

THE MANUFACTURER

TOP 100

2020





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THE MANUFACTURER TOP 100

16-52

Sponsored by:



BACKGROUND

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WHY? We first had the idea for *The Manufacturer Top 100* in 2013. There was a growing recognition in academic studies and parliamentary reports that there was a lack of visible role models in the industry.

WHAT? The Top 100 was our response. We wanted to provide a showcase for the most inspiring individuals in industry, to illustrate the enthusiasm and commitment present in modern manufacturing and to underscore the exciting, well-paid and rewarding careers that exist in the sector.

WHO? These 100 individuals have been nominated by customers, team members, by the leaders and the led, from shop floor to top floor. They are among the very best UK manufacturing has to offer. And given the brilliance of modern manufacturing in this country, that is really saying something.

Out of the 100 judged to have made the cut, 20 have been highlighted as Exemplars, people who make a truly exceptional contribution to the sector every day.

WHAT'S NEXT? All 100 are catalysts for change. They strive for innovation, the newest technologies and pioneering business models. They acclimatise, pivot and plunge forward as the markets and competition around them evolve. They are the driving force behind the country's manufacturing renaissance, and to understand their journeys is to understand why it is truly exciting to be manufacturing in Britain today.

FOREWORD

Welcome to our celebration of *The Manufacturer Top 100 2020*

As we celebrated our last cohort in November 2019 no one could have predicted the events that have since unfolded. Brexit finally passed parliament but as I write, the type of deal we will eventually have with the European Union is still far from assured, and manufacturers across the UK are still preparing themselves for a no-deal scenario. If Brexit wasn't enough to contend with, a once-in-a-century event decided to sweep the globe and disrupt our lives – the likes of which we haven't experienced in the post-war world. COVID-19 has transformed the way we work, how we consume, and has given us pause to reflect on what's really important in life.

There will be both short and long-term changes brought about by the pandemic

and the shape of the manufacturing industry post-COVID is far from certain. What is evident though is how the industry rapidly adapted itself to meet this new reality. Whilst it has been far from easy to see businesses reshaped and reorientated with the loss of skilled workers, we must nevertheless take a collective pride in how manufacturers stepped up in a time of national emergency.

On these pages you will find individuals who played no small part in that collective effort, whether it be diversifying their businesses to meet demands for PPE or those who were part of the Ventilator Challenge. It was quite remarkable to see, what appeared to be developed at warp speed, the collaboration between manufacturers from the aerospace, automotive and others sectors, and from all sized businesses, who came together to produce the thousands of ventilators

that were required to assist those who were most vulnerable to the effects of COVID. Every single participant should know how proud the entire country was of their efforts and the way they proved how valuable manufacturing is to the UK, not just in a time of emergency but every day of the year.

The Manufacturer Top 100 is a showcase of those individuals who go that extra mile in their work. Nominated by their peers and judged by an expert panel, they represent the very best of the UK manufacturing industry. Of the 100, our judging panel chose a number for special recognition, we call them 'Exemplars'. They, like all named as a Top 100, prove, day after day, what remarkable people work in our manufacturing sector.

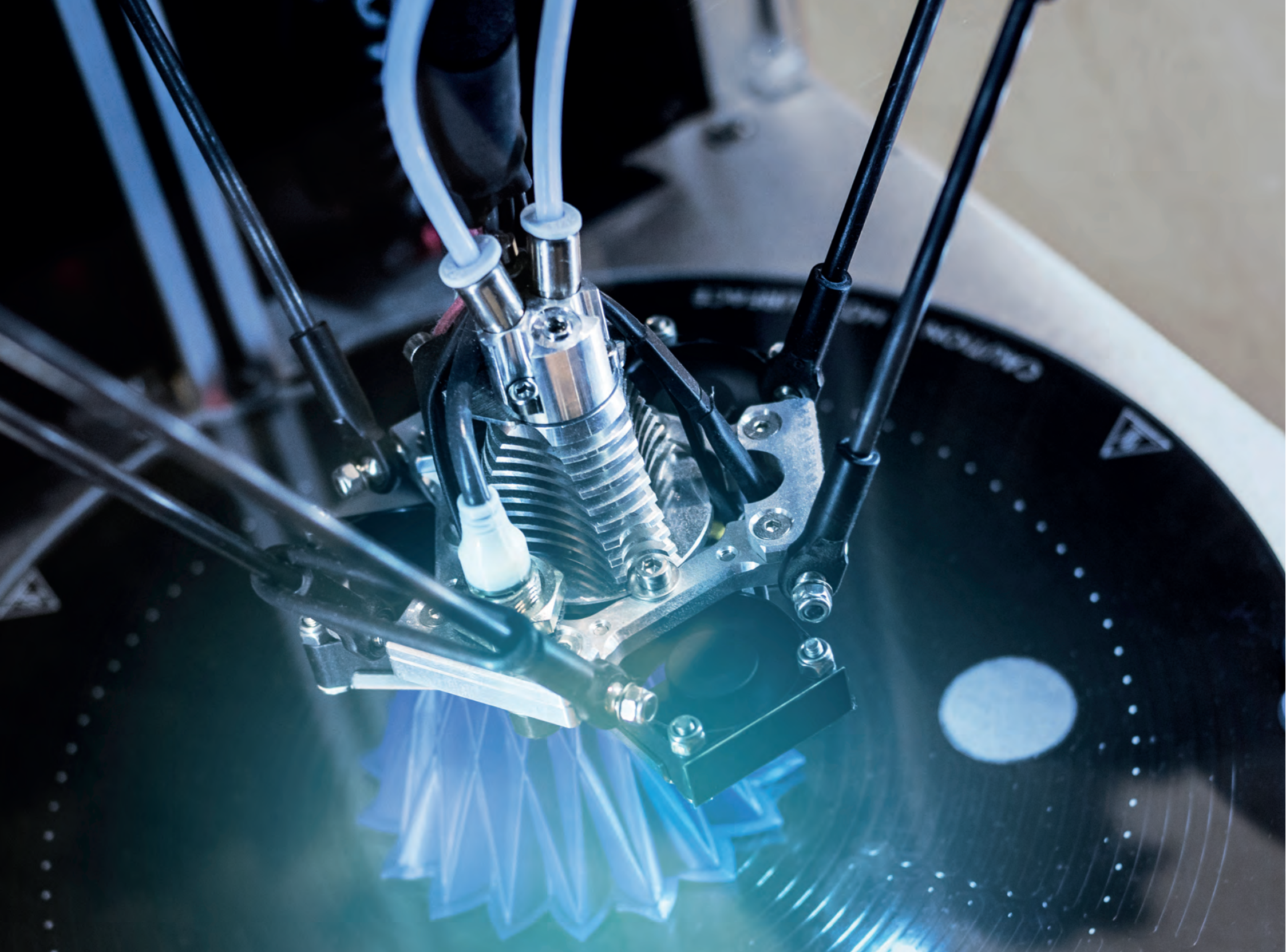
To the Top 100 themselves – you are part of a unique community of 700 individuals from the 7 years we have

been running this. Please take time to read 'The Pledge' on what it means to be a Top 100 and the contributions we ask you to make as a member of this community.

