

GPV annual

2020

# MAGAZINE



## WINNING OUR FUTURE

Discover the highlights of our strategic ambition:  
a vision for the future together with our customers.

WINNING OUR  
FUTURE AS

ONE  
GPV



**Bo Lybæk**  
President & CEO

**2020 will forever be a year defined by the coronavirus crisis with not a single person, company or country left unaffected. From the beginning, we set two related goals: taking care of our employees and their families. And taking care of deliveries to our customers in the best possible way at an extremely difficult time. All as one GPV.**

The crisis showed us all how impossible it is to predict the future. And how important it is to prepare for it. The coronavirus crisis has had tangible consequences for GPV and for every individual in our company. However, in some ways we were fortunate that 2019 was a year of integration for us, in which we worked on becoming one company. The efforts have proven themselves in our agility and ability to adapt to new regulations and requirements on a day-to-day basis.

Now, we continue to think ahead. During 2019, our global footprint was strengthened, new capabilities were added, and we remain steadfast in the launch of a new, ambitious strategic direction for 2023 called “Winning our Future”. A shared vision for us and our customers.

Having achieved the strategic and financial goals of our 2022 strategy, we are now looking ahead in a market where we see ourselves as “largest among the smallest and smallest among the largest” in the European EMS industry. “Winning our future” sets ambitious growth targets to further strengthen our market position and execution power, as the combination of our size and proximity is vital when supporting our customers in accomplishing even more.

“Winning our Future” is as much about our customers’ business as it is about our own, and success rests on several elements: our focus on offering expert competencies, an uncompromising aim for sustainable high quality, and continuous investments in our state-of-the-art production setup. Thanks to our owners, Schouw & Co., we can combine long-term plans with ambitious short-term goals.

The coronavirus crisis has brought the impact that our company has on local communities and the environment into sharp focus. Even if we play only a small part in the global scheme of things, I am pleased that GPV is taking steps to reduce our environmental impact and by our efforts to offer an excellent workplace to our dedicated employees. Because in order to win our future, there are no shortcuts! We must add value in everything we do. For our company. Our employees. And first and foremost our customers.

**Our “new” organisation was tested. Harder than I had ever expected. But I am positively overwhelmed by the spirit and dedication of our employees, not only to accommodate to a new reality, but also to find creative, viable solutions for our customers in ways that were previously unthinkable.**





# CORE

GPV  
AT  
THE

Going “the extra mile” is an often-used cliché. However, a dedicated servant-approach and strong business values are necessary to succeed - both in day-to-day operations and when a customer wants to outsource their entire manufacturing site to GPV.

**The EMS industry is undergoing significant changes. Many companies are consolidating, and the trend points towards fewer, larger, specialised players. Thomas Kaiser, Executive Vice President shares his take on how going “the extra mile” in understanding the customers’ real needs and challenges can make the difference.**

As an EMS company, GPV moves with the customers; anticipating their requirements and reacting quickly as new needs arise or change. For Thomas Kaiser, this servant-approach is at the heart of the corporation and defines how GPV does business.

“With our strong footprint across the world, we are able to serve our customers in their specific markets. We believe in collaboration through proximity, as this enables us to react faster and work even more closely together with our customers. Our entire value chain is set up to make life as easy as possible for our customers. The better we can close the interface between the people we work for and our business, the better services we will ultimately provide,” says Thomas Kaiser and elaborates:

“We are a turnkey provider for the mid-sized market in need of technical electronics. That requires us to offer support with application design where relevant and offer the best service excellence in series manufacturing. There is no magic formula here. Only a well-defined focus on a fast response time and strong employee competencies across all sites.”

**Focusing on the core business**

The close involvement often means that GPV essentially becomes a part of the customer’s business - and that is a key ingredient in success for both parties.

