

DVS Technology Group

COMPLETES EXECUTIVE BOARD RESHUFFLE

As of April 1, 2021, DVS Technology Group/DVS Technology AG will initially appoint Dr. Christoph Müller-Mederer to the executive board as Co-CEO. As of July 1, he will then take over the duties of the long-standing CEO Josef Preis. Following the departure from the board and the company of CEO Josef Preis and his fellow board member CSMO Bernd Rothenberger, as planned, and the appointment of CFO Stefan Menz and CTDO Mario Preis, which had already taken place beforehand, this completes a long-planned reshuffle of the management of the Hessian solution provider in mechanical engineering.



Left to right: Bernd Rothenberger, Josef Preis, Christoph Müller-Mederer.

“Continuity and change” — these two words could stand as a motto over the change in the DVS Group management team, which has been well prepared for a long time. With CEO Josef Preis and CSMO Bernd Rothenberger, two personalities will leave the company in July who have shaped the group into the technological solution provider as which it presents itself today with international success. Both will remain associated with the group of companies in an advisory capacity after their active time. Following a three-month handover phase, Dr. Christoph Müller-Mederer will assume the role of CEO from this date and, together with CFO Stefan Menz and CTDO Mario Preis, will form the new, three-member executive board team.

With Müller-Mederer, someone takes the helm who combines both the classically technology-driven side of DVS Group and the recently increased focus on customer orientation and business aspects: the internationally experienced company leader has his academic roots in both mechanical engineering and economics and has shaped his professional career

throughout the world of mechanical engineering.

“We are very happy to have found a successor in Christoph Müller-Mederer who understands both the rules of the game and the challenges of our industry very well, so he also recognizes the special opportunities that can be found in the current change. As a solution provider in Future Mobility, we thrive on our experience and technical know-how — but also on innovation, agility and customer focus. Our new CEO stands for both sides,” says Dr. Steen Rothenberger, chairman of the supervisory board, about the selection criteria for the succession.

The focus of the new CEO’s work will be on the further alignment of the DVS Group as a solution provider of future mobility with a particular emphasis on customer orientation, internationalization and digitalization.

www.dvs-technology.com

Gear Motions

WELCOMES DIRECTOR OF BUSINESS DEVELOPMENT

Gear Motions welcomes **Mike Toper** as director of business development. In this new position, Toper will be responsible for strategic business development to identify and create business markets and opportunities.

Toper brings with him 20 years of experience in the industrial sector, with proven success in strategic planning and execution, and implementing new programs. Most recently, he served as the northeast sales manager for Gerard Daniel Worldwide.

“The employee owners are excited to welcome Mike to the Gear Motions Team” says Dean Burrows, president and CEO, Gear Motions. “In this new role, Mike will bring his technical expertise and background to explore and develop new markets.”

Gearmotions.com



Amorphology

OPENS WEST COAST DEMO CENTER WITH STARRAG MACHINING CENTER

Amorphology and Starrag Bumotec are teaming up to establish the only U.S. West Coast laboratory where customers of both companies can observe real-time precision engineering and machining of complex gears using amorphous metals.

Amorphology, a NASA spinoff company founded from technology developed at the Jet Propulsion Laboratory (JPL) and the California Institute of Technology, is a leader in applying advanced materials and manufacturing technologies toward improving gear production for robotics and other industrial applications using amorphous metals, also known as bulk metal glass (BMG).

The demo center will be at Amorphology’s Pasadena, California, headquarters where Starrag Bumotec’s s191H CNC

[\[www.geartechnology.com\]](http://www.geartechnology.com)



machine will be showcased, machining a wide variety of parts from mold inserts to rapid prototype gears, as well as other production BMGs and traditional metal parts.

“We are targeting high-precision parts with tolerances often <math>< 5 \mu\text{m}</math> on certain dimensions,” said Jason Riley, Amorphology’s chief operating officer. “The majority of our work is focused on rapid prototyping and production quantities in the hundreds of parts per month.”

“Establishing a laboratory environment to showcase the precision, quality and capabilities of the Bumotec s191H will enable aerospace and defense engineers to experience this real-time machining that could be used in their manufacturing operations,” said Greg Dunkley, Starrag Bumotec’s vice president of precision engineering.”

Advanced Features of Amorphous Metals

BMGs have several material advantages over traditional steel, titanium and aluminum metals and alloys. Amorphology’s patent portfolio includes several patents focused on high-precision gears for space and other extreme cold temperature applications. Amorphous metals are a non-crystalline class of alloys that cut and chip differently than other materials.

“The Bumotec s191H provides mill-turn capabilities as well as a higher production capacity,” said Riley. “Bumotec can take our alloys and machine single pieces. Or instead of machining one part at a time, it can produce hundreds of pieces lights-out.”

