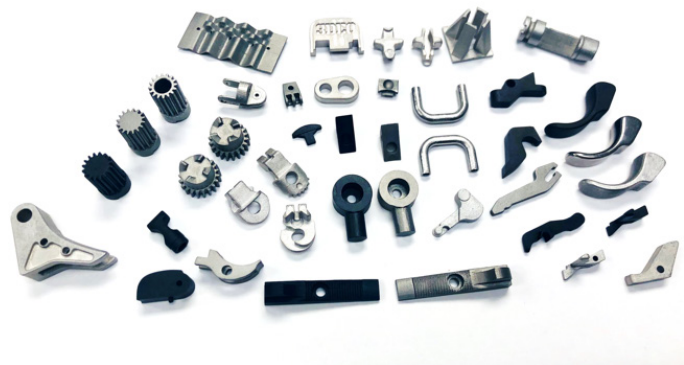


3DEO

POSTTRIPLE DIGIT GROWTH BY DEMOCRATIZING MANUFACTURING

3DEO started as a 3D printing company with its revolutionary metal 3D printing technology, Intelligent Layering, at the core. But in order to compete in high-volume traditional manufacturing, the company evolved into a vertically integrated, next generation factory. This new business model meant manufacturers could gain the cost savings, design freedom, and manufacturing flexibility they need to compete — without having to shell out millions of dollars for a metal 3D printer and the supporting infrastructure.



As evidenced by 3DEO's success metrics for 2019, this paradigm shift could be a forerunner to building the factory of the future.

"We are very proud of the growth that was accomplished over the last year. It is clear that 2020 will be another record-setting year for 3DEO as our pace of adoption across all industries is accelerating. More than a metal 3D printing company, 3DEO is a solutions provider helping our customers tackle their most challenging manufacturing problems. What's more, almost every customer we are working with is using metal 3D printing in production for the first time. We are in the trenches with our customers, and our growth curve is a testament to the demand for these solutions. In the end, our mission is to do for manufacturing what Amazon's AWS did for the internet by offering low-cost access to flexible, scalable, and world-class manufacturing infrastructure," Matt Sand, the company's president, said.

"We're doing things in manufacturing that previously couldn't be done," Matt Petros, 3DEO's CEO, said. "And we're doing it by leveraging several enabling technologies that are converging right now in manufacturing — in a way that finally allows metal 3D printing to shift the serial production paradigm."

Amidst a downcycle in manufacturing jobs in America, 3DEO's new solution-focused business model is creating new jobs. High-tech production workers work with robotics and automation. The most noteworthy employee increase was in the R&D department. With over 25 engineers, 3DEO is continuously improving core processes and technology up and down the production line. (*3deo.com*)

DTR USA Corp.

MOVES TO NEW LOCATION

DTR USA Corp. is moving to a new office located at 1261 Wiley Road, Unit K, Schaumburg, IL 60173. DTR offers a complete line of coarse pitch to fine pitch hobs including involute, worm, chain sprocket, timing pulley, serration, parallel spline or special tooth shape, shaper cutters and milling cutters and broaches for auto, aerospace, wind, mining, construction and other industrial gear cutting applications.



Hobs are manufactured to AGMA, DIN, JIS and ISO standards, modules ranging from 0.5 to 32, available in AGMA Class A, AA and AAA tolerances. Every hob is precision-made with the latest in coatings and high-speed steels, premium powder metal and carbide, giving the best possible tool to achieve superior cutting. DTR uses top of the line equipment including Reishauer CNC hob grinding and Klingelnberg CNC sharpening and inspection equipment. (*www.dtrtool.com*)

Höganäs

DONATES 165,000 SURGICAL FACE MASKS TO SWEDISH HOSPITAL

Höganäs in China recently sourced 165,000 surgical face masks, the kind that are used by hospital staff when caring for Covid-19 infected patients.