“A hard factor in our turnkey services is our approach to full-range capabilities. By offering everything from design & engineering and product application design, through full supply-chain handling, to end-of-life services, we let our customers focus on what they do best - while leaving all the manufacturing activities to us. Essentially, each party does what they are best at. But there is also a soft key factor; our clear understanding of the part we play. It is our role to enable the customers we work for to concentrate on their core business, and we always go to great lengths - even if the outlook seems difficult at first,” says Thomas Kaiser.

**A business based on values**

While all companies have corporate values, fewer have employees who live them. According to Thomas Kaiser, the values of GPV become apparent especially in challenging times:

“I believe you can tell the true nature of people when they experience headwinds. That is when you see what people are defined by. Whenever we take on a particularly complex task, that is when the values of GPV shine through. And when this happens, I find strong evidence that our future is looking very bright indeed.”

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**Recently, we transferred a full manufacturing site for one of our large customers including more than 1,000 products - many of high complexity and with as little as 24 hours’ delivery time from PO to shipment. Everything from sourcing, mechanics, testing to manufacturing and box-build was moved, and all documentation, compliance and several product optimisations had to be ensured without interruption to production. These kinds of solutions are a testament to our approach. In the end, it is about finding the solution that benefits the customers the most.”**

**Jorgen Holm**  
SVP Sales Northern Europe & Americas





**Dieter Weiss**  
CEO of In4ma and  
Weiss Engineering

FORECASTING

# THE FUTURE OF EMS

**For the past 15 years, Dieter Weiss, CEO of In4ma and Weiss Engineering, has analysed the European EMS market. As a partner to the IPC and an internationally recognised expert, he examines the EMS market in this article and gives his viewpoints on what the coming years have in store for EMS companies and OEMs alike.**

Every year, Dieter Weiss and his team analyse the European EMS industry to predict tomorrow's winning companies - a task, which has obviously been made more difficult by the coronavirus crisis. Last year, he had already predicted difficult times for smaller companies in the European EMS market, and it is his firm conviction that, more than ever, successful EMS companies must be truly global to accommodate customers' shifting wants and needs.

"Size matters in the world of EMS. We saw small companies suffering up to 40% losses in revenue in 2019, while big players grew by 5-6% on average. Without scale, smaller companies cannot buy raw materials in bulk and they simply do not have the resources to invest in future manufacturing capabilities. I estimate that around 30% of the smaller EMS companies will be gone in the next 10 years - either by dissolving or because of M&As," says Dieter Weiss and continues: "In the midst of the coronavirus crisis, we see big companies weathering the storm much better than small companies. Studies point towards a revenue decline of 6-10% for big companies and 12-20% amongst small companies. A decisive factor here is which markets are being served, where e.g. automotive suppliers are hit the worst right now."

## The shift to Eastern Europe

Traditionally, China has been a manufacturing hotspot, but this has changed in recent years. Labour costs have increased in China and are now matched by best-cost countries in the eastern part of Central Europe. This is an opportunity for EMS companies to manufacture products in proximity to their European customer base.

"For most European OEMs, it is important to have proximity with their suppliers - including their EMS partners. Strong EMS companies must achieve the right mix of best-cost manufacturing setups and customer closeness. Eastern Europe provides just that, and in 2018 we saw many products shift from China to this region, which also makes European distribution easier. The strike of the coronavirus and the lockdown in Q1 2020 in China has made many OEM customers realise that single-sourcing in the Far East bears risks - and global EMS companies can alleviate this by shifting to other factories within the company," says Dieter Weiss.

"More than ever, it is crucial for the OEMs to have close relationships with a reliable and financially strong manufacturing partner that will not risk collapse due to price constraints. And while many EMS companies believe they can do business in the same way as they have done in the past, that is simply not the case. In order to succeed, you need a full range of manufacturing capabilities and a footprint that matches the customer's expectations."

**Three major trends will shape the future EMS industry: "Stupid" products will become intelligent allowing for e.g. remote diagnostics. A popular demand for sustainability will affect the industry - first through the OEMs and then through the EMS companies. Lastly, miniaturisation will be in high demand.**

As new trends arise, the EMS industry must follow. In recent years, sustainability has become increasingly important to consumers and politicians alike - and both OEMs and EMS companies must take notice.