Finally, many congratulations to everyone of you on this great accolade, it is thoroughly well deserved and I speak for all of us at *The Manufacturer* and our Judging Panel when I say we are all proud of your achievements in making manufacturing in the UK the innovative and forward looking sector it is today.



Daniel Kirmatzis
Head of Digital
and Communities,
The Manufacturer



CRANFIELD UNIVERSITY & *THE MANUFACTURER*: DRIVING EXCELLENCE

Throughout the last few months the adage that it is people that make the difference has come into sharp focus more than ever before. As the pandemic disrupted supply chains and factories began to feel the brunt of resource scarcity and demand turbulence, battle-ready manufacturing leaders and their teams responded in an agile way to the challenge in keeping the nation fed, mobile and safe. The UK manufacturing sector proved once more its strategic importance and this makes our 7th year of celebrating the Top 100 extra special. It serves as validation that whatever the backdrop of geopolitical turbulence, our talented people continue to provide hope and excitement for a part of our economy that has always been a multiplier of value in both economic and social terms. Cranfield University as the educational partner of the Top 100 remains a staunch supporter and proud sponsor of *The Manufacturer Top 100*.

The UK manufacturing sector continues to underpin the economy sustaining more than five million households and delivering more than half of all UK exports. We are still in the top 10 of

global manufacturing nations and the opportunities for rewarding and well-paid careers are plentiful. The yearly showcase of the Top 100 in our profession is the testament to the real difference manufacturing people are making to so many lives in communities across the UK.

Cranfield University is recognised as one of the UK's leading institutions where manufacturing education, research and technology transfer are world-beating. Alongside our long-standing award winning postgraduate programmes, Cranfield Manufacturing offers a special mastership in Operations Excellence that has over the years helped deliver the crème de la crème of operations leaders in UK industry. This part-time course meets the requirements of the Level 7 Senior Leaders Master's Degree Apprenticeship Standard. Eligible organisations can use £18,000 of their Apprenticeship Levy to cover the course tuition fees. It is designed with excellence as a goal in both learning and doing as the true pedigree of our famous Cranfield no-nonsense approach that injects the best thought-leadership into actionable plans.

Over a period of two years, delegates are not only taught the latest theories and methods but they are also coached with meaningful feedback to grow their confidence and prowess in defining the best strategic and tactical action plans for their operations. The course is designed for middle to senior managers, directors and high potential employees of UK businesses with operational responsibility for manufacturing and service delivery wishing to attain true mastery of the operations excellence genre. It builds on the individual's own skills and experience using Cranfield University staff's practitioner expertise of implementing operational excellence. The outcomes on ROI are tangible as 60% of the course time is dedicated to actual in-business project

work that the students are able to carry out whilst performing their existing roles without distractions. Nine one-week modules are designed to stretch the critical thinking and develop true mastery of managing change and driving progress. Our OpEx MSc alumni are becoming the "elite force" of the UK manufacturing sector, navigating the turbulent emergent and geo-social changes with agility and resilience making us immensely proud of their achievements.

At Cranfield we understand that getting to the top is not the end of your journey – helping you stay on top is what we do best.



Professor Mark Jolly
CEng, CEnv, FIMMM, FICME
Director of Manufacturing,
Cranfield University

MANUFACTURING HEROES

In years to come, as we look back to the challenges of the 2020 pandemic, one truth will stand out above all others. Amid all of the tumult of COVID's invasion of these shores, there were people across our society who stood forward to make life better for all of us. We will remember standing outside our homes to cheer our NHS workers. We will think of Joe Wicks helping us all to battle the lockdown spread of our waistlines. We will call to mind the many thousands of unsung heroes in our communities who made sure that the elderly and the isolated got the supplies they needed.

As we remember these 'celebrities' of the COVID era, I hope we will also celebrate the many men and women of our manufacturing community who worked long hours to deliver what this nation needed. Often struggling against the odds, key individuals worked to heal the hole in our supplies of personal

protective equipment, to deliver the vital equipment our hospitals needed and to put in place the technologies needed to mass produce vaccines and testing kits and so much more. They showed the power and agility of UK manufacturing. They demonstrated, beyond all question, that when faced with a problem, this country needs its manufacturers and that with grit, determination and friends one person can rise to meet apparently insurmountable challenges.

Too often in our popular press manufacturing is depicted as a national problem. The individuals celebrated in this Top 100 have shown us all that, in moments of need, manufacturing is the solution. They remind us that success begins with people and provide a role model for the next generation of entrepreneurs, engineers and technologists. The HVM Catapult is proud to honour all of them.



ROSA WILKINSON,
Communications
Director, High Value
Manufacturing
Catapult

CATAPULT
High Value Manufacturing

www.hvm.catapult.org.uk

RECOGNISING TALENT

Well I think it's fair to say 2020 has not gone according to plan! However, there have still been some huge achievements in UK manufacturing including how manufacturers from all sectors got together to support the UK's need for ventilators – thank you to all those who were involved and I know some of you who were involved are represented in this year's Top 100.

The Manufacturer Top 100 is a brilliant way of recognising, supporting and thanking the leaders, the unsung talent and the up and coming stars of the future. It was fantastic to see such a large number of high-quality entrants this year - shortlisting down to 100 was a challenge for all involved. A big thank you to all those who nominated somebody – without your nominations there wouldn't be a Top 100.

The Top 100 is in its 7th year so, including this year's cohort, there

are now 700 members of this unique community of manufacturing talent. This sector contains a wide variety of people – from those who are leading their businesses forward in such uncertain times right through to those who are just starting out in manufacturing as Apprentices and Graduates (albeit, from reading their nominations, they're definitely going to be manufacturing leaders of the future). In addition, the Top 100 also recognises Unsung Heroes – nearly every company has somebody who would be classed as one of these... if you're reading this who are you now thinking of in your business? Put a reminder in your calendar to nominate them in 2021!

Talking of unsung heroes there is still going to be a war for top talent in 2021 – manufacturers need to be harnessing and recognising their unsung heroes – the easiest way to win the war for talent is by

keeping and developing the employees you have in your business already.

Sometimes you will need to attract external talent though and that's where Hunter can help - our mission is to enable engineering and manufacturing businesses to attract the right talent to their business. Through a blend of intuitive technology and recruitment expertise we help position businesses to attract the best talent ahead of their competition.

2021 brings challenge and opportunity for UK manufacturing. Challenge due to both COVID-19 and the potential lack of a trade deal between the UK and the EU, but with challenge and change comes opportunity. We only need to look at the resilience UK manufacturers have shown so far in 2020 and the achievements of those nominated in the Top 100 this year (and previous years) to know that we are in safe hands.

This year's list is, truly, a fantastic reflection of the resilience, adaptiveness and overall success of the UK manufacturing industry. Hunter is, again, privileged to be involved in celebrating this success, and together, we are committed to helping the UK manufacturing industry continue to drive forwards.