Amorphology’s gears are made for use in cobots, robots and medical devices. For example, most cobots use strainwave gears — the main component being a flexspline. It is complex, thin-walled and fulfills an important role — to precisely move the arm of the robot.

Many of the cobot, robot and medical device parts can be cast or injected molded but, at times, the micro-parts need to be post-processed to extremely high tolerances. “Bumotec ‘cut its teeth’ in designing machines for the Swiss watch industry,” said Dunkley. “Bumotec has a talent for machining micro-size high-value gears.”

Riley believes the Bumotec s191H will make Amorphology’s own micro gearboxes without lubrication for robots and medical devices. “We will be machining our patented alloys to very small sizes where production quantities don’t require our injection molding process,” he said.

www.amorphology.com

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Star Cutter

ANNOUNCES NEW VP OF OPERATIONS

Star Cutter Company has promoted **Mike Billiel** from corporate operations manager to vice president of operations. In this position, Billiel is responsible for planning, directing and coordinating efficient and cost-effective operational activities across the company's five manufacturing locations, helping Star Cutter meet its current and future needs.

Billiel originally joined the company in 2013 as the cutting tool operations manager and in 2019 moved to the role of corporate operations manager. "Mike has been instrumental in building uniformity into our improvement strategies, from performance targets and KPI development to budget and capital planning," said Jeff Lawton, Star Cutter president. "We're confident he'll bring even more value to this organization in this role and as a member of our board of directors."

When he joined Star Cutter, Billiel already had significant experience in quality, manufacturing, and operations management gained by working for automotive Tier 1 suppliers and other manufacturing companies. He is skilled in Lean and Six Sigma tools including DMAIC, Value Stream Mapping, Failure Mode and Effects Analysis, and more. He has an Associate of Science degree in electrical engineering technologies from the Community College of the Air Force and served six years of active duty in the United States Air Force.



www.starcutter.com

ECM USA

WELCOMES SENIOR PROJECT MANAGER AND TECHNICAL SALES ENGINEER

Many in the heat treat community may recognize one of the newer faces to join the ECM USA Team — **Juan Cruz**, of Saltillo Coahuila Mexico! With a mechatronics engineering degree from the Technologic Institute of Saltillo ITS and master's degree MBA from the Northeast Autonomous University UANE, Cruz has more than 10 years of experience in the heat treat industry. Previous roles include maintenance, sales and service in the United States, and senior management in Mexico. With international vacuum furnace experience in supporting many projects for the heat treat industry, his extremely efficient focus is and always will be on continuous improvement. In his role as ECM USA's senior project manager to Mexico, Cruz will be leading the Mexican market, projects and support for ECM customers. He will be located in Saltillo Coahuila which is in the north of Mexico.



In addition, ECM USA is pleased to announce the addition of **Gordon Banish**, technical sales engineer for the North, Central and South American thermal process markets. Banish joins ECM USA with a highly skilled background in various induction/resistive equipment systems and heat treat applications, such as large ferrous and non-ferrous alloy melting equipment up to 20 MW power. Working primarily as a national/global sales manager in Crystal Growth Furnaces (including PV/Solar) with various global companies for 20 years, including Cyberstar since 2004, his experience also expands into the automotive industry with automation systems for custom-designed tooling with induction and heat transfer applications. He is a graduate of Wayne State University (Detroit, MI) with a degree in electrical engineering.

Banish will primarily be working with ECM's Cyberstar division. Cyberstar is a manufacturer of furnaces for crystal growth equipment (Czochralski, Bridgman, floating zone, liquid phase epitaxy and mirror furnaces -infrared or laser heating-), photo-voltaics (PV) Si furnaces, sapphire crystal furnaces, gamma and X-ray detectors. Their crystal growth furnaces are well known for their outstanding reliability and performance in many R&D laboratories and industrial companies in the Medical, Laser, LED and Medical Imagery fields. Additional responsibilities will be for VPA (vapor phase aluminization), VIM (vacuum induction melting), and other vacuum processing equipment sold under the ECM Group name.

www.ecm-usa.com



Solar Atmospheres of Western Pennsylvania

CONTINUES EXPANSION

Solar Atmospheres of Western PA recently took occupancy of a brand new 15,000 square foot "connector" building. This building joins the existing 80,000 square foot workspace, which houses some of the largest vacuum furnaces in the world, to its current 10,000 square foot Nadcap laboratory, testing building and vacuum oil quenching building. The primary purpose of this new building is to create a clear and defined flow of work using a pull/push system, rather than having incoming and outgoing jobs co-mingled in front of heat treating equipment. All incoming jobs will now be "pulled" from this building and completed jobs will be "pushed" back to a designated out-bound area. This new space will serve as a conduit for transfer of materials from production to final testing. Finally, the four new loading bays will allow for the loading and unloading of multiple trucks at one time. A drive through feature will allow all flatbed trucks to load/unload indoors, thus keeping shipping personnel and equipment out of the harsh winter elements.