## Three industry-shaping trends

Looking ahead, Dieter Weiss sees three trends that will likely shape the industry in the years to come.

"For one, "stupid" products will become intelligent. This enables remote diagnostics if a product breaks down, so a service professional can order the correct spare part without having to make several trips to the customer. This greatly improves efficiency and I believe we will see many more products made smarter in the coming years. Robot and 'cobot' technologies are likely to play a role in the future EMS business, even with medium-sized quantities," says Dieter Weiss and continues:

"Secondly, I believe the popular demand for sustainability will affect the industry - first through the OEMs and then through the EMS companies. EMS players that understand and anticipate this need will be in a strong position. Thirdly, smaller products leave less of an environmental footprint, so I believe miniaturisation skills will be in high demand in the coming years. In this connection, technologies like laser soldering are likely to play a part - or perhaps we will even move away from connecting components with solder at all."

## The future is defined by vision

As an analyst, Dieter Weiss sees many companies of similar sizes and setups deliver very different financial results. For him, the difference between growth and significant deficits is about setting the right course.

"The EMS market favours the larger players, and right now the winners of the future are being decided. It all boils down to management drawing up the right strategy and having the vision to carry it out. However, it is not just the market that is changing. New ways of working are impacting the EMS industry, and this requires EMS companies to evolve as a workplace - not least to face the coming years' challenges. My prediction is that things will stabilize in 2021 and be back to a new normal in 2022. And the key to success is having a good mix of market segments and the ability to stay on track with your strategy and vision."

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# CONTINUING TO STRIVE

## FOR OPERATIONAL EXCELLENCE

Working with "Quality Circle" allows us to benchmark both internally and externally in order to constantly improve our processes.

**Operational excellence is the heart of GPV. It is a constant focus on continued improvements and a mission that will never be fully completed. Hans-Peter Hauser, Senior Vice President Operations gives his take on the importance of excellence as an EMS company.**

"At its core, an EMS company delivers a manufacturing service. For GPV, that approach is embedded in both the corporate values and the overall mission statement. Unlike most strategic goals, the drive for operational excellence is open-ended. The ingredients, however, never change," explains Hans-Peter Hauser.

"We work systematically with operational excellence on a group-wide basis to ensure three things; a clear focus on quality, on-time delivery, and fast response times.

Obviously, that requires state-of-the-art equipment and highly skilled employees but it also requires a particular mindset. We believe results are created by people, and so we work diligently to infuse the shared mission of operational excellence across the organisation - both locally and globally," says Hans-Peter Hauser and continues:

"Working with operational excellence is like chasing a rainbow. You can move closer, but you will never quite reach it. That mentality drives our efforts. It is a continuous process and one that will never be over."

**Underlining the service excellence**

The search for excellence is at the core of the industry, and the service part of Electronic Manufacturing Services is the heart of the business.

"Essentially, an EMS company provides a service. Our customers are highly dependent on us to deliver what we promise. Otherwise, their business will be severely compromised. That requires a servant-attitude where we must constantly strive to do better. As a result, this past year we have harmonised our main measurements group-wide. This provides the basis for a best-practice way of working that ensures we are on the right track in our operations. It provides us with a shared language and complete alignment across our functions," says Hans-Peter Hauser.

**Circling in on quality**

Each site at GPV has a Head of Quality who all meet regularly and make up the GPV Group Quality Circle - a forum for exchanging experiences, new learnings, and determining best practice.

"Working with 'Quality Circle' allows us to benchmark both internally and externally in order to constantly improve our processes. Combined with our New Product Introduction standardisation, we are able to give our customers the security that each site fits them best in terms of logistics, preferences, or proximity," says Hans-Peter Hauser.