DAN KIRKPATRICK,
Head of Customer
Success at
Trust Hunter



www.trusthunter.co.uk

JUDGING PANEL

Will Bridgman
Chairman
Warren Services

Colin Brown
Chief Executive
IMechE

Professor Steve Evans
Director
University of Cambridge

Paul Everitt
Chief Executive
ADS

Nigel Fine
Chief Executive
Institution of Engineering and Technology

Ian Green
Section Manager/Senior Controller
Nissan

Professor Chris Greenough
Chief Commercial Officer
SDE Technology

Dan Kirkpatrick
Director and Head of Customer Success
Hunter

John Ahmet Erkoyuncu
Professor of Digital Engineering
Cranfield University

Professor Carl Perrin
CEO
Institute for Future Transport & Cities

Katrina Ritchie
People and Culture Director
Gripple

Jane Robinson
Director/Trustee
Brigantia Learning Trust

James Selka
Chief Executive Officer
MTA

Professor Sam Turner
Chief Technology Officer
High Value Manufacturing Catapult

Jan Ward CBE
Founder
Corrotherm International

Ann Watson
Chief Executive Officer
Enginuity

Bill Williams
Chief Executive
CEME

Margaret Wood MBE
Chairman
ICW





JUDGING CRITERIA



Inspiring Leader

An inspiring leader who has created wealth for and created stable employment at a UK-based manufacturing firm, while remaining committed to investing in developing the value of their manufacturing business through people, processes and technology.



Bold Investor in New Markets

Someone who has been courageous in finding new markets, increased revenue by venturing overseas and helped reshape one or multiple markets by providing a new and competitive business model involving UK manufacturing.



Driver of Cultural Change

An individual who has helped to alter popular perceptions about manufacturing locally or nationally, inspiring young people, women and minority groups or has influenced government to help make conditions better for manufacturing in the UK.



Unsung Hero

Someone who is instrumental in facilitating the success of those around them and the success of the business as a whole. They are the constants that provide support and knowledge both downwards and upwards within the professional hierarchy.



Young Pioneer

A person who has made an impact disproportionate to their years, providing inspiration for the future of manufacturing in the UK.



Innovator

Someone who embraces change in order to improve outcomes, and who is able to bring their team along with them. They constantly seek to improve products, processes and/or team-work in service of the customer and the business.

WHAT IT MEANS TO BE A MEMBER OF THE MANUFACTURER TOP 100

The Manufacturer Top 100 alumni are representative of everything that is brilliant and inspiring about UK manufacturing.

To be part of it means that someone, either within your company or outside, considers you to be an outstanding role model for the young people we all want to encourage into careers in our sector. It is an acknowledgment of your past achievements and a signpost to your future success.

Such a very public endorsement of your qualities can have significant career implications for you going forward.

As part of this elite community, you are entitled to the following courtesy benefits from *The Manufacturer*:

- **Lifetime VIP passes to *The Manufacturer Summit* events whilst directly employed within a manufacturing role**
- **Lifetime complimentary subscription to *The Manufacturer* magazine whilst directly employed within a manufacturing role**
- **You are invited to join *The Manufacturer Community* (www.community.themanufacturer.com) TOP100 Alumni Club. This is the place to connect with your peers and stay in touch with *The Manufacturer*.**

THE PLEDGE

What we look for in turn is a sign of the deepening commitment to the sector that being a member of *The Manufacturer Top 100* implies. We therefore ask you to make some, if not all, of these contributions. Those with an asterisk we regard as a minimum:



Pay it forward - nominate two individuals for *The Manufacturer Top 100 2021*



Share your story - write an article for *The Manufacturer* or agree to be interviewed*



Be an active member of our community*
(community.themanufacturer.com) - also join us at one of *The Manufacturer's* events, or even better, take a speaking slot



Close the skills gap - become a STEM ambassador or help a colleague to do so



Showcase brilliant UK manufacturing - open your factory doors to schools, universities and the local community



Shape industry coverage - join *The Manufacturer's* Editorial Advisory Board



Future-proof your business - employ an apprentice



Recruit the right talent at school age - host a stand at a careers fair

Now, turn the page to meet
The Manufacturer
Top 100 2020



Carole Ackley

Projects Manager
Hosokawa Micron Ltd



As the third-generation engineer, and albeit the first female, it could have been said my career path was pre-ordained. I was fortunate to have an enlightened father who thought girls could do anything the boys could do and encouraged my tinkering with anything mechanical from an early age. Amongst my professional achievements, the one which has given me greatest pleasure was to complete in 2017 a MSc in Particulate Solids Handling via distance learning with Glasgow Caledonian University. Passing the course with a distinction then led me to becoming a Chartered Engineer with the IMechE later that same year.

If you could have a quiet word with your younger self

You do not have to be perfect all the time, sometimes good enough is enough. Also, to borrow a line from the film *The Best Exotic Marigold Hotel*, 'Everything will be all right in the end... if it's not all right then it's not yet the end.'



Neil Aldersley

Global Head of IT
Element Six



I work for Element Six – a global manufacturing company that harnesses the unique properties of synthetic diamond and tungsten carbide. I am part of the management team for Operations, capturing machine data and turning it via data analytics into business intelligence. It's an exciting area and I love the challenges it brings. I've been a senior manager in IT for many years and a good part of these have been in the manufacturing sector. My approach and style to leadership is one based on competitive teams. Each team player has an important role to play in the success of the team.

What is your favourite engineered/manufactured product?

My Apple iPhone and Apple watch – amazing technology and really well engineered.



Mike Ames

Head Of Technical
TSP Engineering Ltd



I started in Workington with the then British Steel Corporation as a trainee metallurgist. I rapidly realised that I had joined a company in which I could see a complete project from cradle to grave. I qualified as a chartered engineer with what was then the Institute of Metals (now IOM3) whilst training as a welding engineer in parallel, and set my stall out to be Technical Manager by time I was 30. I am now privileged to be part of an energetic senior team, but as Head of Technical am still able to get involved with my engineering and technical first love.

If I wasn't a manufacturer, I'd love to be...

Professional musician. I've played piano and keyboards since I was about five years old, and I spend my down time either practicing, rehearsing or performing music, accompanying choirs, playing for shows or in a jazz or heavy rock group.



Neil Anderson

Managing Director
Caterpillar



I have had a privileged career starting off as an apprentice mechanical engineer with the inspiring David Brown. The company was bought out by Caterpillar in the late 1990s and I moved into business unit management. Managing two satellite factories before moving to Caterpillar corporate office to be part of a team before becoming Managing Director at Caterpillar Skinningrove in 2011. I have had many career highlights, however, if I have to pick one it will be the turnaround at the Caterpillar Skinningrove plant. Earmarked for closure it's a remarkable story.

What qualities must future leaders have?

Tomorrow's leaders should enjoy developing and coaching others by investing a lot of energy and time in building and maintaining personal relationships founded on trust. Trust is a core belief and should be a value which they work hard to keep.



Jennifer Bentley

Head of Production, AnTech Ltd



In their own words

What is your favourite engineered/manufactured product?

Dyson Vacuum Cleaner

Please give one interesting fact about yourself that not many people know.

Each year I volunteer for an organisation that gives children and young adults with special needs a holiday of a lifetime.

If you weren't in manufacturing what would your dream job be?

A Nurse

Growing up Jennifer was always interested in how things worked and for as long as she remembered wanted to be an engineer. Having graduated with a degree in Electrical Engineering in 1997, Jennifer got an opportunity at AnTech Ltd. she was given the task of improving the usability of a piece of software but made quick progress and started training industry professionals how to use it. Following this Jennifer then managed improvements to the software. That first year saw Jennifer travel the globe, making stops at Amsterdam, Canada, Brazil, Dubai, Argentina and the US. Visiting these sites provided ample opportunity to witness real engineering first-hand.

