functions of the company also act as a network of partners. Basically, the phrase 'a partnership is not a one-way street' also holds true in the corporate context. A partnership can only bear fruit when all partners are able to benefit from each other.

Today, we often hear the term 'global footprint'. What does HELLER's footprint look like and what are the benefits to the customer?

The HELLER Group has more than 30 sales and service locations around the globe. In the four main markets, HELLER additionally operates value-adding engineering and production locations. In Europe, this includes the company's headquarters in Nürtingen and our UK location. On the American continent, we have two plants, one in Brazil and one in the US, and finally, there is our Asian production location in China. This global presence allows us to maintain close local partnerships with our customers in the markets around the world. In times of national egoism and trade barriers, it provides us with an important degree of freedom and this advantage has gained an entirely new dimension through Covid-19 and the resulting travel restrictions.

To remain attractive as a partner in the long term, you should never be content to rest on your laurels but strive for continuous improvement. In recent years, the company has made major investments, among other things in the areas of production and assembly. How has HELLER responded to the changing requirements [digitisation, Industry 4.0 etc.]?

HELLER offers its customers a very broad product and services portfolio. In the global context, this implies a high degree of complexity. To harness this complexity, it is essential to provide the suitable assembly infrastructure as well as the right manufacturing equipment and IT systems and, last but not least, adequately qualified staff.

"Partnership is not a one-way street"

HELLER has massively invested in these areas in recent years. As far as assembly is concerned, for example, we opened a new hall in Nürtingen at the beginning of the year. In the UK, the flowline assembly has been optimised and our spindle manufacturing in Nürtingen has been transformed into a state-of-the-art spindle line. Our large machine types FP 16000 and H 14000 are assembled in Brazil and in the US, respectively. Meanwhile our patented CBC machines are also assembled in China. These examples illustrate quite clearly, what the global footprint means to us in terms of production and assembly.

Traditionally, all quality-relevant components of the machines are developed and produced in-house at HELLER. What does that mean for the partnership with customers and suppliers?

Mastering complexity always has to do with 'Knowing how it's done'. For more than a century, this has been the brand essence of HELLER. We derive this knowledge from our depth of added value. Additionally, this depth of added value provides us with the ability to respond effectively to external disturbances. Our expertise is an essential contribution to our partnership with customers and suppliers.

Let's come back to the inside perspective: internally, a globally operating company with production locations around the world also has to focus on a strong partnership-based cooperation in order to be able to operate in an efficient and future-oriented way. What makes the long-term collaboration with international colleagues so fruitful and valuable to HELLER?

HELLER is a family business. This is true not only on the shareholder level but also applies to the group as well as staff around the globe. Many employees – including me – spent a few years at another HELLER location or HELLER company, providing them with an opportunity to gain extensive intercultural experience. There are many international relationships and friendships across companies and borders. This practiced 'HELLER internal partnership' provides the basis for the partnership with customers and suppliers.



“There are many international relationships and friendships across companies and borders.”

Digital products from HELLER for the

transformat10n

bundled in the HELLER Services Interface

TEXT **Martin Ricchiuti**

Since the beginning, HELLER machine tools have been setting new standards in terms of cost-effective machining. The powerful machining centres are known for their exceptional efficiency and reliability, providing solutions at the highest technological level. The Digital Transformation, in which HELLER has taken a pioneering role for itself and its customers, creates the preconditions for further efficiency gains throughout the entire manufacturing situation. It allows us to push the boundaries in terms of output and quality objectives whilst easing the load on the operators.

However, there is no digitisation without data. The search for the cause of a failure or quality problems is no easy task, especially when several machines are connected to form an integrated system or a manufacturing line. In these complex, often automated processes, such issues are no longer ascertainable from the machine operating perspective alone. The same applies to the identification of optimisation potentials. Therefore, a holistic networking approach is needed in order to collect and analyse the necessary process data and to subsequently derive specific steps of action on shopfloor and control centre level.

"Quick wins give the people responsible for manufacturing a strong motivation to drive their digitisation projects forward and to convince both internal and external stakeholders. The tools from the HELLER Performance area are particularly useful for this purpose," explains Bernd Zapf, Head of Development New Business & Technology. "However, optimisation that goes beyond the capabilities of the individual machine tools can only be achieved by applying the HELLER4Industry concept, comprising several consecutive and interlinked areas of action: Operation, Maintenance and Performance." Adaptation to a variety of manufacturing situations leads to the optimal level of productivity based on the same pillars including the reduction of idle times, flexibilisation of use in favour of utilisation and ease of operation.

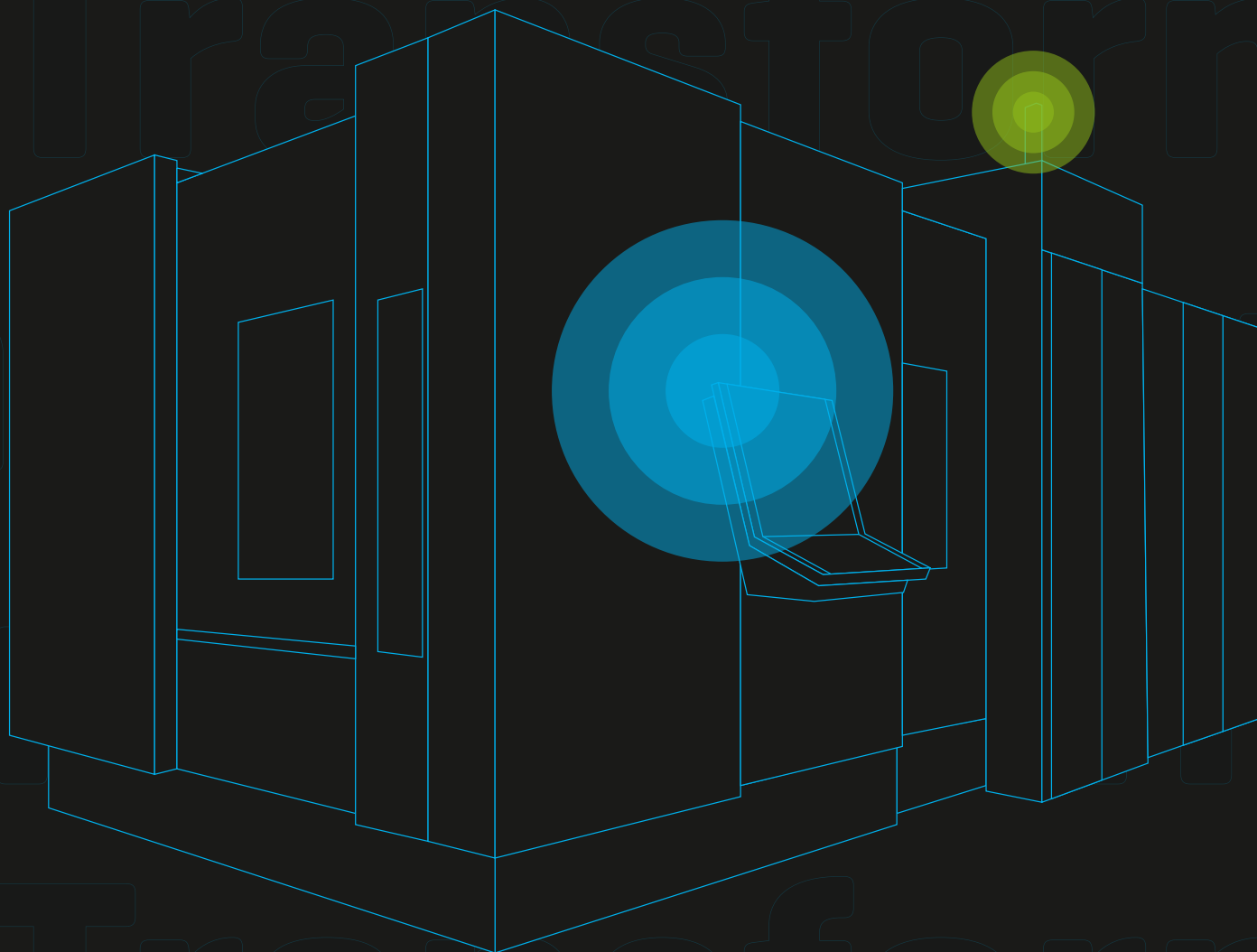
The increase in efficiency results from the interpretation of the data recorded. Through numerous OEM projects, HELLER has already gained outstanding expertise in this key area.