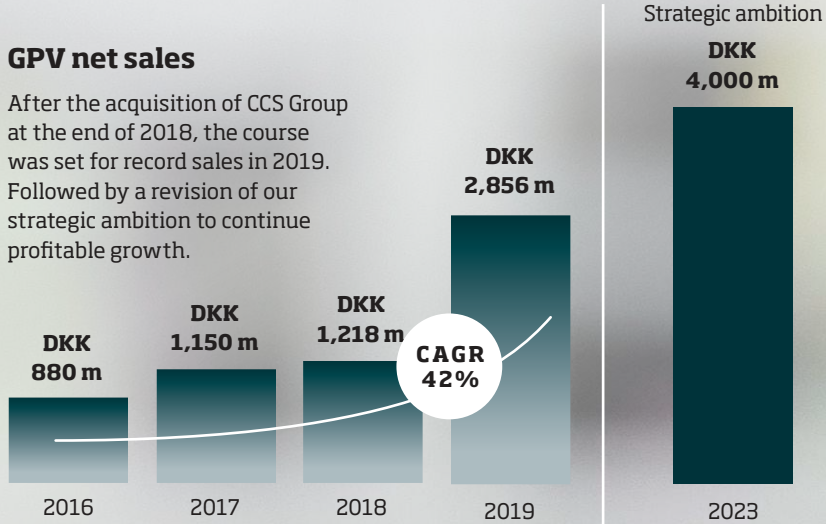
"It is impossible to be the most value-adding EMS partner in the business without operational excellence. It is the very foundation of our company and our offer to the customers we work for - and that is exactly why it must be a task without an end."

Working with operational excellence is like chasing a rainbow. You can move closer, but you will never quite reach it. That mentality drives our efforts. It is a continuous process and one that will never be over.



GPV net sales

After the acquisition of CCS Group at the end of 2018, the course was set for record sales in 2019. Followed by a revision of our strategic ambition to continue profitable growth.



RESULTS ARE  
CREATED  
BY PEOPLE

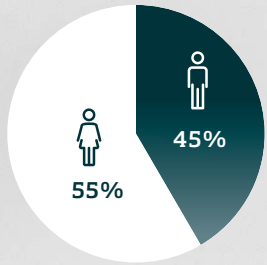
2019 was a good year for GPV. We more than doubled our net sales compared to 2018 primarily driven by the acquisition of Swiss CCS Group and continued organic growth. Now, an ambitious new strategy is set to secure the future from 2020 onwards.

Having met the strategic ambitions of our previous 2022 strategy, at the beginning of 2020 we launched our new “Winning our Future” strategic plan, which set the ambition to grow sales by 40% to reach DKK 4 bn / EUR 530 m by 2023.

Size and proximity are important factors in our continued success. Both in relation to our sites, capacity utilisation and the strength of our supply chain. Industry numbers show that GPV is in the top 10 of EMS players headquartered in Europe – a position that enables us to reach even further into the future.

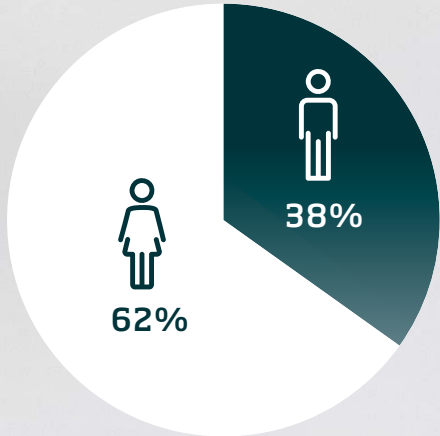
Our strengthened footprint, especially in Asia and in the DACH region of Europe, together with our long-term investments, will fuel our continued, sustainable growth and improvements and is supported by our strong belief that “Results are created by people”.