"Through the Swedish Chamber of Commerce here in Shanghai, we were able to ship and donate the masks to Örebro University hospital in Sweden," says Mark Braithwaite, who heads continent APAC. "If only so little, we are happy to ease the burden on the Swedish national healthcare."

In February, during the peak of the corona crisis in China, Höganäs co-workers in China received a lot of support and care from colleagues around the world. Also, Höganäs in China together with its co-workers donated 184,000 CNY (\$25,000 USD) to support the Wuhan district through a charity foundation.

"Then during March, Höganäs in China sent more than 38,000 masks to different Höganäs countries to support maintained operations," says Terry Chen, who heads the operations at Höganäs' plant in Quing-Pu, Shanghai. "It became apparent



that there was good availability of face masks in China, but shortages in many other parts of the world. We thought we could help.”

With the recent rapid spread of corona virus across the world, including Sweden, Höganäs in China decided to donate face masks to hospitals in need. Through reaching out to the Swedish Chamber of Commerce in China in mid-March, Höganäs was introduced to the brothers Fabian and Aron Fredriksson. They have an extensive business network in the Chinese medical equipment market and supported in identifying hospitals in Sweden in critical need of face masks and ensuring that approved masks were supplied and able to be exported.

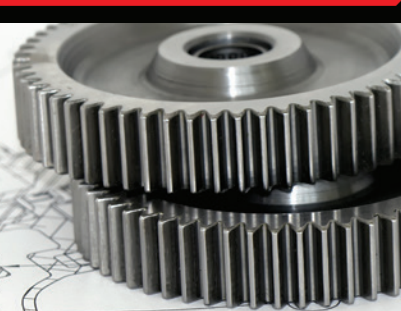
“The whole process took a little longer than expected to finalize, but we managed thanks to support from colleagues in Sweden for the shipment. We were very pleased when the 165,000 face masks finally left Shanghai on 11 April,” says Richard Molin, Continent APAC Operations.

The masks arrived safely at Örebro University Hospital in late April and were approved for use.

“We are immensely grateful for this gift and the engagement it represents. The large number of face masks is a valuable contribution and supports us in supplying a good and safe health-care,” comments Claes-Mårten Ingberg, medical director in Region Örebro County.

“We continue to team up with the Swedish Chamber of Commerce in Shanghai to find more Swedish companies in China that want to join the fight against the corona virus. The situation is changing quickly, and it will become more difficult to secure needed protection equipment as more and more countries are recommending use also for individuals,” says Braithwaite. (www.hoganas.com)

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Eaton

COLLABORATES WITH THOGUS ON FACE SHIELD DESIGN AND PRODUCTION

The global COVID-19 crisis is placing unprecedented demands on government and healthcare organizations, driving a critical need for front line workers' access to personal protective equipment (PPE). Power management company Eaton is using its manufacturing, 3D printing expertise and partner network to fulfill a JobsOhio order for rapid production of 360,000 reusable face shields to strengthen the state's fight against the virus.

Eaton collaborated with multiple hospitals and Cleveland's Manufacturing Advocacy and Growth Network (MAGNET) to optimize the face shield design for production. Now, Eaton is working with Thogus, a local family-owned custom plastic injection molder, to rapidly produce the critical equipment at scale.

"Ten business days ago, this project was just a concept. Today, we're moving forward with production and looking to expand further," said Michael Regelski, senior vice president and chief technology officer, electrical sector



at Eaton. "By leveraging our advanced manufacturing capabilities and strong network of partners, we're helping Ohio quickly respond to current inventory challenges and maximize accessibility of critical PPE resources for front line teams combatting COVID-19."