"Within the optimisation cycle, we are passing on this knowledge library to the users. Through trend analysis, for example, we enable them to avoid standstills, to recognise reserves and to parallel operations. This also includes the predictive set-up of the machine for the follow-on job."

Focus on the customer benefit unit cost reduction

Basically, all sub-steps on the way to digitisation must be judged against the customer benefit. To reach the overall objective of a unit cost reduction on the customer's behalf, HELLER uses digital optimisation tools from the areas of Performance, Operation and Maintenance to create the best possible triad of productivity, quality and availability. This already shows that the task fields vary greatly depending on the position of the employee responsible, accordingly changing the perspective on the respective production step. Apart from production data acquisition, which provides the data basis, HELLER has developed areas specifically tailored to the various requirements of the protagonists. This includes derivations regarding the maintenance condition and servicing throughout the life cycle of the system [Maintenance], process and production optimisation [Performance] and monitoring of product quality, the machine and the energy required [Operation].

HELLER acts as the general enabler throughout all value creation stages of manufacturing because today's machine tools provide all the networking implementations to guarantee an orderly flow of information. This also applies to machines from other manufacturers, which can be integrated into the network in the same way using *umat*, the future communication standard for machine tools.



“Aside from the hardware, the digitisation tools also play a major role,” explains Bernd Zapf. “HELLER4Industry works like a control loop, helping users at many different points to exploit the full scope of the theoretical potentials in practice. Only then, a HELLER machine can play to its superior strengths in an even more impressive way.”

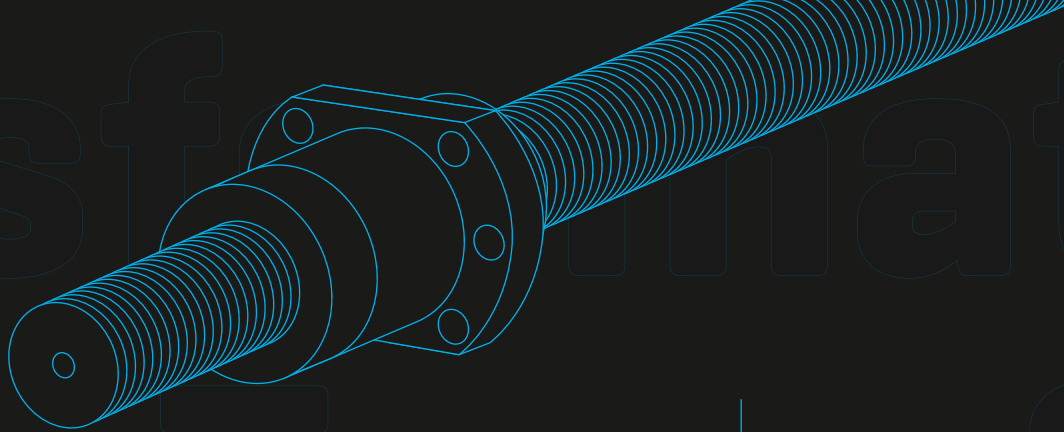
Easy operation or the focus of the application on the task at hand, respectively, is the decisive factor for user value in practical application. Browser-based visualisation enables users with an internet-enabled device, e.g. a smartphone, a tablet or a PC, to retrieve the appropriate evaluations or information from any location and to share them with colleagues. With HSI, the HELLER Services Interface, HELLER has created a unique platform for this purpose. It serves as the user's interface to the individual applications as well as a docking point for the wide range of HELLER services. It is up to the user to decide whether data will be extended to the cloud for a more in-depth analysis or if they remain local. When data leave the local HELLER Services Interface following data synchronisation via the local IoT operating system to the company server or the SIEMENS MindSphere on the internet, then an additional machine comparison of the machines in the company network or on the internet across several locations is available. Adaptation of the HSI on machine level, company level or across a group of companies takes account of the preferred network situation.

HELLER4Industry Connect for a scalable entry into digitisation

The entry into networking is very easy with HELLER because all modules and their interaction are validated by the manufacturer and available from a single source. Level 1 requires the Edge computer [SIEMENS Sinumerik Edge] for data storage and pre-processing, HSI local with basic functionalities, including machine overview, performance, operation and maintenance monitor, as well as the Production Analysis [PA] tool. With this configuration, all data and insights gained remain inside a database integrated into the machine, and thus inside the company, and are used for the individual optimisation of the ongoing production.

The integration of MES and ERP becomes a simple routine

On the next integration level, HELLER tackles the issue of data exchange between the machine and higher-level control systems such as MES and ERP. HELLER's use of the standardised VDW MDA/ PDA data interface with umati [universal machine tool interface] based on the OPC-UA standard guarantees seamless communication across machines from different manufacturers within the predefined scope. The umati standard makes the implementation of umati-conforming MES and ERP solutions especially convenient, eliminating the need for extensive programming.



Axes Condition AC

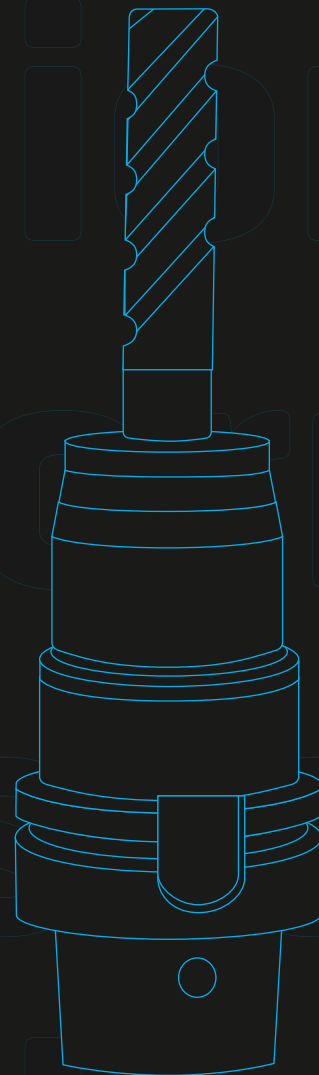
Without requiring additional sensors, this functionality allows to identify the degree of wear of the main axes ball-screw drives in the feed movement and thus early recognition of a loss of quality.

Spindle Condition SC

Continuous monitoring of the spindle during the machining process using a vibration sensor provides permanent process monitoring and allows to identify the degree of wear of the spindle bearing. Overloads can be detected reliably. Both measures contribute to the goal of reducing unscheduled standstills.