GENDER DIVERSITY



Management

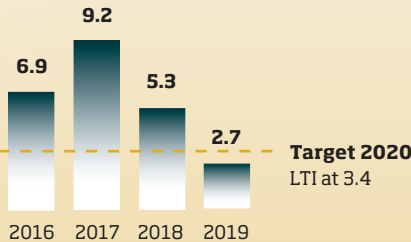
We have a strong focus on diversity, and at management level, 55% of our employees are women.



Total

Women represent 62% of GPV's approximate 3,700 dedicated employees.

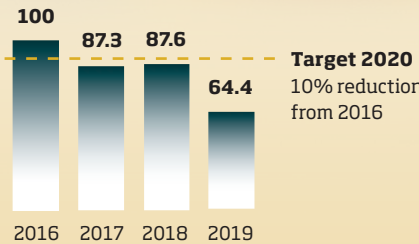
SAFETY FIRST



Lost-Time Injuries (per 1 mio. working hours)

Safety of our employees is key. In 2019, we had already reached our 2020 target of a 50% reduction in the LTI rate compared to 2016.

ENERGY SAVING



Electricity consumption index

2016 = index 100 (KWh compared to net sales). In 2019, we again took large steps in lowering our environmental footprint.





**The starting point for any extraordinary product is good design. At GPV, dedicated design and product application capabilities can help ensure the basis for successful manufacturing. Felix Tobler, Head of Design & Engineering, explains the processes leading up to a successful product design at GPV and the ambition to partner with customers across the entire product life cycle.**

“Most often, decisions made in the design phase determine whether a product becomes a success or not. It can relate to the technical specifications of a product or simply to optimisations that reduce material costs, improve logistics, or reduce production times. But design is so much more,” Felix Tobler explains. “We always test for human interaction and actual use scenarios. How does the final product perform in daily use? And does it live up to the specific requirements of its user environment?”

**Ability to see the light at the end of the tunnel**

According to Felix Tobler, successful design requires a close and on-going dialogue with the customer to ensure the desired results:

“Developing a new design or product does take time. You can produce a prototype in a few weeks, but it takes longer to design a viable product. That is why I always instruct our teams to keep an eye on the light at the end of the tunnel. You need to keep the user-scenario top of mind.

Ideally, you want the design to remain unchanged when it enters production. Changes during production are much more expensive and time-consuming, so we always strive to hit the mark the first time around.”

**Most often, decisions made in the design phase determine whether a product becomes a success or not.**

**From supplier to partner**

GPV’s continued focus on design & engineering is ultimately a way of offering customers a true partnership with increased support and responsibility for the products throughout the entire life cycle:

“When we handle the entire life cycle, we can protect IP and product knowledge, and we can support and speed up time to market, while letting our customers focus on the next product generation. To do this, we have defined success factors that must be in place: cost-efficiency coming from e.g. care management and our global footprint; reducing time to market through intrinsic knowledge about processes, infrastructure and fast prototyping; quality through life-cycle expertise from NPI to after sales support; and the right competences across everything from supply chain to innovation,” Felix Tobler concludes.

# DESIGNING FOR EXCELLENCE

While product design and development is only a small part of the product’s total life cycle, it leaves a significant footprint on final material cost (the BOM) and manufacturability. To a great extent, the basis of successful series manufacturing is a well-executed design.





A GLOBAL

# FOOTPRINT

**The future of GPV is shaped by a combination of customer proximity and best-cost locations along with investments in both manufacturing setups and employees.**

With sites across three time zones, GPV is ready to serve customers where they operate. By working in close proximity to our customers, we are able to be highly connected to their everyday operations; from application design, prototyping, series manufacturing, final assembly and testing, to advanced logistics. The majority of our customers are headquartered in Northern

and Central Europe and the rest in the US, and with a global footprint, our customers are able to get the best of both worlds: customer proximity for a close partnership and manufacturing setups in strategic best-cost locations.

**Continued strategic investments**

While GPV has grown well in recent years, there is no time to rest on our laurels. In 2019, we built a new 2,300 sqm. expansion of a high-bay warehouse at our electronics site in Thailand. This and other investments obviously add positively to our competitive power but also very much enhance the communities in which we operate.