After a couple of years, she moved into the Production team and in her own words, 'felt most at home'. As an engineer, Jennifer always preferred the 'dirty' type of engineering – i.e. one works out what's needed and solve problems.

Jennifer says, "I am proud to say I support younger people who are interested in developing their

engineering skills. I had a year in industry within my degree and I appreciate the value of it." She regularly works with organisations to offer experience to students and a number of these placements have led to permanent roles. Jennifer concludes, "I am always keen to offer support and opportunities to young people just starting out. As engineers we need to do our part in encouraging the next generation into engineering and enable them to develop their ideas and change the world with their contribution."

“

I am proud to say I support younger people who are interested in developing their engineering skills.



Daniel Arey

Manufacturing Engineer
Olympus Algram



From watching *How It's Made* as a young boy, I grew up fascinated with how the everyday items we take for granted make their way into our lives. Working primarily in the field of organisational improvement, an aspect of the job I love is empowering people to make positive changes to their work life. It is my hope to contribute as much as I can to improving the UK's capabilities as a manufacturer, particularly in the fields of process automation – a topic of both my PhD thesis, and a large part of my work as a manufacturing professional.

My favourite manufactured product

The Domestic Clothes Iron - At university, we did a project de-constructing a clothes iron to analyse the design and materials of the components inside. The fact that such a complex and somewhat understated piece of engineering is available to purchase for less than £5 still impresses me.



Chris Balmer

Production Manager
Janus International Europe



I have a great passion for manufacturing, I love to focus on continuous improvement and sharing my passions for CI with my teams to drive efficiencies and create a positive workplace. I believe in creating an environment where everyone feels empowered to create and drive their own initiatives.

Something else you'd like to tell us?

I'm a FA qualified football coach and in my spare time volunteer at a local grassroots club.



Shiby Bernard

Chief Operations Officer
McMenon



As chief operations officer and board member at McMenon Engineering Services – an internationally-focused manufacturer of flow and temperature measurement products - I am responsible for the operational functions of the business. I enjoy engineering for the creative space it allows. As a senior member of the team I make it a priority to lead by example as I look to support growth - both of our company, and of the people who underpin its success. To know that you are part of the process of creating something or solving a problem is a hugely positive and fulfilling experience.

If you could have a quiet word with your younger self...

Working hard and achieving success for the teams and organisations I have been part of have always come naturally to me. But I was reluctant in being ambitious towards personal achievement and success. I'd advise the younger self and all the young girls to be ambitious and not be shy about it.



Sarah Black-Smith

Head of Factory Operations
Siemens Congleton



I believe in empowering and inspiring my colleagues and engaging and developing my team members to successfully deliver the strategic goals of Siemens. I am a passionate and highly motivated Operational and Digitalisation Leader. I believe in starting with the 'why' and engaging people by finding their purpose. I am a firm believer in UK manufacturing and making the UK a world leading place to make things.

What qualities must future leaders have?

They will need excellent communication skills combined with a growth mindset. In addition to being adaptable and versatile, developing new innovative ideas and enjoy a challenge. They will require empathy, humility and a focused will to be at the top of their game.



Martin Cross

Engineering Infrastructure Manager, Niftylift Ltd



In their own words

What is your favourite engineered/manufactured product?

I am proud of all the Niftylifts I have been involved in developing. My favourite non-Nifty product is the Honda HRX 476 QY 19" Rear Roller Lawnmower.

Please give one interesting fact about yourself that not many people know.

I have an amazing pet runner duck called 'Mr Quickie' who follows me everywhere.

If you weren't in manufacturing what would your dream job be?

Running my own business, Consultant, Groundsman, Rally Driver and Scuba Diving Instructor.

Martin works in product development at Niftylift - a privately owned UK business that designs and manufactures mobile elevated work platforms exported globally, helping the business to grow nearly ten-fold and contributing towards their four Queen's Awards for Enterprise. Martin's supervisor at university made him aware of Niftylift and his association with the company began when he did a work placement and undergraduate final term project testing a machine at the business. After a short period of travel Martin returned to them and now, as a graduate, designed a novel lifting mechanism for a mobile elevating work platform, which is a key subsystem of a number of Nifty's products today.

Since then, Martin has been fortunate to design machines, manage projects, programmes, facilities, engineering human resources, process improvement, and standards compliance. He gained a first class engineering degree and achieved professional registration as a Chartered Engineer in 2005 and was

awarded a PhD in 2008, having studied part-time whilst working in industry.

Martin setup the IMechE accredited Niftylift Monitored Professional Development Scheme, in addition to mentoring developing engineers and helping them to achieve their professional registration. He also supported many more through work-experience placements. In 2012 he was awarded Fellow of the IMechE and was invited onto the IMechE Manufacturing Industries Division board in 2015, taking over as Chair in early 2020. Martin says, "I enjoy the commercial and technical challenges that product development presents."

"I always strive for excellence, and to find improved ways to work by embracing best practice and new technology." Martin continues. "I am proactive and try to balance sound theory with a pragmatic approach. I am thankful for all the opportunities I have had, to my academic supervisor, and to my colleagues at Niftylift and for their continued support. Product development is definitely a team sport!"

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I always strive for excellence, and to find improved ways to work by embracing best practice and new technology.



Christopher Bowmer

Engineering Manager
AnTech Ltd



I have worked in various departments at AnTech and enjoy the variety this brings. Each day is different, with a separate spread of challenges to overcome. I have experience in the engineering, production and field teams which gives me an insight into the requirements of each division, allowing me to integrate effectively between all parties. I take great pride in that fact that some of our end users are now including the company's interface drawings copied into their tender documents, which is a sound indicator that AnTech's detail is technically respected and clearly communicated across the sector.

What qualities must future leaders have?

Integrity, fairness and bravery will be the key qualities for future leadership. Leaders will need to stand tall on the quarter deck and command the respect of those who follow them. They will need to stand up for what's right, be able to listen to those who are the most vulnerable and act decisively and justly.



Richard Brighton

General Manager
Ramfoam Care +



As an Interim Director using leadership, project management and operational skills, I have learnt a lot by transforming a number of businesses; having mentored some great people; by delivering significant returns of investment and ultimately having the privilege of setting up and leading the largest UK manufactured PPE contract during, and to help to counter, the COVID-19 pandemic. The economy needs to be balanced to support manufacturing, such that great things are made by great people in the right, safe and environmentally friendly way.

Something else you'd like to tell us?

I have taken part in an around the world yacht race



Ali Burns

Managing Director
Siemens Healthineers



Currently I run the Point Of Care Siemens Healthineers medical device business based in Sudbury, Suffolk. Here we build and ship globally Blood gas, urine and diabetes analysis instruments and consumables. Prior to joining Siemens Healthineers, I worked for the Danaher Corporation, Pfizer, Wyeth and Johnson & Johnson. I have always enjoyed a challenge and in recent times I was very fortunate to lead the Siemens Healthineers and Siemens team involved in the Ventilator Challenge UK. To be part of this was a true honour and highlight in my career.