Tool Optimization TO

An integrated tool monitoring function protects the tools and optimises tool life. Data recording and analysis help to optimise tool usage, allowing to predict the end of tool life in the best possible way using trend analyses. Tool overload or breakage is prevented, which, in sum, has a positive effect on tool costs. The available Integrated Process Monitoring IPM can be added as an upgrade to provide dependable detection of overload and breakage and thus to reliably determine tool wear.



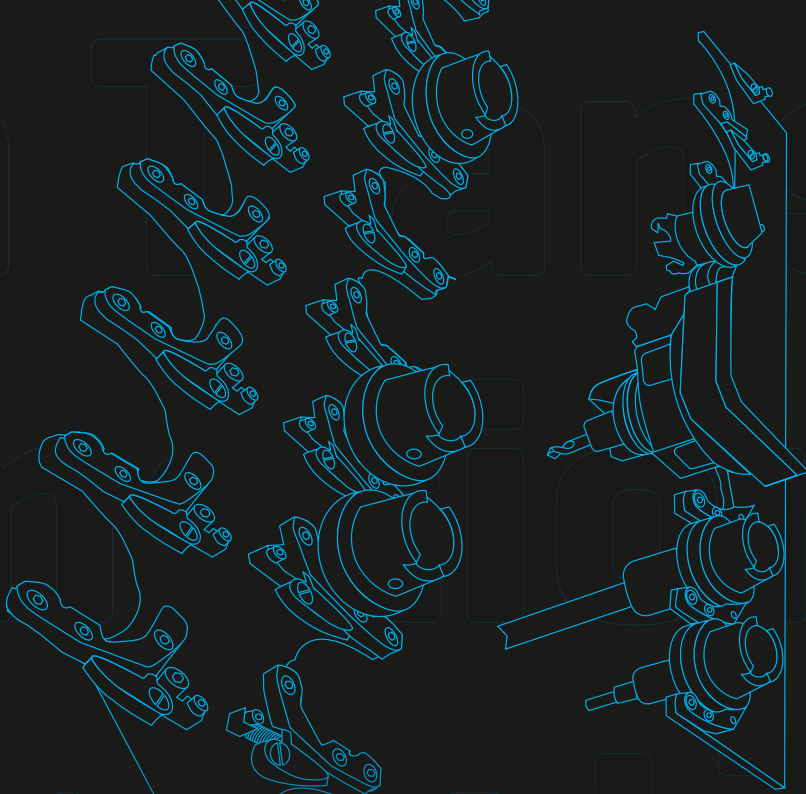
The HSI modules at a glance

Depending on user requirements, optional services and functionalities from the individual modules can be combined. This allows to design scalable solutions tailored to individual requirements. In the local HSI configuration (without cloud connection), the following functions can be selected.

Damage Reduction DR

Reduces the risk of damage to the components in case of a spindle collision by immediately reversing the direction of the drive axes. As a result, the potential damage is minimised.





Magazine Optimisation

The Magazine Optimisation performance tool already presented in previous issues will be available to users in the fourth quarter. The pre-sorting of tools in the rack-type tool magazine in the machine according to the follow-on manufacturing job makes tool change faster and more efficient. The optimal storage location assignment results in shorter program runtimes and traverse paths. To achieve this, the function accesses the upcoming CNC programs for analysis.

Energy Monitoring EM

Continuous monitoring and clear visualisation and recording of the machine's energy consumption can help to identify anomalies more easily and can contribute to energy savings. The breakdown of consumption rates according to operating mode and source (electricity and air) is essential for early detection of problems and can also be used as a basis for future energy audits.

Also at



New Dimension
V-CON 2020

The future is already here

The new HELLER4Industry products impressively demonstrate the high value of process and machine data, when they are aggregated and evaluated productively. With its comprehensive portfolio, HELLER demonstrates how digitisation and networking are currently pervading the key areas of manufacturing. Closed data circuits provide the users with those customised functions and visualisations they need in practical application. From the design to job preparation and production through to related fields of activity such as maintenance and servicing: HELLER customers can rely on future-proof manufacturing taking into account all technical and organisational perspectives to continually push the boundaries of performance in order to increase output and quality levels whilst taking the load off the operators.



MARKET

what m

oves us

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Making optimum use of information from the manufacturing process with the EROWA web app

Mastering the manufacturing process from every point of view

EROWA turns the Smart Factory into a reality

The 'intelligent factory' is no invention of our time. However, today's information processing technology allows to create solutions our forefathers could only dream about. For more than three decades, EROWA has been using the Flexible Manufacturing Concept (FMC). With this type of production system, you are able to know where each workpiece is located in the manufacturing process at any time. As a result, idle times are reduced and manufacturing quality is improved while flexibility remains at a high level also by using automation. Or, in a nutshell, already at the time, we anticipated today's Smart Factory.

Manufacturing process

Depending on a person's function, this term means something different to them. In procurement, the focus is on the availability of raw materials, people in production planning are concerned with delivery deadlines and the available production hours, while the machine operators have to keep an eye on the NC programs, the tools inside the tool changer, control measurements, completion dates and quality control. The interplay between the EROWA FMC concept and its many components ensures that all the necessary information to fulfil these needs is constantly available.

Partner

The two independent, family-owned companies HELLER and EROWA successfully apply the FMC philosophy. Customers directly benefit from the companies' short decision-making channels and cooperative partnership. Flexibility and trust on both sides enable the efficient implementation of complete turnkey systems based on customer requirements.

An example:

A HELLER customer wants to automate the company's production milling machine. The goal is to be able to manufacture small batch sizes and even individual parts in unmanned production. If successful, it plans to integrate a second machine into this process. The suitably chosen EROWA robot provides the pre-requisites for the envisaged system. The sheer limitless possibilities allowed to create

a manufacturing cell precisely tailored to the initial requirements. Already in the first project phase, the potential expansion is taken into account. As part of this, the existing investments are re-used, resulting in reasonable further investment costs.

Networking

A manufacturing process generates a mass of information, including CAD data and CAM programs calculated for specific machines. Then there are deadlines, quality measurements and evaluations, tool data, process times, individual operations, feedback into the ERP system and much more...

Based on the FMC philosophy, these and other data are collected and visualised in a clear and comprehensible manner. Responsible for this is the JMS 4.0 software. This part of the FMC system products is also configured to suit the initial requirements and can be expanded with increasing demands on the system.

Benefit

The amount of production-relevant time that can be realised on a machine without automatic loading is often underestimated. In manned one-shift operation, the full FMC technology helps to achieve a productive availability of well over 90 %. The closer the machine manufacturer and EROWA work together, the faster and smoother this goal can be implemented in everyday production. The beneficiaries of the FMC concept receive an intelligent system for their manufacturing process providing ease of operation.



Project at SPÜHL: EROWA automation of a HELLER HF 3500 APC



EROWA is known for its innovative clamping systems and loading solutions and, with the FMC concept, offers its customers much more in terms of productivity than is apparent at first sight.

Throughout the past 50 years, EROWA has successfully helped customers to increase their productivity based on the FMC philosophy. Already in 1987, the company realised that automation of small series and single part production would be a key to success. Since its inception, the 'Flexible Manufacturing Concept' (FMC) has been continually developed and implemented.

With 550 staff worldwide, a substantial number of them working in R&D, EROWA continually drives the FMC philosophy forward. In close cooperation with machine manufacturers, the company develops solutions that always go beyond expectations.