**Powered by people**

At GPV, we have a saying: #ResultsAreCreatedByPeople, which we are fully committed to. Fuelled by our customer-oriented ambition “Winning our Future”, we will continue investments in attracting, developing, and retaining highly skilled employees with the right attitude across the world. Employees who will unite with us in the ambition to add value for our ambitious blue-chip customers - through a uniform focus on quality, on-time delivery and fast response times.

**Our global footprint is of major strategic and practical importance for our customers and us as a company. And it is based on a simple principle of proximity to our customers.**



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# PAVING THE ROAD TO

# THE DIGITAL FUTURE

**At GPV, the coronavirus crisis has not slowed down the focus on tomorrow's digital solutions. On the contrary: smooth, everyday use of technology and large-scale investments in digital systems have become even more important in the light of a new reality.**

Numerous digital solutions, some planned and some new, bloomed at GPV as a result of the coronavirus crisis - all of which found their way into everyday work life faster and maybe even more efficiently than normal. From daily video conference calls to online live product-implementation services, the digital technologies truly paved the way for collaboration and strengthened customer relations - even across great distances.

Alessandro Marinai, Operation Director Electronics Thailand, explains one of the initiatives: "During the coronavirus crisis, we wanted to find a way to provide customers with the same level of service as in normal times. New online live camera solutions have been implemented and have proven very effective in avoiding delays to customers for the approval and implementation of new products. Customers perceived this solution in a very positive way as it was still possible to get in close contact in real-time and have a view of processes. I am sure we will continue to make use of this solution in the future."

An investment in a large-scale digital project is also progressing according to plan and is being prioritised despite market turmoil:

"We have decided on a new, global Manufacturing Execution System for GPV - MES for short. Currently, we have a number of local systems in place but in the future, the MES system will link to our ERP system to predict which production lines are best suited for the specific order. It will not only help to increase efficiency but also quality and compliance," says Lars Ellegaard, Director of Digitalisation.

**Our work with digitalisation is all about matching customers' changing needs.**

"We will continue to work diligently with digitalisation on several levels. As another example, we are implementing Robotic Process Automation (RPA) to streamline some of our administrative functions. In general, we work with small-step optimisations to ensure our continued progress and with global roadmaps to ensure our future and to be ready to take the big leaps to match our customers' changing needs."

## Roadmaps help fight complexity

As a service provider, GPV serves many customers with many different products. In total, thousands of products are being manufactured at sites across the world, adding to a high degree of complexity - not least in the light of new requirements and demands in the wake of the coronavirus crisis.

"Each product manufactured has its own requirements and when you multiply that with the number of active products, it can get tricky. In total, it amounts to a high degree of complexity and it is our job to navigate smoothly through this without our customers ever experiencing the true complexity themselves. Our technology and digitalisation roadmaps help us combat complexity by raising our quality and ensuring smooth processes - locally and worldwide," says Hans-Peter Hauser, Senior Vice President Operations.

## A spectrum of technologies

Advances in automatization in recent years have made manufacturing more efficient and more cost-effective. Looking ahead, Hans-Peter Hauser predicts that a broad spectrum of technologies will help shape GPV in the future.