What qualities must future leaders have?

They will still need to understand the basics of leadership from today. In my view this includes being humble, leading by example, not micro-managing and not worrying about being the smartest person in the room. They will also need to be able to adapt to new technology quickly understanding that failure is ok and build off it quickly.



Matthew Byrom

Business Excellence
Siemens



I work for Siemens and specialise in business excellence. In a nutshell I help the organisation in Strategy and Productivity topics. I have been part of the Siemens UK organisation for 16 years. My career highlight and biggest achievement came as recent as March 2020 when I was seconded to the Ventilator Challenge UK. I spent 20 weeks working closely with Airbus colleagues to scale the production of ventilators. This involved learning from the existing SME operation and transferring that knowledge to the Siemens team to enable the design of the production system. I stayed with project through to completion and played a part in setting up the 'pop up' factory.

My favourite manufactured product

Has to be the Penlon ES02 Breathing unit - this was the ventilator we produced 11,000 of in 20 weeks.



Kati Gastrow

Global Engineering Manager – Robotics and Automation,
Unilever



In their own words

What is your favourite engineered/manufactured product?

I'm a huge fan of Starship robots, the 6-wheeled delivery robots which are deployed on the streets of Milton Keynes.

Please give one interesting fact about yourself that not many people know.

I dropped out of a Bachelor of Arts degree to take up Electronic Engineering.

If you weren't in manufacturing what would your dream job be?

It would be a job that mixed vertical farming, nature conservation and law.

Kati was influenced by talented parents and extended family, who from an early age encouraged her to create and build things with her hands. Kati's mum taught her to sew, creating a 3D structure from 2D fabric pieces, practising using a machine, following and customising patterns. This gave Kati confidence early on in designing and trying new things. One holiday, her dad took the family to a bus factory in Germany where a young Kati could see the various stages of construction of a bus, with its engine and cables and windows. These episodes have all contributed to opening her mind.

However, it wasn't until Kati was 19 when she considered a career in engineering. Whilst undertaking translation work at a German machine builder during her school holidays, translating electronic parts lists from German to English, a senior engineer read Kati's (quite literal) translations and said "I can see from this that you have no idea what any of these components are, do you?" It turned out that 'Netzteil' was not a 'net part', but in fact a 'power supply'. Shortly

afterwards, Kati changed her degree in translation studies to a degree in electronic engineering.

Kati joined Unilever's Robotics and Automation Team in 2019 to dive deeper into the robotics needed to make Unilever's consumer products. It gives her a chance to bring together the experience from previous roles in control systems, personal care products and food manufacturing. Kati says, "It also stretches me to think bigger and at a larger scale. As a company Unilever has a strong commitment to sustainability and purpose-driven products, and I want the work I do to help reduce our impact on the environment."

For Kati, manufacturing is a socio-technical team sport. "The results depend on the composition of the team and the competent use of technology. Being able to take an idea from sketch to commissioned system, and seeing actual products being assembled on a line is an extremely rewarding process. It requires imagination, logic, grit and especially a sense of humour!"

“

Being able to take an idea from sketch to commissioned system, and seeing actual products being assembled on a line is an extremely rewarding process.



Janis Cairns

HR Business Partner
Mettler Toledo Safeline Limited



HR was an unknown to me until I temped in an HR Shared Service centre for a British retail organisation back in 2007. That experience opened my eyes to the work HR do for organisations and how integral the function is to the smooth running of those organisations. I really enjoy working with the people here. Sometimes it can feel that you're seriously in at the deep end, but you probably won't get to work in an environment that will build your resilience in a healthy way like manufacturing can. In my experience the industry environment is always dynamic, usually requires transparency and straight-talking, never dull.

If you could have a quiet word with your younger self...

Being genuine is what other people seem to like and respect and it is that bravery that can drive change.



Barry Cathrall

Production Engineering Manager
Adder Technology



My interest in manufacturing first started when taking my sister's radio apart and seeing how it works and how it went back together, thankfully I got the radio working again too! I have been in electronics manufacturing since leaving school. I have worked at Adder for over 10 years, which is an exciting company to be part of. I am interested in how things are put together to simplify the design of the product to make manufacture and assembly more efficient, so on the back of this DfMA has been something that is key for me when introducing new products into the factory.

My favourite manufactured product

Adder product would be the Alif100T range, non Adder product Samsung Galaxy S9+ my trustee work horse.



Agata Choma

Head of Operations
Woodlands Home & Garden Group



I came to the United Kingdom 15 years ago and I was very fortunate to start my professional career at a large and reputable company. I learnt a great deal and developed my skills and knowledge in the supply chain and operations, finding my inner passion for leading, motivating and developing people. I was introduced to an inspiring mentor who helped me gain confidence as a leader. As a young woman in a predominantly male environment it could have proved difficult for me to integrate and be fully accepted into the roles. However, I was never afraid to be seen and heard, communication being the vital tool in securing trust and respect of my colleagues.

If I wasn't a manufacturer, I'd love to be...

When I was a small child I wanted to be a journalist, riding a motorbike through Europe and be the first person to capture any interesting events.



Carl Cleghorn

Global Operations Information Analyst
HellermannTyton



I've always loved figuring out how things work. Taking my toys apart when I was a young boy was better than playing with them! What excites me about manufacturing and engineering and has done all my life, is that I get to live out this excitement. This can be applied across all disciplines, even to cost control, building the component costs, the data models needed for MDM, to me any problem that needs breaking down into cause and effect and rebuilding into a slick flowing system is magic. I still really get a kick from seeing machinery in action.

What qualities must future leaders have?

Leaders of tomorrow need to be able to communicate effectively above all else. They should be naturally inquisitive, and be able to show it, but humble enough to know where the limits of knowledge are. Be a Jack of all trades, Master of some. Most important, a good sense of humour!



Edward Grainger

Managing Director, Grainger & Worrall Ltd



In their own words

What is your favourite engineered/manufactured product?

The Car. I am far from a petrol head, but always marvel at the continuous innovation, application and ability of the industry to exploit on a mass scale globally to a deadline.

Please give one interesting fact about yourself that not many people know.

I make the finest game sausages, from field to table with delicious winter mash and gravy.

If you weren't in manufacturing what would your dream job be?

Make more sausages!

Grainger and Worall was incorporated by Edward's grandfather and his brother-in-law (Worrall). It's a family business that has weathered the storm of 2020 and although challenging at times Edward says, "We are here, and as long as we keep on doing the right thing, I think the business is in a good shape to go forward". On his own career path Edward says, "I think I'd always known that my calling was going to be into the family business. And I was very fortunate in that".

Various placements, one of which was with his family business' longstanding customer, Ricardo, gave Edward a fortunate early insight into the exciting space of automotive powertrain R&D. In the early 1990s the family business was in Edward's words, "modest sized" (30 people) and although it embraced the digital revolution the DNA, Edward says, "it remained finding solutions to problems, be that in the form of shape, mechanical performance, light weighting, time or often all of the above. Embracing emerging technologies like process simulation and rapid prototyping (digital sand

printing) enabled us to really exercise the art of the possible".