EROWA® 
system solutions





AAM delivers POWER that moves the world. As a leading global tier 1 automotive supplier, AAM designs, engineers and manufactures driveline and metal forming technologies that are making the next generation of vehicles smarter, lighter, safer and more efficient.

Headquartered in Detroit, AAM has approximately 20,000 associates operating at nearly 80 facilities in 17 countries to support our customers on global and regional platforms with a focus on quality, operational excellence and technology leadership.

Collaboration with HELLER

Over 20 years ago, HELLER and AAM began a relationship which they deepened as AAM grew global operations into new markets including Mexico. HELLER was AAM's choice for all prismatic cast iron machining that the company launched for heavy duty pickup trucks for GM and eventually FCA.

According to Tom Szymanski, Vice President of Global Manufacturing Services, American Axle & Manufacturing, Inc. has the full gamut of HELLER equipment, H 4000s, H 4500s, H 5000s, and is still running some 20-year-old MCPs "that are still running really well and making quality parts".

For further information go to: www.aam.com



®



Successful in the US

"We have always had good service support from HELLER, anywhere on the globe."

"When we upgraded to the HELLER equipment and technology, we saw a dramatic improvement in the quality of our carriers for front and rear axles which was our bread and butter business at that time, and along with this improvement came a big improvement on Ring and pinion replacement warranty for the OEMs."

"When you are hogging off and cutting big cast iron carriers day in and day out, 24 hours a day for 6+ days a week and the machines hold up for 15 plus years, I think that speaks for itself."

"The other machines' controls became obsolete in terms of electronics and capabilities as new technologies were deployed. So, the reliability of the HELLER equipment was a definite strength over other suppliers."

"HELLER has always built high-quality machines and from our experience, the HELLER machines have mechanically outperformed the rest of the [other branded] machines."

partnerships



"HELLER has always been very flexible when working with CAT. HELLER takes the time to develop the processes with our engineering teams to make sure the processes are seamless. This is unlike the other machine tool OEMs that have told CAT, 'this is the process you are going to use', which has not worked out in the past."

"HELLER knows the diesel industry very well which allows HELLER to bring processing strength to the table. The trust in expertise is a big factor in the partnership."

"HELLER machines are more heavy duty than competitors' machines. The flexibility of being able to use the machines as stand-alone, gantry loaded, robot loaded etc. is a good advantage."

"The partnership with the process design is a big advantage – this is a lot better than when the machine builder just hands you a machine and says, 'have at it'."

"Before introducing HELLER, the machines were manually loaded commodity machines and specially designed transfer lines. The key benefit of the HELLERs was still the gantry loaded automated processes, but with the flexibility of having machining centers mixed with specialized machines to keep throughput high and have the ability to adapt the equipment to new or different processes. There was not the flexibility we have now since bringing HELLER machine solutions into the plants."

Since 1925, Caterpillar Inc. has been helping the customers build a better world – making sustainable progress possible and driving positive change on every continent.

With 2019 sales and revenues of \$53.8 billion, Caterpillar is the world's leading manufacturer of construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives. Services offered throughout the product life cycle, cutting-edge technology and decades of product expertise set Caterpillar apart, providing exceptional value to help their customers succeed. The company principally operates through three primary segments – Construction Industries, Resource Industries and Energy & Transportation – and provides financing and related services through its Financial Products segment.

Collaboration with HELLER

Caterpillar's sister machining facility in San Antonio, Texas that also machines heads and blocks has been utilizing HELLER machines since they opened in 2003. The Schertz team has been producing HELLER machines since they opened the facility in 2011.

For further information go to: www.cat.com



A shared philosophy for the perfect picture

TEXT **Lukas Schult** PHOTOS **Sebastian Grenzing**

Every photographer and camera enthusiast should know the small town of Feltre in Northern Italy in the province of Belluno. Not only because the historic upper part of the town is picturesquely nestled into a hillside and located in a gorgeous, lush valley on the foothills of the Dolomites. It is also home to one of the world's most renowned manufacturers of camera accessories. For 45 years, the company Manfrotto, now Vitec Imaging Solutions, has been synonymous with highest quality in the production of camera tripods and other accessories for photo and video production. For ten years now, Andrea De Danieli has been the Head of Industrial Engineering and Facilities in Feltre, employing approx. 400 staff producing all key components of tripods in a wide range of different sizes. However, this supposedly simple product does not only comprise countless individual parts, but also requires extensive know-how, innovative spirit and a charismatic tinkerer, who is responsible for a total of seven production workshops covering 40,000 sqm floorspace, to which a HELLER HF 3500 was added last year.

The Pioneering Lab as a factory in the factory

At the beginning of 2018, the people at Vitec Imaging Solutions decided to set up a Pioneering Lab, a dedicated area for manufacturing the latest developments for testing at the customers. "It took us four months to clear, refurbish and set up the hall," explains Andrea De Danieli, who was the originator of the project. "In here, we produce new products and developments in small volumes which we will then test in the market. We see the lab as a mixture of prototype construction and series production. It practically is a factory within the factory that operates independently of the rest of the production," De Danieli continues. The graduate electronic engineer will eagerly and enthusiastically show people visiting the facilities around his department and they will realise immediately that the company develops and produces high-tech equipment at the factory. The innovative spirit can be felt throughout the hall. High, light-coloured walls, shiny white floors, ample space to experiment and in the centre of it, the HELLER 5-axis machining centre model HF 3500. These are the ingredients for the tripod pioneers at Vitec Imaging

Solutions. "Everything was new to us. This area was supposed to be completely different from the others, the strategy was new to us and so was 5-axis machining. However, it all fell into place perfectly," says De Danieli.

The HF 3500 provides a highly productive overall package

The HF on site is used for the production of the first two different products that subsequently have to undergo market testing. In the first six months, for instance, the company machined an innovative camera head at the facility in a volume of 3000 pieces. The machine in Feltre is equipped with a pallet changer and a rotary load/unload station with CAD/CAM technology and a Balluff sensor system for automatic tool recognition. The motor spindle





with HSK-A63 spindle taper provides 47 kW drive power, 100 Nm of drive torque and generates a speed of 18,000 rpm. Moreover, the torque drives in the A axis and C axis equipped with counter bearings ensure the machine's high level of productivity. The tool magazine of the HF 3500 at Manfrotto has 80 storage places.

What convinced De Danieli was not the feedback from other Italian users, but a visit to HELLER in Nürtingen, Germany. "What sparked my enthusiasm was the 'HELLER made by HELLER' concept that matches our philosophy." Anyone who talks to Vitec Imaging Solutions' 'Gyro Gearloose' will know immediately why the concepts are such a good match. The Engineering Manager is an

inventor and developer of complex production machines himself. His machines are used in the cutting of the tripod legs and the painting of the finish-machined parts. "We plan, design and manufacture our own machines for production. That is a major competitive advantage of ours and I am convinced that it is extremely important for our status as a leading innovator," he explains. Therefore, the engineer is very discerning when it comes to buying new machines. "The HELLER machine is a highly precise machine, guaranteeing the highest quality, also for our customers." And if ever service support is needed, the HELLER RDS remote diagnostics included in the package ensures quick troubleshooting and fault rectification.