Wes Hoffman, shipping manager states, “Material handling is now thoughtful and organized throughout our 100,000 plus square foot facility. The new building has already proven to eliminate wasteful movement of material. This addition has also enhanced our overall safety. Instead of large trucks navigating our entire campus internally, we can now isolate trucks and drivers to the outer perimeter of the property. This improvement prominently positions Solar for continued growth well into the future.”

Solaratm.com

Starrett

APPOINTS DIRECTOR OF SALES,
METROLOGY SYSTEMS

The L.S. Starrett Company has announced the appointment of **Jim VandeHei** as director of sales, Starrett Metrology Systems. In this newly created role, VandeHei’s primary responsibility will be North American sales of the company’s vision systems, optical measuring projectors and force measurement systems.



“I am very pleased to announce that Jim is joining Starrett,” said David Allen, vice president of Starrett Metrology Systems. “His extensive sales management and sales process skills will be key to furthering the growth of our metrology equipment products in the North American marketplace.”

VandeHei has led and developed multi-channel sales teams for more than 28 years, including over 20 years of metrology sales and commercial operations management for Hexagon Manufacturing Intelligence, Carl Zeiss IMT Corp., and DW Fritz Automation. He is a graduate of the University of Wisconsin — Madison where he received a bachelor of science in industrial engineering degree, in addition to a professional development certificate for executive sales management. He lives with his family in the Chicago area.

www.starrett.com

Verisurf

APPOINTS BUSINESS DEVELOPMENT
MANAGER FOR THE AMERICAS

Verisurf Software has appointed **Tara Mitchell** to the position of business development manager for the Americas. She will work closely with both customers and Verisurf regional sales managers in her new role, applying critical thinking for inspection and measurement solutions across the manufacturing enterprise.



“We are delighted to have Tara as a team leader for business development; her experience and reputation as being highly effective and customer-centric are a great fit for Verisurf,” said Pat Bass, director of sales.

Mitchell’s work history and ongoing involvement in metrology-related community organizations adds to her relevant expertise and provides a clear perspective on industry and customer challenges.

Previously, Mitchell was responsible for business development in the western region for Hexagon Metrology, where she sold inspection and measurement solutions, including fixed CNC CMMs, portable CMM arms, and more.

Notably, during her tenure with Hexagon, she also served on the Executive Committee of the CMSC for nearly ten years, where she pursued the organizations’ goal of bringing the world of metrology one step closer to its audience. While working with the CMSC, Mitchell helped foster an educational atmosphere through programs and the annual CMSC conference that encouraged attendees to network and learn about innovations in 3D measurement solutions from the world’s leading providers of metrology systems.

Mitchell is also a member of the manufacturing and fabrication technical advisory committee at Renton Technical College, Renton Washington, where she will continue her role of supporting programs designed to prepare students and incumbent workers for careers in industrial production and fabrication.

www.verisurf.com

Bonfiglioli

WINS INNOVATION 4.0 AWARD FOR IOTWINS PROJECT

The A&T (Automation & Testing) 2021 Fair in Torino recently presented Bonfiglioli Riduttori with an Innovation 4.0 award for its IoTwins project. The other winner was Rollwasch italiana S.p.a., with VibroBLAST, a patent for a revolutionary vibro-blasting technology.

The IoTwins project is led and coordinated by Bonfiglioli and involves 23 partners from 8 European countries, realizing an effective network of open innovation.



Francesco Millo, strategic planning and M&A director (left) and Fausto Carboni, CEO Bonfiglioli Group (right).

IoTwins design and implement a platform providing services to 12 test beds. The platform digitally reproduces a system (infrastructure, process, machine, etc.) together with its performance, creating Digital Twins that allow the modelling of the system and its dynamics, the prediction of its evolution and the optimization of its operation, management and maintenance. The simulations already affected and replicable involve monitoring production in industrial plants, managing the flow of crowds inside large entertainment facilities, such as the Barcelona stadium, and creating a digital twin of a wind farm by aggregating simulation models and machine learning of single turbines for predictive maintenance.

There were 51 projects selected and admitted, among which the Industrial Scientific Committee of A&T has designated eight finalists. The 2021 edition of the Prize awarded by the A&T Fair has seen a growing interest especially from companies.

“Receiving this award is a source of pride for us, proof of the importance of the IoTwins project of which we are coordinator. R&D, innovation and market orientation as drivers of our corporate activities are the elements that distinguish and guide our Group. I consider the constant development of new ideas and strategies our competitive advantage and success factor,” said Fausto Carboni CEO of Bonfiglioli Group.

www.bonfiglioli.com

Tsugami/Rem

RECEIVES ISO 9001:2015 CERTIFICATION QMS

Tsugami/Rem Sales LLC, exclusive North American importer of Precision Tsugami machine tools, has received ISO 9001:2015 Certification Quality Management System (QMS) through American Systems Registrar (ASR), an ANSI National Accreditation Board (ANAB) accredited registrar.