On the changes that have occurred across the course of his career in manufacturing Edward says he was lucky "that in the late 1980s it was quite a traditional apprenticeship that I took and by the time it finished, it was almost 2D handcrafted skill sets followed by the digital age of CAD and CAM, and then later, 3D printing and so on. I was fortunate to have experienced that little window of the handcrafted stuff before the digital age came along, which was almost always the fallback...You know, it developed so quickly. I inherited my grandfather's toolbox that he had from his uncle. And within 18 months of my apprenticeship it was obsolete and that was after almost 100 years of some of those tools being used. And so it still sits in my shed, and I still use it at the weekends for doing those things that we all like to do at home".

From a modest size in the 1990s the business now employs almost 600 people today. On that incredible growth Edward reflects, "meanwhile along

with my brothers Matthew and James we steered the business to a sustained period of double-digit growth with a policy of 'scale and scope' to a global market. I am very proud to say we have, and continue to be a key contributor with our castings to countless motorsport titles at the highest level. We are at the heart of powertrains to the world's most desirable and iconic cars, giving leadership and innovative solutions on and under the sea, in the air and now enjoying the challenge of future generation transportation. I am most fortunate to travel the globe (right now virtually), make friends and be inspired by outstanding individuals and their great organisations."

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I was fortunate to have experienced that little window of the handcrafted stuff before the digital age came along.



Daniel Crow

IT Technician
AnTech Ltd



I am currently working as an IT technician while studying engineering at college. I have always enjoyed hands on practical and technical work, whether this be coding on a PC or building something from scratch. My biggest highlight of my career so far would be my first trip away to the US in November 2018. From there I have now been on several overseas jobs and am trusted to be responsible for the on-site IT and integration along with maintenance support if needed.

What qualities must future leaders have?

Traits of any leader of tomorrow must be compassion and empathy, along with the ability to connect and talk with people at any level. They must be open to new ideas and constructive criticism as this is the only way improvements will come, and understand that they will not always be right.



Stuart Dallaway

Academies Manager
In-comm Training Services



The things that inspire me about my job are being part of a team that strives to support the manufacturing industry in training apprentices to the highest level. When starting at In-comm Training Services the company was relatively small but one that had big plans. I am proud to be part of the team that has expanded, we have now opened three centres and achieved OFSTED outstanding standard. Other aspects of my job that I enjoy are training the apprentices of the future and developing their skills to enable them to become the best engineers they can be.

If I wasn't a manufacturer, I'd love to be...

Mountain rescue paramedic



Kasia Cygan

HR & Development Officer
Lander Automotive Ltd



I started my journey in the manufacturing sector over 11 years ago. I have been with Lander Automotive since May 2014, starting in the Operational Department and then progressing to Human Resources. I always thought there is nothing more important than developing and growing people. It is my passion to give people a platform for spreading their ideas. I am very proud for having an opportunity to take part in managing the Lander Apprenticeship Programme and watch all young people coming through our door and achieving their dreams and goals and becoming our shining stars.

My favourite manufactured product

Danyang-Kunshan Grand Bridge, the longest bridge over water. This is proof that nothing is impossible.



Hai Dang

Production Engineer Team Leader
AnTech Ltd



When I was a kid, I always loved putting things together, even my toys, a radio, or any small machine that my family had. This kept growing when I got a chance to go to university and had my first degree in Engineering Mechanics. I was very happy at that time because finally I was able to make something from my ideas, my concept. In my current job, I can share that dream with others that I work with, and the joy of finishing a product, seeing it pass a test, hearing from happy customers – I keep them all with me.

If you could have a quiet word with your younger self...

Be curious about everything



Andrew Halsall

Business Owner, Lumos Aluminium Ltd



In their own words

What is your favourite engineered/manufactured product?

Lumos doors... obviously

Please give one interesting fact about yourself that not many people know.

I won the Calloway Long Driving competition at the 2000 Open

If you weren't in manufacturing what would your dream job be?

Sports Agent... My passions are people and performance

What qualities must future leaders have?

I don't think the qualities of "exceptional" leaders will ever change. An ability to bring together a group of individuals and find joy on a journey to a shared goal.

Andrew says he got into manufacturing by accident. With a background in Sales and Management he started as a sales consultant and was offered a full-time job as sales director. He was then offered the position of MD in 2011. He used his experience to build a fully engaged team in his words "to make stuff and sell stuff".

He used problem solving techniques, constraint theory, and all available learning to improve his knowledge of manufacturing. Andrews explains, "My main skill was engaging the staff and customers in shared goals. With the factory delivering on time in full, with maximum efficiency I could spend my time hands on with customers and staff training and supporting them. I was fortunate to be included in my daughter's journey to 3 Olympics in swimming. This is where I got to experience first-hand the impact, resilience, discipline and high expectations have on performance."

Andrew worked for ten years at Origin Frames and nine of those as managing director. Andrew says, "The

most important thing we achieved was a unique level of trust between the management team, the rest of the staff, the customers and the suppliers. We did this by an uncompromising commitment to quality, delivering great products on time in full and we were the only company, I am aware of, who made communication a standard operating procedure." He continues, "We took a small family business and increased the size 10-fold over ten years maintaining high profit margins every year."

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We took a small family business and increased the size 10-fold over ten years maintaining high profit margins every year.



Tracey Dawson

Managing Director
Daletech Electronics Limited



I'm incredibly passionate about the world of manufacturing and raising the profile of British manufacturing. I was appointed Managing Director in August 2016 (after the sudden death of my husband who had been the Managing Director since 1992) and set out to build a strategy for growth. In July 2017 I graduated from the Goldman Sachs 10KSBUK programme which has been pivotal in helping us on our growth trajectory. Daletech was established in 1987 as an electronic manufacturing company focussing on high quality, diverse, niche products. My journey has opened the doors to the marvellous world of manufacturing!

What qualities must future leaders have?

It will be important to lead with empathy and to listen carefully to our teams who will most definitely know more than we do! Finally a sense of humour will be vital!



Paul Derham

General Manager
Fuel Additive Science Technologies Ltd



I am privileged to be General Manager for Fuel Additive Science Technologies (FAST), a company quite unlike any other with a fantastic range of technical products all developed, blended and bottled on site in Shropshire. At 18 I was discouraged from entering manufacturing so as a determined and slightly rebellious teenager I ignored all the given advice and my manufacturing journey began. From labourer to General Manager, my climb within the manufacturing world has been both enjoyable and rewarding, helping with the design and development of new products and launching various products into new markets both home and abroad.

If you could have a quiet word with your younger self...

Grasp every opportunity, be braver, more confident and take a few more risks.



Lara Edison

Batch & Furnace Supervisor
Encirc



I am passionate about creating a better world for the future through innovation. I work in the container glass industry for a company which strives to become the most sustainable glass manufacturer in the world. My role includes managing the glass melting activities across 6 furnaces in the UK & Italy, so I am well placed to challenge the status quo. My day-to-day operations are driven with sustainability at heart, by striving to maximise our energy efficiency by having state-of-the-art-furnaces and equipment operated by teams trained to a high standard. What keeps it interesting for me is the exceedingly fast pace of the industry.

If I wasn't a manufacturer, I'd love to be...