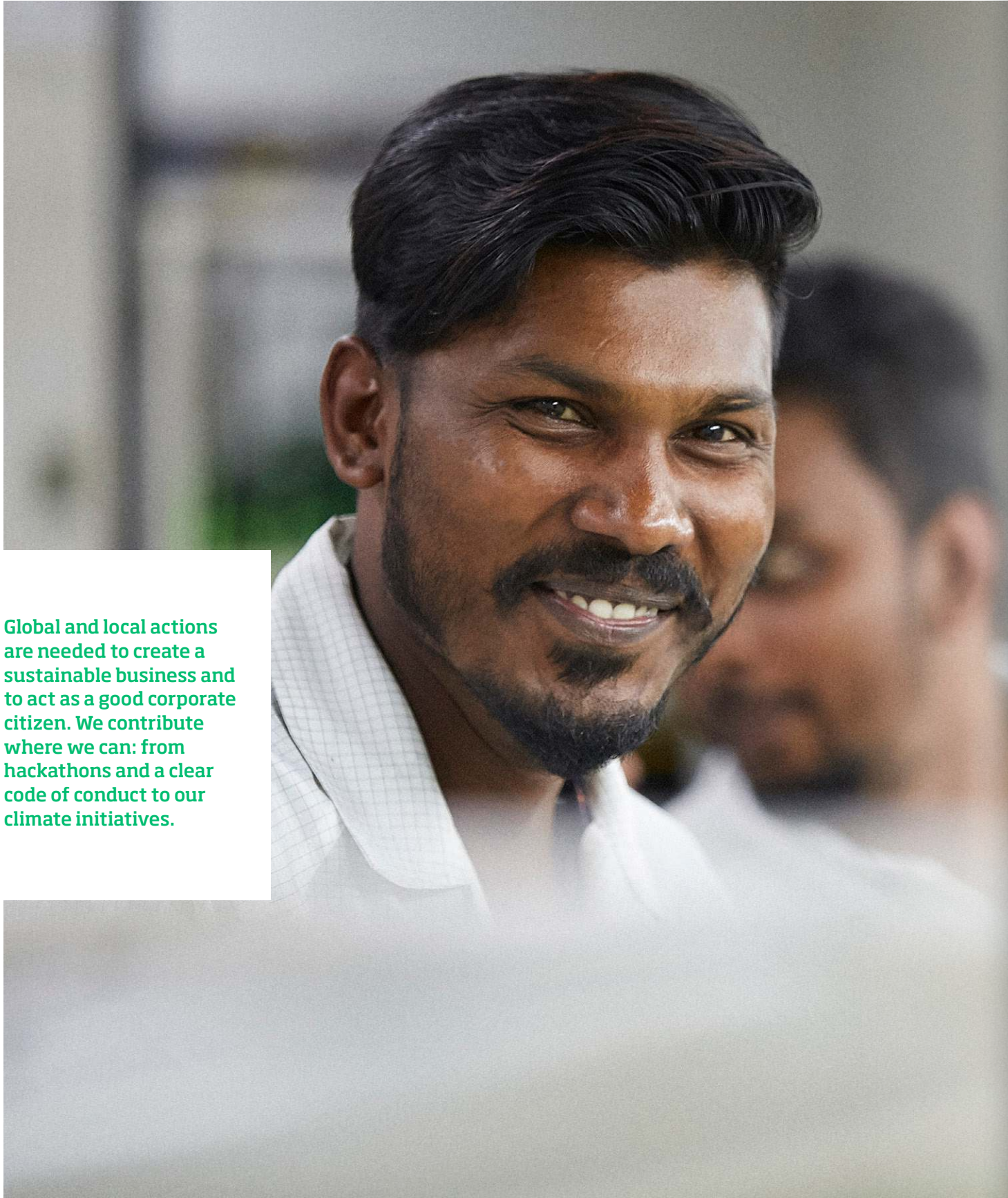
"As a high-mix/low-medium volume EMS company, it is typically not efficient to 100% automatise our production.

It is a balancing act with major potential though. We are keeping a keen eye on developments in robotics, such as collaborative robots, and already we have a number of those in our production today. In addition, we are exploring potential investments in IoT capabilities," explains Hans-Peter Hauser and sums up:

"Digitalisation typically requires a long horizon. One that looks forward but also backwards. Our work with specific roadmaps for digitalisation and technology ensures that we are always on track with the market and our customers' needs. This ensures a clear direction in all our initiatives while still maintaining the flexibility to act when our customers need us to."