Eaton's additive manufacturing capabilities are instrumental to fast-paced design incorporating customer feedback and ability to easily scale production to meet the immediate needs of communities around the world. (www.eaton.com)

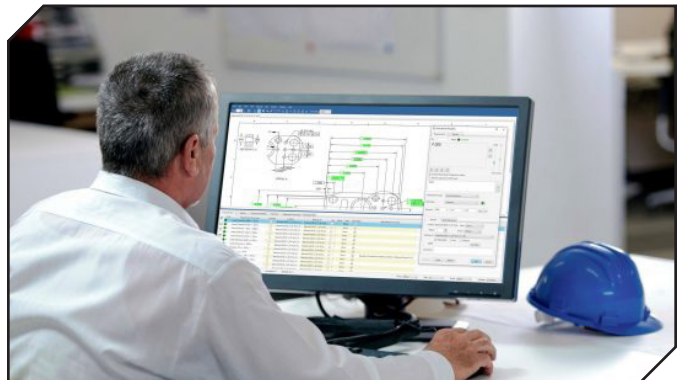
Discus Software

SELECTS ADAPTIVE CORPORATION AS U.S. DISTRIBUTOR

Discus Software Company, headquartered in Columbus, OH, has announced a premier authorized partnership agreement with Adaptive Corporation. Adaptive will sell and support Discus' First Article Inspection (FAI) software solutions to businesses operating in aerospace, defense, automotive, medical and various other manufacturing industries that have stringent quality requirements.

Discus specializes in automation of the first article inspection process. "We selected Adaptive as our first U.S. premier authorized partner because of their ability to deliver a closed-loop solution for FAI, as well as additional services such as the capture and tracking of statistical process control (SPC) data," says Jake Hart, director of sales and marketing for Discus.

"Our complete package provides not only First Article Inspection, but support for other production/inspection processes as well," says Frank Thomas, Adaptive's metrology line business manager. "At Adaptive, our metrology solution portfolio helps our customers significantly reduce first article inspection costs by automating the data collection and reporting process."



First article inspection is a common practice in a wide variety of industries for reviewing products before volume production. Many manufacturers spend an inordinate amount of time converting customer data packages (CAD models, drawings, specifications, etc.) into the necessary internal documentation. Quality engineers create inspection plans and FAI reports; manufacturing engineers create process plans. Manual transcription of such data is laborious, can be redundant and is subject to human error.

Compliance with the various FAI expectations (i.e. AS9100 in aerospace, PPAP in automotive) of customers is essential for manufacturers. Discus' modular software tools greatly reduce the labor effort for AS9100, PPAP, TS16949, and Part 820 quality and manufacturing planning. The software is compatible with many of the requirements used by companies like Boeing, Lockheed, BAE, Aerojet, Honeywell, Collins Aerospace and others.

“Discus is an industry-leading product that is used heavily in automotive and aerospace companies of all sizes, which are a primary focus for Adaptive,” says Thomas. “Together we have a common market and business focus on enhancing product quality and time-to-market and it made sense to partner in sales and support of Discus software moving forward.”

“The Discus-Adaptive partnership is a powerful combination given Adaptive’s extensive experience in FAI and metrology and Discus’ industry-leading software,” says Hart. “Adaptive will help grow and support Discus’ expanding customer base here in the US.” (www.discussoftware.com, www.adaptivecorp.com)

Gear Motions

PLEDGES TO KEEP PEOPLE SAFE AND FACTORIES RUNNING

In coordination with the Manufacturers Association of Central New York (MACNY), Gear Motions has joined a group of CNY manufacturing companies pledging to keep employees safe and factories running.

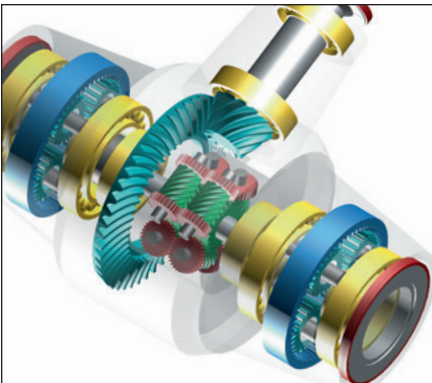
Supported by a peer-to-peer review process, the pledge combines the experience, skills, and knowledge of the founding organizations with best practices from noted authorities such as NYS DOH, CDC, OSHA, and WHO.