De Danieli is what would these days be called an innovator. He travels widely throughout the world, always looking for new trends and technological developments. Although he is not a member of the R&D team, his opinion is heard and greatly valued. "I am always involved in the brainstorming sessions of our R&D department," says the tinkerer who – what is hardly surprising – is a major photo enthusiast himself. At the beginning of his 20s, he started photography as a hobby. Only ten years ago, when he came to Manfrotto, he became involved in photography on a professional level. "My job has given me the opportunity to meet the most important and best-known photographers in the world and to go on a photo tour with them. That has been a really unique experience." As a result, the feedback received from customers can be directly incorporated into production. After all, there are high requirements on tripods. They have to ensure high stability and low vibration in order to guarantee perfect picture quality. This absolute requirement on highest quality fits in perfectly with HELLER's goal to always offer customers the best and highest-quality solution for their individual manufacturing tasks. Translating this into steel, iron or carbon is more than just work to Andrea De Danieli: to him, it is sheer passion. "I don't like my job, I love it."

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Among professionals

Learning for life: at the Nürtingen headquarters, HELLER has concentrated its entire spectrum of manufacturing systems for metal cutting applications at the long-standing industrial training department. With its integrated training concept of the 'Teaching and Learning Factory', the family enterprise has positioned itself as an innovation leader – not only in the key industry of Mechanical Engineering.



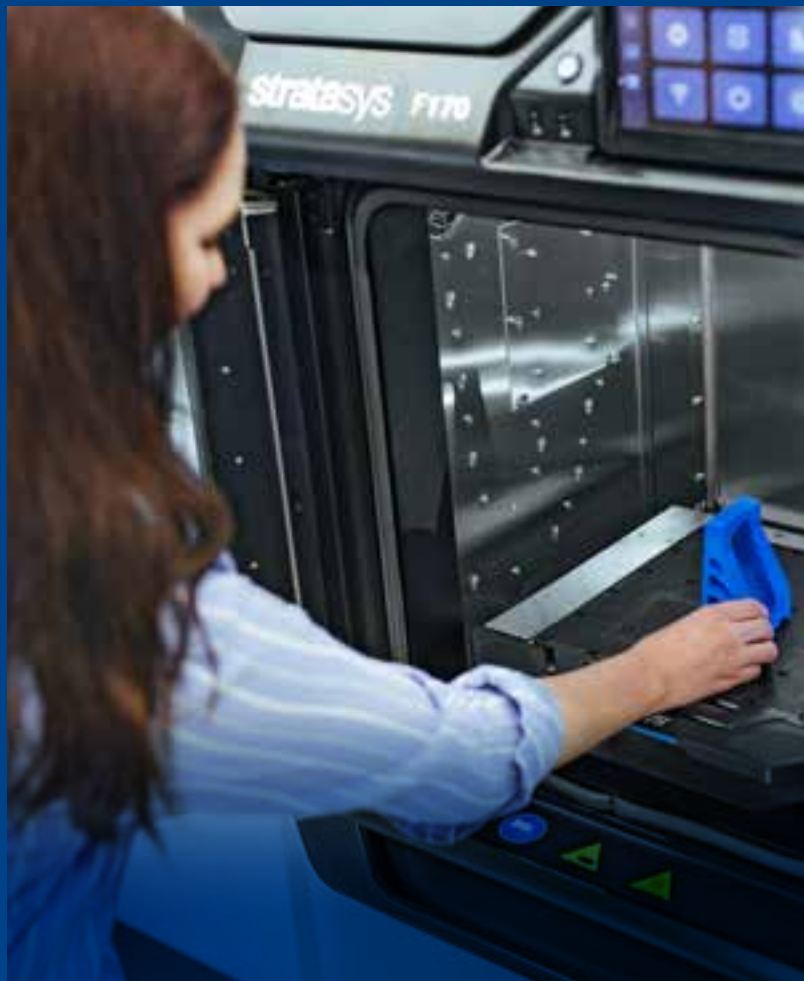


Visitors entering the light-flooded foyer at the HELLER main entrance in Nürtingen are invited to step right into the heart of it. From here to the right is the TechnologyCenter, a kind of showroom, where the long-established company's latest CNC machine tools and manufacturing systems for metal cutting applications are exhibited, including 4-axis and 5-axis machining centres, mill/turning centres, special-purpose and process machines, coating modules or machines for crankshaft and camshaft machining.

Turning left leads you into a space that provides the foundations for all this high-tech equipment. A placard at the entrance welcomes visitors to HELLER's vocational training facilities. The picture on it shows young people smiling widely and wearing the blue HELLER gear together with their instructors. Accepting their invitation into the company's education centre is well worthwhile. The vocational training offered by HELLER is unique and each year attracts potential apprentices and students from all over the world, wishing to learn more about the award-winning, holistic training concept.

At the entrance, we are greeted by Martin Schmeckenbecher, a friendly and approachable Swabian with a pair of bright eyes and a well-groomed beard sprinkled with grey. The 49-year-old has been Head of Vocational Training at HELLER in Nürtingen since January this year. He obviously finds it difficult not to be able to shake hands in times of Corona. "I like people," he says, raising his hands apologetically. It is obvious that the trained steel fitter breathes enthusiasm for education and life-long learning. He explains that he completed a number of extra-occupational qualification measures before graduating as Master of Technical Management, always with the goal to work in vocational education. "I like to be in close contact with the young people to spark their enthusiasm for their professions."

The HELLER headquarters in Nürtingen offers excellent prerequisites in this regard. The company's own training workshop has grown over time and today, between 30 and 40 young people start their apprenticeship or degree every year.



“Even the grannies understand that their grandchildren are in good hands at the HELLER training department and headed towards a bright future.”

Training courses with a future

The company offers a broad spectrum of professional training courses, ranging from Industrial Mechanic and Metal Cutting Mechanic to Mechatronics and Electronics Engineer for Automation Technology through to Technical Product Designer specialising in machinery and equipment design. Furthermore, the company offers a number of work-study programmes focusing on Mechatronics and Mechanical Engineering.

“Experts don’t grow on trees nor do they fall from the sky. They have to be educated and trained on an ongoing basis. Having skilled workers determines the economic efficiency and success of the machines,” explains Martin Schmeckenbecher, putting the

HELLER vocational training philosophy in a nutshell. The HELLER ProfiTrainer (PT), a miniature version of a large CNC machining centre built completely by the apprentices throughout the course of their education, helps to pave the way towards accomplishing this goal.

“The stations of the PT 16 reflect the entire process chain of modern machine tool engineering. From basic training to product design, mechatronics and metal cutting through to electronics, logistics and assembly – all of these aspects converge in the ProfiTrainer,” explains Schmeckenbecher. “As a result, the apprentices learn to keep an eye on the bigger picture and to think for themselves from the beginning.”

Women on the up and up

One of the apprentices is Despina Lang. The 24-year-old is in her second year of training to become a Technical Product Designer specialising in machinery and equipment design. "After finishing school, I went to university to study Civil Engineering, but I quickly realised that I was more interested in machines," she explains. "I really enjoy 3D construction of large, fascinating machines and their components – especially using advanced, future-oriented technologies – for example, integrating virtual and augmented reality into the development process."

Having to stand her ground in a working environment that is still very much dominated by men is not a problem for Despina Lang. She explains that after all she comes from a family of artisans: her grandfather was a carpenter, her father is a trained electrician and her mother a tailor. Moreover, she has been a squad leader in the voluntary fire brigade for many years and is therefore used "to working with heavy equipment and seasoned men."