**Numerous digital solutions, many planned and some new, bloomed at GPV as a result of the coronavirus crisis. From daily video conference calls to online live product implementation services, the digital technologies truly paved the way for collaboration and strengthened customer relations - even across great distances.**





Global and local actions are needed to create a sustainable business and to act as a good corporate citizen. We contribute where we can: from hackathons and a clear code of conduct to our climate initiatives.

# TAKING RESPONSIBILITY IN UNCERTAIN TIMES

**GPV is committed to taking responsibility for the people we work with and the world we are a part of – not least in the wake of the coronavirus crisis. Here are some of our initiatives.**

The coronavirus crisis showed how big an impact we as a company have on the lives of our employees, and the communities of which we are a part. For us, taking responsibility is part of our core - in calm as well as in uncertain times. We have always been committed to providing safe working environments with room for employees to develop their skill sets and thrive. In the first half of 2020, "a safe working environment" suddenly meant new health and safety rules and new work routines, but the situation was handled extraordinarily well by the entire organisation.

Going forward, we will continue to emphasise employee safety and satisfaction, including our group-wide focus on preventing work-related injuries - an area where in 2019, we had already exceeded the 2020 target set back in 2016.

The GPV Code of Conduct is another valuable tool that we employ, ensuring that we always act in accordance with local and international laws and regulations as well as our own, and that our zero-tolerance policy on corruption is top of mind. It has recently been updated, and approximately one quarter of all employees from all our business units and sites were required to pass an e-learning course on this.

**Working towards a sustainable future**  
As a company operating in Asia, Europe and the Americas, we exist in an uncertain world with many cultural differences.

To act responsibly as one GPV, we are, among other things, exploring initiatives to support the UN Sustainable Development Goal number eight: decent work and economic growth. This includes a hackathon for younger GPV employees to ensure that our initiatives are in line with the way the coming generations view the world's challenges.

**Responsibility is a natural part of our DNA.**

Meanwhile, our energy consumption continues to decline thanks to new, energy-conserving technologies, and we are exploring opportunities to install solar panels at our Asian factories to provide a sustainable energy source.

**Taking local responsibility**  
At Easter 2019, Sri Lanka experienced a terrible terrorist attack. In order to provide aid to local medical staff, our colleagues at our electronics site in Sri Lanka gave blood to help the victims of the attack. In the aftermath of the incident, some children have been left without parents and to help them, we have made donations to help support their education.



## NEW OPPORTUNITIES AS ONE GPV

### WINNING OUR FUTURE

Our strategic ambition is a shared vision for us and our customers with a focus on size, growth and proximity.

### DIGITALISATION

Going from analogue to digital is an opportunity to streamline procedures, ensure high-quality manufacturing, and explore new possibilities.

### CORE BUSINESS

From design, electronics, mechanics, cable-assemblies, box-build, and logistics, our job is to meet these needs within high-mix / low-medium volumes.

### SUSTAINABILITY

A long-term, sustainable approach to value-creation will be key in the future. We work to increase employee opportunities, secure diversity, promote equal rights and reduce our climate footprint.

# A SHARED VISION

#### Headquarters

GPV International A/S  
Lysholt Allé 11  
DK-7100 Vejle  
Denmark

#### Europe

GPV Electronics DK  
Aars, Denmark

GPV Mechanics DK  
Tarm, Denmark

GPV Electronics CH  
Mendrisio, Switzerland

GPV Electronics DE  
Hildesheim, Germany

GPV Cables AT (F)  
Frankenmarkt, Austria

GPV Cables AT (R)  
Rottenmann, Austria

GPV Electronics SK  
Hlohovec-Šulekovo, Slovakia

GPV Cables SK  
Hlohovec-Šulekovo, Slovakia

#### Asia

GPV Electronics TH  
Bangkok, Thailand

GPV Mechanics TH  
Bangkok, Thailand

GPV Electronics LK  
Kochchikade, Sri Lanka

GPV Electronics CN  
Zhongshan, China

#### The Americas

GPV Electronics MX  
Guadalajara, Mexico