The pledge includes steps that go above and beyond to keep factories safe for employees and the community. Components include:

- Controlling site traffic
- Enhanced hygiene
- Social distancing and reduced density
- Emergency response and quarantine procedures
- Robust communication

Message from Gear Motions: “Keep People Safe and Factories Running. We have instituted significant operating enhancements to mitigate the risk associated with the spread of the Novel Coronavirus. We remain committed to, and align with, NYS DOH, CDC, OSHA and WHO guidelines.” (gearmotions.com)



KISSsoft Highlights

- Rainflow method for load data analysis
- Reliability evaluation with AGMA 6006, VDMA 23904 and Bertsche
- Revised tooth root and flank rating according to ISO 6336:2019
- Scripting language for automation and extension of calculations
- Gearbox data exchange with REXS

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TECHNOLOGY

Atlas Pressed Metals

ACQUIRES NEW SINKER EDM FOR PM MANUFACTURING

Electrical Discharge Machine (EDM) is a machining method primarily used for hard metals or those that would be impossible to machine with traditional machine tools. A Sinker EDM is especially well-suited for cutting intricate contours or delicate cavities that would be difficult to produce with a grinder, an end mill, or other cutting tools. Atlas currently does most all repairs to tooling in house, the Sinker EDM is an integral part of the company's tool repair and replacement program.



Atlas upgraded to a brand new Sodick AD55L Rigid Linear Motor Driven Sinker EDM for higher precision, and the ability to produce finer, more intricate details on powder metal compaction tooling; to accommodate larger tools for higher compaction tonnage presses. With a maximum workpiece weight of over 2,200 pounds, and capability to accept a punch over 22 inches in length, this EDM will cover most any powdered metal (PM) tool in the entire industry; and to produce much finer finishes and reduce EDM time. With less labor-intensive hand polishing required Atlas will achieve quicker lead times, shorter press downtime, and reduced labor to improve the overall cost of its final products.

"It is very exciting to have this level of technology for tool and die work here at Atlas. Investing in an EDM of this caliber really shows that we are committed to supporting our customers and being the best at what we do," says Dan Dixon, Atlas tool shop and machining manager.

Atlas Pressed Metals is a family-owned, powdered metal parts manufacturer, that was established in 1976. (atlaspressed-metals.com)

VELO3D

FUNDING PAVES WAY FOR PRODUCT EXPANSION

VELO3D has announced that it has raised \$28 million in a Series D funding round. New investors Piva and TNSC joined the round, along with existing investors Bessemer Venture Partners, Playground, and Khosla Ventures. This brings VELO3D's total funding to \$138 million.



"With the VELO3D integrated solution of Flow advanced pre-print software, Sapphire printer, and Assure quality management software, companies can finally break free of the constraints of existing metal additive manufacturing processes," states Benny Buller, founder and CEO of VELO3D. "Customers in industries such as aerospace, oil & gas, and power generation are now able to achieve part quality for their mission-critical applications with performance levels that weren't possible before with 3D metal printing."

VELO3D plans to use the new capital to expand its product portfolio to include more machine options, compatible alloys, and enhanced software and hardware capabilities. The company anticipates that the injection of fresh capital will help them reach sustainable profitability by mid-2022.

Piva is the largest investor in the new round and has a strong heritage in industrial markets, as they are backed by Malaysia-based PETRONAS, one of the world's largest energy companies.

"VELO3D is revolutionizing the way we think about advanced manufacturing today," said Ricardo Angel, CEO and managing partner at Piva. "We have been impressed by Benny, the team and their breakthrough technology that will have a significant impact on the efficient design and manufacturing of more complex components, previously unattainable, with clear commercial traction already in the aerospace and aviation markets. VELO3D will lead a new wave of more resilient, distributed manufacturing capabilities for its most critical components, which the world will need to ensure local product availability and timeliness, while mitigating potential future worldwide disruptions."