Real training for real life

Philipp Scheuerle is also passionate about technical innovations. He is 18 and in his third year of apprenticeship to become a Metal Cutting Mechanic. A demanding training profile. Apart from computer-controlled turning machines, these professionals also operate milling and grinding systems for the manufacture of precision components. They master the entire manufacturing process, the selection of the machining process and the set-up of the CNC-controlled machines.

"I had looked at many different professions before starting my training. I always liked milling and turning best," he says. "The workshop is an excellent place to learn these skills. One of the reasons is that the educational concept of HELLER's Teaching and Learning Factory covers HELLER's entire field of activity". For the components of the PT 16, he uses the 4-axis machining centre model H 2000, one of the most advanced machining centres at HELLER. "This is superior technology," he says appraisingly, explaining that it was OK to make mistakes now and then, which he believes is right and also important. "It makes you feel more confident when approaching new things."

Scheuerle feels that his profession is in the middle of a transition. The digitisation of milling and turning processes is progressing rapidly. Apart from craftsmanship it now also involves a substantial amount of data processing, machine programming and virtualisation. "I really enjoy it and it is also forward-looking", says Scheuerle.



From Fischertechnik to ProfiTrainer

Right next to the Machining Unit is the training area for the Electronics Engineers. The smell of tin-solder is in the air and cables and connectors are placed within easy reach. Axel Schäffer is completing an apprenticeship as an Electronics Engineer for Automation Technology at HELLER. The 19-year-old is in his third year of apprenticeship and moves around the training department with great confidence, almost like an 'old stager'.

He clearly enjoys his tasks. "My father also works as an Electronics Engineer at HELLER. As a little boy, I loved the Fischertechnik kit with a programming set he gave me for Christmas," the apprentice recalls. It seems the decision to opt for this particular apprenticeship was already set out for him.

"Working with machines and taking care of the electronics and their complex control is an extremely varied task," he explains. Following his second year of apprenticeship, he had the opportunity to gather some hands-on experience in day-to-day work practice in automation technology. Despite this, the protected learning environment provided by the HELLER training department is still something he greatly appreciates: "I learn the most whenever we encounter problems throughout the assembly of the PT 16 and manage to solve them with the assistance of the Foreman and the Training Supervisor. Having fixed a problem feels really great."



Axel is a team player and likes the fact that the different crafts involved in the construction of the ProfiTrainer work hand in hand within a confined space. "We often sit together to think about what we could do better." According to him, this helps them to know each other's skills better and gives them the assurance that they can rely on each other.

To Training Supervisor Martin Schmeckenbecher, the training concept of the Teaching and Learning Factory using the ProfiTrainer is a success. "The ProfiTrainer helps us to show the apprentices how the individual process steps and qualifications interlock and what this means for each of the professions." It allows to illustrate and discuss all correlations within the value-added chain and throughout all the manufacturing stages, providing an opportunity to experience the overall purpose of the company. "We do this in a way that makes everybody understand what we do: the applicants, the parents, the Chamber of Industry and Commerce as well as our customers," says Schmeckenbecher, adding in a tongue-in-cheek manner: "Even the grannies understand that their grandchildren are in good hands at the HELLER training department and headed towards a bright future."

99 Endless potential

At the HELLER headquarters in Nürtingen, the company operates its very own 'Teaching and Learning Factory' for students and apprentices in various professional fields based on a pioneering educational concept. Why make this kind of effort? We asked Martin Schmeckenbecher, Head of Vocational Training at HELLER.

Mr Schmeckenbecher, how important is vocational training to HELLER?

Training is the beginning of everything. Therefore, it is of paramount importance – to the company, but also to our society and our entire educational system. Learning and development always belong together. Even the top decision makers once started their lives' journeys and professional careers being learners. Therefore, training and education are always an investment in the future.

What do you expect from the apprentices?

To me they are uncut diamonds. Primarily, our team of instructors expects them to be curious and willing to meet the challenges of our time. However, every generation of apprentices is different. Ten years ago, young people would still ask us "What profession should I choose and how can I get there?" while today a question we are asked increasingly is: "Why am I choosing a particular profession and what other career paths can I take from there?"

Where does this change in perspective come from?

The economy and our society are dynamic systems that are constantly changing and adapting to new overall conditions. Digitisation or the increasing interconnectedness of all areas of life and work have become important factors. As a company that trains young people, we have to ask what the apprentices bring with them from school and their social environment. Vice versa, we have to tell the apprentices and their parents why specific professions are meaningful and important in these transformative times.

How do you see your role as the Head of Vocational Training?

A significant part of my role is to provide information and to be a mediator: between the young people, the schools, their families, the Chamber of Industry and Commerce with its examination requirements and us as the training department. Moreover, we sometimes have to remind the 'old-stagers' in our company that they were apprentices once themselves who were not only eager to learn but also to make a difference and to change things. As in all areas of life, the important thing is to listen to each other.



What advantages does the concept of the Teaching and Learning Factory provide?

Our training facilities combine traditional craftsmanship and mechanics with diverse aspects of Industry 4.0. Manual filing, turning and drilling are just as much a part of it as digitised manufacturing processes, 3D printing, the use of VR and apps or networked actuators and sensors. This makes the Teaching and Learning Factory a very effective instrument for providing a modern, contemporary education. This is how we keep up with the future.

And what about the Coronavirus pandemic? Does it affect vocational training?

It is hard to predict when and how the economy will recover from the crisis. Investing into a thorough education when times are tough is an important stepping-stone into a brighter future. We have integrated the hygiene and social distancing rules and are deliberately not cutting back as far as the quality of our vocational training is concerned.

Where is the HELLER training department headed?

'Beim HELLER g'lernt' [apprenticed at HELLER] is a trademark known far beyond our region that provides endless potential. The fact that our vocational training concept based on the ProfiTrainer focuses on a high-tech product, reflecting the entire quality of the company, is a unique characteristic when it comes to finding and retaining the most brilliant minds for the company.



PUSHING

TEXT **Marcus Schick** PHOTOS **Sebastian Grenzing**

To ensure that machines and systems newly conceived and designed today will continue to run reliably tomorrow and beyond, the research and development of machine tools above all requires plenty of patience, instinct and a meticulous attention to detail. At HELLER, R&D Evaluation and Optimising combines a theoretical and a practical approach. Being inconvenient is part of the concept as well as a matter of honour.

Tool clamping must be able to withstand high loads. A million times, the inconspicuous spindle component is subjected to compressive and tensile forces on the test bench. The test at HELLER's new Test Centre has been running for 18 months now. Flagging is out of the question. Or not? "We always subject our components, assemblies, prototypes and pre-production systems to high load cycles in endurance testing, deliberately pushing them to their limits in order to make reliable forecasts about their durability and operational safety," says Dr Michael Mayer.

The graduate Mechanical Engineer has worked at HELLER since 1990. As Manager R&D Virtual Evaluation and Optimising, he faces a dichotomy. He and his team are drivers and inhibitors of progress at the same time. "Precision comes before speed," says Mayer. "We cannot skip any steps in the process of development, testing and production release. That is a vital precondition for subsequent process stability and absolute precision of the HELLER machining centres under all conceivable operating conditions."

He explains that the development of such sophisticated and extremely complex high-tech machines takes time and a meticulous approach. Having to say, "We can't rush this!" can be unpleasant sometimes, yet it is inevitable on the way to developing a system as perfect as possible. The testing centre continuously operates four large HELLER machines from the H and HF series for the 4-axis and 5-axis machining of components as well as numerous smaller and larger test stations for

component testing. Nothing is produced here – except for data from seemingly endless series of measurements and a wealth of engineering knowledge.