An astronaut



Ryan Edwards

Apprentice Engineer
Focus SB Ltd



I enjoy being able to use the machinery that I would not normally have access to. I am learning to program the CNC machine and I am happy when I have written a program and it machines the part to a high standard. I also enjoy taking apart press tools and learning how they work. I understand the amount of time and skill that is put into making a tool so that it is accurate.

What qualities must future leaders have?

Leaders of tomorrow will need to understand how manufacturing processes work. They will need to be able to integrate new technologies with traditional learnt and practiced skills to be able to make products efficiently and to a high standard.



Elliott Hawkins

Chief Designer, RDM GROUP



In their own words

What is your favourite engineered/manufactured product?

My favourite piece of design and engineering is William Barlow's train shed at St Pancras International. It's a truly breath-taking piece of engineering.

Please give one interesting fact about yourself that not many people know.

I love romantic comedies and musicals!

If you weren't in manufacturing what would your dream job be?

Captain of West Ham United!

Elliott has been working in Coventry for over 10 years. He says he is proud to be designing and building vehicles in a place that has such a rich heritage as the home of British motor manufacturing.

Elliott's passion for cars began early as he remembers, "ever since I was a small boy, I just loved cars, lorries and stuff like that. I would be at nursery around the age of three and my favourite thing there was like a little six wheeled cart". From the age of eight he wanted to design cars and that early passion is as strong as ever, "I genuinely look forward to going to work every day. I'm lucky to be doing a job that is also truly my passion. With RDM GROUP being an SME, every day is different, with an incredibly diverse number of projects ongoing.

In my current role of Chief Designer, I have a responsibility that goes beyond the design side of my job, into management of my team and relationships. This is a part of my role that I particularly enjoy, especially the nurturing of young graduate engineers, trying to steer them away from all the mistakes I made at that age!"

In terms of a design ethos, Elliott believes in an honest, engineering led aesthetic. He says, "This works really well with the design of our autonomous vehicles, as they have so many sensors, cameras and lidars to package. By embracing these components as part of the design, instead of trying to hide them away, we can create vehicles that look truly different to anything that has gone before. My team and I are excited to be working at the cutting edge of vehicle and product design in the 21st century. The next two decades are going to provide some of the most incredible advances in the automotive sector in over 100 years."

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The next two decades are going to provide some of the most incredible advances in the automotive sector in over 100 years.



Nathan Evans

Product Development & Innovation Engineer
Unistrut UK



Right from an early age I always liked designing / drawing and playing with new technology, so it seemed the logical path to do something I enjoyed. However, when I was in the early stages of my career I was told by someone 'You'll never make it as an engineer'. This pushed me more than anything ever could, because I knew that I would and I had to prove them wrong. In the time I've worked for Unistrut UK they have helped me become a certified professional in Autodesk Inventor, win our end of intercompany innovation award and gained EngTech status within the IET.

Something else you'd like to tell us?

My next goal is to become a Chartered Engineer, I hope to do this within the next two years.



Kim Everitt

Powertrain Calibration Engineer
Aston Martin Lagonda Ltd



Now with technology more accessible, I have continued to be motivated to up-skill and learn about the evolving manufacturing environments and upcoming technologies. Developing various technologies within engineering can create a sense of purpose and belonging. You can work with a product at any stage of life cycle and still make a difference to the greater engineering community through design ideas, planning, collaboration, and other aspects. Working towards a final product and seeing the results is self-rewarding and inspiring.

What qualities must future leaders have?

Be passionate and persevere. Take risks when needed and continue to be resilient.



Simon Foster

Senior Manager
Toyota UK



When growing up I always wanted to know how things work? Since then I have developed from a maintenance member to Senior Manager through various engineering and management roles. With the 'Toyota Way' there is always a challenge to move forward and continuously make improvements. I enjoy working at Toyota, as every day is a school day and continually develops my knowledge, skills and experience. The most rewarding part for me has been applying my coaching skills and seeing our members grow with new skills, new experiences - therefore preparing them for the challenges of now and the future.

My favourite manufactured product

Toyota 2000 GT



Furqan

Strategic Technology & Collaboration Lead
GKN Aerospace



Unmanned Aircraft have been a passion of mine since university and I am excited that I have the opportunity to work on them every day in my job. One of my very first days as an engineer at GKN Aerospace, I had the opportunity to press a big red button that triggered a hail gun to fire balls of hail at an aircraft wing section at extreme velocities for damage tolerance testing. I didn't really need any further convincing to pursue a career in engineering after that.

If you could have a quiet word with your younger self...

Approach every opportunity with an open mind. Even though you may have planned a certain route in life, things won't always go your way but that's not a problem. You might enjoy and learn from jobs you didn't expect to be doing. It's very difficult to grow without stepping outside your comfort zone so seek out different challenges and try something new from time to time.



Mark Hayward

Managing Director, DENSO Manufacturing UK Ltd



In their own words

What is your favourite engineered/manufactured product?

Vacuum cleaner - still learning about them

Please give one interesting fact about yourself that not many people know.

I enjoy films and movie composers (Hans Zimmer, Harry Gregson - Williams others)

If you weren't in manufacturing what would your dream job be?

Interior Designer

If you could have a quiet word with your younger self...

Listen; Respect; Learn

DENSO Manufacturing UK carries out a wide variety of processes to produce plastic mouldings, aluminium pressings, heat exchangers and pipe and hose components.

In his own words Mark Hayward, MD, DENSO UK, elucidates on the industry, “The manufacturing environment can be a harsh battlefield but one that can also produce inspiration through the people who drive it at the roots, i.e. those unseen heroes that pioneer and innovate, that work tirelessly to improve their craft – they are the heart of manufacturing and it is a privilege to feel a part of that and then to be able to influence it, especially in the development and thinking-way of those craftsmen and women.

“The influence and understanding for the Japanese and Toyota/DENSO thinking way, has been a continued source of learning and inspiration for myself. The necessary foresight, attention to detail and focus toward the human spirit remains at the core and has enabled me to have a clearer vision and a stronger sensitivity to help create a sustainable foundation in a

manufacturing environment, not just one of stability, but a thriving energy that can continue to evolve.

Now the focus must be how to change and promote that manufacturing environment, from the ‘traditional view’ of a harsh environment toward one of opportunity and the excitement of development and change. An environment that finds harmony in digital transformation and new technology that invites and excites the next generation to be part of it, to improve it and continue our proud heritage in the UK of being world leaders in manufacturing enterprise.”

“

The manufacturing environment can be a harsh battlefield but one that can also produce inspiration through the people who drive it at the roots.



Suranjan Ghosh

Global Operations Director
Morgan Advanced Materials



I view life as a blessing. The pandemic has made us realise that we should cherish life and make the most of it. What fires me up is to make the most of this one chance I have in life to make a positive impact on the world. To do so, I am constantly learning - learning about science, technology and the impact it has on mankind through business and social change. Also learning about people, teams, leadership and cultures, be it organisations or countries. As a Global Operations Director, marrying these two elements to positively touch the lives of the people that I work with, while we serve our customers, is what drives me.

If you could have a quiet word with your younger self...

Take more risks. Push yourself out of your comfort zone. Try new things...fail more to learn more. Find the right balance between depth and breadth. And have fun - life is too short not to enjoy it!