The International Organization for Standardization (ISO) is an independent organization with the goal of developing voluntary, consensus-based, market relevant International Standards that support innovation and provide solutions to global challenges.

Valentina Ciotto, engineering project specialist at Tsugami/Rem Sales, shared, “Becoming ISO 9001:2015 certified allows us to be proactive in our approach to refining our processes, improving the quality of our support, and enhancing our overall customer service.”

ISO 9001 is a set of basic business principles, written in a standard for quality management systems, that apply uniformly to organizations of any size or type of business. Currently, more than 100 countries have adopted ISO 9001 as a national standard.

“ISO 9001:2015 provided Rem Sales with the structure to focus on standard practices, business process effectiveness, and a culture of risk-based thinking and continual improvement using a team approach.” explained Elaine Rampone, consultant at RAMP Enterprises, who assisted Tsugami/Rem Sales in preparing for their assessment.



While many associate the Tsugami name with Swiss turn machines, Tsugami/Rem Sales does much more than that. Alongside their distribution network, Tsugami/Rem Sales is in regular contact with their customers, whether it is the service department answering questions about alarms or other machine maintenance or the applications engineers to assisting customers in streamlining their programs.

Michael Mugno, president at Tsugami/Rem Sales commented, “Many of our end-users operate with ISO standards. By embedding the ISO process in our own company’s culture, we hope that in addition to bettering our own practices, we can better understand the needs of our customers, and in turn further their confidence in the Tsugami/Rem Sales team.”

remsales.com

Shell

SELECTS SIEMENS POLARION SOFTWARE FOR CAPITAL PROJECTS DATA

Siemens Digital Industries Software recently announced that Royal Dutch Shell has selected *Polarion Requirements* software as the foundation for managing and streamlining the flow of requirements across Shell's global Capital Projects ecosystem. Shell will leverage Siemens' *Polarion* to accelerate development of its digital enterprise as they further transition from document-centric communications to data-driven execution. This will improve the efficiency and flow of digital project data and integrated requirements throughout the Shell supply chain.



Shell is using *Polarion*, a contextual tool within Siemens' *Xcelerator* portfolio of integrated software and services, to enable highly effective and transparent collaboration between its project development teams. The software connects Shell's project teams as they apply Systems Engineering techniques to rapidly and efficiently gather, author, approve, manage, and audit requirements for complex systems across the entire project lifecycle.

"Shell invests billions of dollars each year in new capital projects, Powering Progress in the energy transition and working toward our climate target of being a net-zero energy emissions business by 2050, in step with society. We need trusted partners to do this — which is why we are working with Siemens on a robust, comprehensive and innovative requirements solution," said James Haug, general manager for systems engineering at Shell. "The *Polarion Requirements* software will be the lynchpin technology for advancing our digital enterprise. As we standardize on and deploy *Polarion* globally, we look forward to enhanced efficiencies and lower costs for Shell and for our supply chain and project ecosystems."

Siemens and Shell worked collaboratively to ensure that the *Polarion* solution provided was configured to accelerate Shell's digital transformation goals. The strategy involved atomizing corporate specification documents into data using *Polarion* to automatically create status reports, documents and workflows that subsequently improve the real-time availability of relevant standards content and requirements across the organization. As a result of the initiative, requirements previously managed in documents are now available as data to be modified and tracked, via a user-friendly collaborative interface, to support and deliver greater efficiency in engineering workflows across

the project development lifecycle. Shell quickly expanded the use of *Polarion* to a substantial number of projects globally within the first year, following the technology's initial deployment.

"Siemens is pleased to help one of the world's foremost energy firms develop and deploy a modern, world-class digital enterprise based on the management and coordination of requirements data and other critical initiatives," said John Nixon, senior director for the energy and utilities industry at Siemens Digital Industries Software. "By implementing a unified approach to requirements management that connects all project development processes with their engineering artifacts, and improving the collaboration between the teams that originate, manage and review them, *Polarion* is helping Shell and its supply chain partners reduce their total cost of ownership, improve regulatory compliance, and accelerate time-to-value on assets."

www.sw.siemens.com

You Have Questions. We Have Answers.

Gear Technology's "Ask the Expert" column has been one of our most popular features over the years. But our experts are getting bored and lonely! Give us some questions, and we'll help you get the answers you need, while educating the gear industry at large! We're looking for your technical questions on gear design, manufacturing, inspection and use. And just like when you were in school, there are no dumb questions!

[www.geartechnology.com/
asktheexpert.php](http://www.geartechnology.com/asktheexpert.php)