"Thoroughly reflecting and scrutinising operations and processes over and over and challenging the parts and components using every trick in the book of engineering is anything but convenient", explains Mayer. However, in the end this is what makes the difference between a HELLER and any other machine, whose manufacturers may not be quite as meticulous throughout the development process.

The fact that the function R&D Evaluation and Optimising is given such a high priority at HELLER becomes apparent at the new Test Centre in Nürtingen. In 2019, the former logistics hall was completely gutted and refurbished with the latest technology available and fully air-conditioned, perfectly lit using LED lighting technology and all stations connected to pressurised air, power and data supply. Moreover, the workshop was equipped with ergonomically designed workstations, acoustic enclosures for noisy test setups and special oil-mist extraction systems. The hall has a dedicated entrance air-lock and even allows simulating extremely hot or cold environmental conditions for the global use of the machining centres. In other words, nothing is left to chance before a product goes into series production.

To achieve this, Evaluation and R&D work closely together. The office of Markus Gottwald is located in the neighbouring building. The Mechanical Engineer has worked at HELLER for 25 years and knows the machining centres and their requirements inside out. "We focus on the overall machine and its topology, primarily on statics, thermal behaviour and the behaviour of the machine components under load," explains Gottwald. CAD designs and numerous simulations for this purpose are done on computers.

Today, simulations allow the engineers to perform extensive testing of machines and components even before building the prototypes. This saves time and money. For example, when investigating questions such as: How does thermal growth of a machine affect the resulting quality? How does a machine bed behave under dead load and how does that affect machining accuracy? Or which harmonic response analyses need to be performed with regard to the compliance frequency response of milling units? Sounds complicated? "In fact, it is. We always have to consider the bigger picture, including all possible influencing variables. It's a very complex process," Gottwald explains.

For example, when the model of a spindle is subjected to virtual forces. This procedure allows the engineers to investigate the potential effects of imbalances. It is quite impressive to see on the PC how the forces acting on the spindle literally make it flutter – a nightmare for a designer who at HELLER always strives for precision down to the micron level. However, Markus Gottwald waves his hand dismissively: "Pedagogically excessive standards help us to illustrate forces and their effects, allowing us to derive relevant controlling measures to achieve further geometry and topology optimisations."

All possibilities of thinking then first have to stand up in practice. This is where the Test Centre's workshop comes into play. Since 2014, Thomas Huppert has been team leader R&D Evaluation at HELLER. The 43-year-old has been employed with HELLER since 1993. He is an extremely experienced practitioner who first completed his vocational training as an Industrial Mechanic at HELLER and then continued his education with another apprenticeship to become an Electronics Engineer for Automation Technology. "Following my apprenticeships, I started working at the test department, whilst attending evening school to train as an Industrial Supervisor," he explains. Quite obviously, Thomas Huppert likes going full throttle. You can feel his enthusiasm for the entire testing process burst out of him when he talks about his work and his team.

With his workshop team ('all trained in-house at HELLER'), Thomas Huppert sees himself as a team player who collaborates closely with the development engineers and experts from the field, i.e. people from Assembly, Maintenance and Service. "We work so that others can continue working," he says, fully aware of the great responsibility and development pressure. "The more information we get from R&D and from the field, the more progress we make and the faster we make it."

For this purpose, the technicians, for example, equip a spindle with a multitude of sensors. This helps them to determine the correlation between smooth running and temperature development in order to answer questions such as: What measured variables and measurement readings are obtained in continuous operation and what do they look like in case of a 'cold start'? "After all, the machine is expected to achieve the targeted process and machining quality reliably under any given conditions," says Huppert. Moreover, it is important to know as early as possible when a wear part will reach its limits. "This is essential for predictive maintenance, which means preventing damage to the system as a result of component wear."

Vendor parts also have to undergo an endurance test before they can be incorporated into a HELLER machine. "If we are unable to find the right product on the market, we develop it in-house," says Thomas Huppert. The Test Centre is strict with itself in this regard. "Anything that does not work is returned to R&D," explains the workshop manager. "In doing so, we take a step-by-step approach in achieving the optimum whilst learning continuously throughout the process, also for the benefit of new solutions."

Despite all digitisation and ever-evolving simulation possibilities, the most important aspects to Michael Mayer on the way to innovations are engineering know-how and a wealth of experience. "Theoretically, it would be possible to calculate all possible degrees of freedom, but economically it is not viable," explains the Manager R&D Virtual Evaluation and Optimising. "We do not have to answer all the questions, only the right ones. And that is something HELLER is very good at."

THE LIMITS





The HELLER location in Mexico

Beginnings:

HELLER Mexico was established in April 2001 and has been located in Querétaro since October 2011.

Tasks:

- _ direct sales of HELLER machines
- _ sales (including direct sales) of spare parts and facilities
- _ training
- _ production support and modification of processes
- _ preventative and corrective maintenance
- _ installation
- _ retrofit and repair
- _ HELLER sales support

Head of subsidiary:

Salvador Icazbalceta

Building facilities:

- _ office floorspace: 120 sqm
- _ exhibition and warehouse: 480 sqm

Employee number:

13


Customers within the support area:

Our customers come from a wide range of industries. They mainly include companies from the automotive industry and its suppliers, mechanical engineering companies, plant construction companies, tool and mould makers as well as companies from the aerospace and metal processing industries.

Objectives:

With the sale of HELLER machines, spare parts and equipment within the group and through direct sales, we ensure that our customers always receive exactly the machine that fits their specific requirements. In order to provide them with the best possible support beyond this, we take over, among

other things, conversions and repairs of components, offer solutions for cycle time optimization and TPS [Total Productive Services] and provide our customers with comprehensive advice on processes and machine optimisation.



Places worth seeing in the state of Querétaro

Querétaro

The aqueduct 'Los Arcos' is the most important historical monument of the city of Querétaro and was used for the distribution of drinking water from the 18th century onwards. According to the legend, it was once built as a proof of love. It has 74 arches, is 1,298 metres long and 28.5 metres high.

The monastery of Santa Cruz is perhaps the greatest attraction of Querétaro. It was built on the site where the decisive battle between the Spaniards and the Chichimeca Indians, who lived in the region, took place on 25 July 1532. The greatest pride of the monastery is the 'Árbol de la Cruz', a tree whose thorns have the shape of a cross.

In 1867, Maximilian of Habsburg, proclaimed Emperor of Mexico, surrendered in Querétaro and handed over his sword to General Mariano Escobedo. Sentenced to death by a court martial, he was shot on the Cerro de las Campanas [Bell Hill] together with his generals Miramón and Mejía. The name of the hill is derived from special stones, called phonolites, which, when touched, produce a bright sound similar to that of a bell due to their bronze, silver, copper and antimony ore content.



Freixenet

In Ezequiel Montes lies the farm Freixenet. The location was chosen based on its excellent geoclimatic conditions for the cultivation of wine.

The architectural style of the winery with fired bricks and wood gives it a harmonious, peaceful atmosphere reminiscent of the large haciendas with their gardens. The winery has extensive vineyards where different varieties of grapes are grown and carefully tended.