Founded in 2015, VELO3D operated in stealth mode for the first 4 years, then announced availability of the Sapphire printer in 2019. In that first year of commercialization, VELO3D generated nearly \$30 million in sales and gained seven new customers, many of which have placed repeat orders. VELO3D now has a global customer footprint that includes Japan, Korea, and Australia. (www.velo3d.com)

Rollomatic Inc.

APPOINTS GROUP COO

The Rollomatic Group has announced the appointment of **Joe Kane** as Group COO for both entities, Rollomatic Inc. and Strausak Inc. Kane will continue to hold his position as president of Strausak Inc. In this position, Kane will oversee all areas related to the operation of the two companies. He will personally manage the combined team of application engineers and provide leadership and training to the field service manager, parts and logistics manager and the customer solutions manager and their respective teams. Kane will also be responsible for the day-to-day running of the company, IT/IS and the facility.



“Joe’s impressive track record working as president of Strausak Inc. and his ability to communicate and relate to people make him the ideal leader. Such qualities are key to expanding the brand name and drive the ever-evolving new technologies of the companies. We fully expect that his talents will support the profitable growth of the Rollomatic and Strausak business,” said Eric Schwarzenbach, president of Rollomatic Inc.

Kane has been president of Strausak Inc. for 2½ years where he successfully focused on accelerating Strausak’s innovation and customer-focused applications in the precision grinding space for the cutting tool industry.

Prior to joining Strausak Inc., Kane spent over 14 years in the manufacturing and quality industry where he began as a metrology technician with the United States Marine Corps. He later translated these skills and expanded his career into product and sales manager positions where he set up distribution and service channels throughout North America for CNC machine tool companies specializing in automated, turnkey solutions for production machining. (www.rollomaticusa.com)

Blaser Swisslube

OFFERS LIVE WEBINARS AND METALWORKING FLUID TIPS

Blaser Swisslube is close to its customers in these difficult times with regular live webinars to help the machining world refresh their knowledge and learn new things. It began with a look behind the scenes at the headquarters in Switzerland, followed by a series of in-depth webinars.

Since physical meetings are hardly possible at the moment, the innovative coolant manufacturer Blaser Swisslube has quickly changed to online company tours and trainings. CEO Marc Blaser explains the background of Blaser’s current training series. “From basics to expertise, from analysis to monitoring and maintenance, our

machining experts and chemists help you fully capitalize on the potential of your machines and tools and turn your metalworking fluid into a key success factor — a Liquid Tool,” he said.

On April 2, 2020, Blaser Swisslube began with internal online courses for further training of employees. In the first five weeks, the in-house Blaser College held in total 176 live sessions, which were attended by more than 3,200 employees as well as business partners and customers from all over the world.

Since April 30, Blaser has been offering live events for the entire machining world. In the first of a series of webinars, attended by over 1,000, Chief Technology Officer Bernhard Gerber provided a look behind the scenes at the headquarters in Switzerland. He talked to machining experts



and chemists from Blaser’s technology center and laboratory about the strong leverage effect of the metalworking fluid on crucial performance indicators such as tool life, cycle time, workpiece quality and machinist satisfaction, as well as about the importance of regular monitoring and maintenance.

Visit the website below to see the schedule of live webinars for the coming weeks and months on topics such as coolant maintenance, microbiology and the underestimated leverage effect of the metalworking fluid on total costs. The recordings of live events that have already taken place are also available for viewing. Anyone interested in the power of the metalworking fluid can therefore easily refresh their knowledge and learn new things. Since Blaser Swisslube has had positive experiences with its online trainings, they will remain an integral part of the company’s training plan for the future. “We will focus on online and live trainings to provide our customers and partners with in-depth knowledge and experience,” concludes Marc Blaser. (blaser.com/webinars)