Tequisquiapan

Tequisquiapan is one of the six 'Pueblos Mágicos de México' (magic villages of Mexico) and attracts travellers all year round with its tranquil atmosphere and good weather. On a tour, you can admire colourful houses and get to know the culinary variety and the rich handicraft of the region. Tequisquiapan hosts the annual traditional cheese and wine festival which offers specialties from all over the state. Visitors can also take balloon rides.

In the vicinity of the village, there are various spa facilities and thermal baths where you can find pleasant cooling during the summer holidays or on a weekend trip.

Bernal

59 km from the town of Querétaro stands the impressive 'Peña de Bernal', some 300 metres high. This monolith, located in the Sierra Gorda, is considered the third largest in the world after the Rock of Gibraltar in Spain and the Sugar Loaf Mountain in Brazil. The area around the rock is a paradise for mountaineers and climbers. At its foot lies the village of Bernal, a picturesque town with beautiful arcades, winding cobblestone streets, numerous bars and restaurants serving local specialties, workshops of artisans as well as museums and colourful houses.





Team building, networked cooperation and working from home

*Tips and tricks for
productive collaboration*

Before companies start to tackle digitisation, they should spend some time thinking about their existing teamwork. After all, digitisation requires a new way of working together – and it starts in the mind. When employees continue to think in terms of ‘me’ and their existing system, their use of new digital tools will reflect the same long-established, habitual strategies. Speaking of digital tools: they should make digitised collaboration a breeze, or not? Yes and no. In fact, even the most sophisticated app or any other solution is unable to replace a well-functioning team.

But what does it take to establish a well-functioning team? And furthermore, once this foundation has been laid: how can we collaborate efficiently from anywhere and what tools are there to support us? HELLER the Magazine has collected a few tips for you.

‘Teamwork makes the dream work’ rather than ‘great, someone else is doing the job’: how to build a successful team

- _ **A clear goal in mind:** What goal are we pursuing together? The answer to this question has to be clear to every team member; in the best case, the team members themselves are passionate about reaching the goal.
- _ **The right size:** The team should be large enough to achieve the goal together, however, not too large in order to ensure it can navigate smoothly.
- _ **Different personalities:** There is less friction in homogeneous teams – but also a lack of new ideas.
- _ **An accepted leader:** One person should take responsibility, keep an eye on the bigger picture and lead the team accordingly.
- _ **Well-functioning communication:** A productive team must be in constant contact with one another and exchange information.



Things that can even lead a great team to fail

- _ the team has been working together for years – it lacks a breath of fresh air and contrasting ideas ▶ stagnation
- _ no mistakes are made – however, we actually learn the most from our mistakes ▶ no development
- _ all the team members always agree – however, without discussions and compromising no progress is made ▶ standstill, more time for unnecessary taunts
- _ Decisions are made too quickly – sometimes it takes more information and time to consider and weigh the options ▶ carelessness, stagnation

Ways to counteract this

- _ do not focus and rely on trust, sympathy and affection in team building
- _ regularly change the teams and their composition
- _ develop an atmosphere of constructive conflict and debate



Turning your home into an office: 10 tips to organise yourself whilst working from home

1. Define realistic working goals for the day or week – rather too few than too many in order to provide capacities for unexpected work
2. Set up a clear time frame – and stick to it
3. Actively communicate your working hours
4. Keep an eye on extra hours and the factors that have led you to working overtime
5. Take regular breaks throughout the course of your working day
6. Make your availability clearly visible, e.g. using the status indicator in Outlook or other collaboration tools
7. Leverage new technologies, e.g. apps that measure screen time or remind you to drink water or to exercise
8. Consciously create transition times replacing the commuting times between work and leisure
9. Help your subconsciousness by introducing rituals, e.g. putting on or taking off your 'work outfit' in order to separate working life from private life
10. Visually separate your working space from your private space



Teamwork across borders: these tools can support you



Microsoft Teams

- _ create projects in the form of 'teams' and manage them collaboratively
- _ integrate and share different file types
- _ make chats and video calls within the team or with external partners
- _ the basic version is free of charge and available on any device

Trello

- _ create 'boards' with lists to be managed together, if required
- _ integrate checklists, attachments, appointments and more
- _ combine them with calendar functions and other tools
- _ basic functions are free of charge; available for the most common browsers and as an app

Microsoft To Do and Todoist

- _ create lists with items to be completed in a structured manner
- _ Microsoft To Do: available as a free-of-charge desktop and web app; can be combined with Outlook tasks; synchronises tasks with iPhone, Android, Windows 10 and the web
- _ Todoist: available as a website, for desktop PCs and mobile devices; basic version is free of charge

Zoom

- _ remote conferences, webinars, video conferences, online meetings, chats and mobile collaboration
- _ up to 1000 video participants and 10,000 viewers
- _ basic version is free of charge with limited functions for up to 100 participants
- _ available for Mac, Windows, Linux, iOS and Android

OneDrive and SharePoint

- _ save, manage and make documents available online from any location
- _ conforms to GDPR
- _ files can be used in the web, on mobile devices using apps and on a desktop PC (Windows and Mac)
- _ OneDrive storage space up to 5GB is free of charge; SharePoint as part of an Office365 licence comes at a fee

DocuSign and AdobeSign

- _ sign documents electronically
- _ the electronic signatures from both providers are legally binding in Germany, Austria, Switzerland and most countries around the world
- _ both come at a fee, with a free-of-charge trial version available

The HELLER Group mourns the loss of Hubert Heller

Nürtingen, April 2020 – The HELLER Group mourns the loss of Mr Hubert Heller, who passed away at the end of April following a short but serious illness. As an entrepreneur, Hubert Heller put his heart and mind into everything he did and played a major role in developing HELLER into one of the world's leading machine tool manufacturers and an international group of companies operating subsidiaries around the globe. Following his father's premature death in 1959, he had to take over responsibility for the company at a very young age. In January 1960, he joined the family business as a young Mechanical Engineer. He was appointed Managing Director in 1961 and Chairman of the Management Board in 1963 when he was only 27. Throughout the approx. 40 years he managed the company together with his younger brother Berndt from 1969 onwards, Hubert Heller shaped the company in countless ways. Moreover, he left an indelible impression on many employees, customers and business partners.

"I was always the foreign minister," Hubert Heller described his role in an interview in the past anniversary year 2019. As the 'foreign minister', he forged a very deep connection with 'his' customers, placing their individual needs and requirements in the focus of all business activities. He felt particularly attached to his employees. Until the end, it was very important and a matter of course to him to personally thank the employees for their many years of loyalty to the company during the annual Employment Anniversary Celebration.


After taking his well-deserved retirement in 1999, Hubert Heller took the Chair of the Supervisory Board of Heller GmbH and Gebr. Heller Maschinenfabrik GmbH, which he held until 2007. Even after his retirement, he took a keen interest in the company's development. Visits to the headquarters and staying in close contact were important to him until the end of his life.

Hubert Heller rendered outstanding services to the machine tool industry in Germany. For many years, he represented the company in a voluntary capacity in various association committees.

"The company was his life. With Hubert Heller's death, we lose a leading business personality who has been an important advisor to us until the end. Our sympathy goes to his wife and his family. We will always honour his memory," Klaus Winkler said on behalf of the HELLER Group's management.



Hubert Heller * 1937 † 2020



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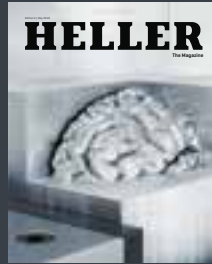
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