Jasmine Hibbert

Engineering Apprentice
Produmax



When I was at school I decided that I wanted to follow a career in manufacturing and engineering and I was able to source an apprenticeship at Produmax, an aerospace company, following my GCSEs. I have completed a Level 3 BTEC in Mechanical Manufacturing and a Level 3 NVQ. I am working towards my Level 4 HNC in Mechanical Engineering and Level 4 NVQ. During the first year of my apprenticeship I was awarded the Milner Award for Outstanding Apprentice of the Year and the Institute of Technology Student of Excellence for West Yorkshire. I've been fortunate to represent Produmax at both primary and secondary schools promoting women in engineering and STEM careers.

What qualities must future leaders have?

Tomorrows leaders will need to aim high and have the determination to be able to succeed in their chosen field. To become a great leader, you need to be able to work as a team and share aspirations to drive change.



Richard Hagan

Managing Director/Owner
Crystal Doors



Richard Hagan believes it is everyone's responsibility to tackle the climate emergency and has over the past five years personally radically changed his priorities, then engaged with all his stakeholders to take immediate urgent action. He was recognised this year by The Institute of Environmental Management and Assessment winning the UK energy and carbon transition award. From next year all suppliers, customers and employees must show significant action on climate impact to continue trading with Crystal Doors. Last year a finalist at *The Manufacturer's* MX awards, this year has begun B Corp certification, supporting three charities addressing the Sustainable Development Goals.

Something else you'd like to tell us?

11,000 trees planted by the age of 14, helping my Dad reduce the wind on a isolated farm high on the hills in Lancashire. Yes, one of the first windfarm locations in the UK. Now on my own mission to carbon offset and plant another 11,000 trees in Greater Manchester with City of Trees.



Mohammad Hossain

EC&I Engineering Lead
TSP Engineering



In 2008, at the age of 17 I travelled to the UK from Bangladesh with the sole aim of achieving a degree in electrical engineering. Following my graduation from the University of Greenwich in 2013 with 'The University Merit Award for Outstanding Achievement', I secured a graduate engineering role with Tata Steel Europe, which in 2016 transitioned across to TSP Engineering. After a variety of engineering and manufacturing roles in the steelmaking, rail, building services and nuclear business, I took up the EC&I Engineering Lead role in TSP Engineering at the age of 25. Complex discrete manufacturing is always challenging and holds a continuous fascination for me.

My favourite manufactured product

Programmable automation controllers. These are increasingly becoming more capable and intelligent on a daily basis and are the unsung hero of today's and tomorrow's industrial revolution.



Claire Jarvis

Deputy Quality Manager, GKN Aerospace



In their own words

What is your favourite engineered/manufactured product?

Engineering that benefits the environment/people - i.e. projects such as the Seabin project which is a floating bin that collects ocean waste (simple but incredible!)

Please give one interesting fact about yourself that not many people know.

When younger, I performed in London as part of a theatre training group

If you weren't in manufacturing what would your dream job be?

A lawyer

Claire was inspired by her Dad, a manufacturing manager, to follow a career into manufacturing. Leaving school Claire went straight into working for her Dad's company. Working through the different departments, including production, Claire spent 7 years there before progressing to become an engineer at GKN.

Feeling quite daunted initially by others who had higher qualifications, Claire's story is inspirational for other young people who want to get into manufacturing but not necessarily through an academic route, as Claire articulates, "It can be quite daunting. You've got people that have been to university and then studying a masters or doing an apprenticeship, but there are other ways to go about it. There's no right or wrong way in life."

On her current role at GKN Claire reflects, "I'm really fortunate that I work with such a dynamic team. I work with a lot of people inside and outside the organisation. I've got a fantastic department that work under me - they

inspire me, because they're all such different characters and they've all come from different backgrounds. I think it's good to pull on different people's experiences, all from different age ranges. There is just a wealth of knowledge within a small team. And in the wider business there are so many different characters. People are genuinely interested in wanting to help you and that makes me happy going to work. I enjoy my role, it's always challenging and we're working on an exciting range of products and I've also been lucky to employ people and develop people. And that's great job satisfaction when you know that only if you performed well but you've made a difference to somebody else's career that day as well."

When asked about her greatest achievement and challenge in her career, Claire said she had the same answer for both and it was no surprise that this happened in 2020 for Claire played a role in the Ventilator Challenge - a vital project that saw manufacturers come together in a time of national emergency.

On that experience Claire says, "It was fantastic. That was so exciting, because as much as the country and the world were in a really bad place - the country was in throes of lockdown - I was able to go into work every single day, and really help contribute to such big projects. We had an integrated program team specifically for the ventilators that our start director headed up and he really drove this this hard and it was just exciting. Every day was so different, it was so fast paced, and you constantly had this feeling that you're doing something really, really good for the country. It wasn't like making any other products - this project was sort of magnified, as the country was in lockdown. We really were helping the government at that moment and we're making all these ventilators to save people's lives and it was just an achievement. In addition to managing our normal workload as well - it was very busy, very full on but so exciting. And I think we're all so proud that we could be involved and do good for the country".



Phoebe Jay

Manufacturing Strategy Engineer
Bentley Motors Ltd



I joined the Bentley family in 2014, and after a three-year apprenticeship, I came out the other side as one of the first skilled females in the paint shop. The skills I learnt were incredible, ranging from hand spraying full Mulsannes by myself, to programming automated spraying robots to do it for me. My attitude and achievements were recognised through winning Apprentice of the Year in 2018. I then progressed into a role in Manufacturing Projects and led the successful integration of bespoke and limited edition vehicles such as the No.9, No.1 and Pikes Peak GT.

Something else you'd like to tell us?

I love rugby and have played Touch rugby nationally representing the England Lionesses winning the European Challenge Cup in Spain.



Dominic Jenkins

UK Supply Chain Director
KIND Snacks



I entered manufacturing at the tender age of 17, mainly attracted by the free chocolate bars from the factory I worked at! What kept me in manufacturing though has been the amazing challenges, the great opportunities and the chance to continually learn and grow. 23 years later I am a chartered engineer, have an MBA have travelled all over the world and worked with some awesome people.

My favourite manufactured product

Definitely my Brompton



Paul Jones

Director
Bitrez Ltd



Paul Jones FRSC is the owner and Managing Director of Bitrez Ltd and Anacarda Ltd as well as the founder and owner of Chemical Processing services Ltd. All three organisations are successful UK businesses concentrating on the design and development of speciality polymers. Paul is passionate about the development of innovative materials that allow the business to differentiate from the competition. Paul featured in the Chemistry for a Better Tomorrow documentary produced by ITN and the Chemical Industries Association (CIA) due to global recognition for dynamic response to industry problems.

If you could have a quiet word with your younger self..

If I had the chance to speak to the younger me, I would probably keep my advice simple and suggest seeking a more effective work-life balance. Having a driven approach to business may have provided me with mental stimulus and satisfaction, enabling me to provide for family and friends, but there are so many things that you need to slow down in order to fully appreciate them.



Michaela Kendall

CEO
Adelan Limited



I am CEO of Adelan, the longest running fuel cell technology company in the UK and a family held business. Adelan specialises in clean, low carbon electricity generation, using micro tubular solid oxide fuel cells (mSOFCs). Adelan was one of the first to capture British fuel cell ingenuity in successive market leading patents, leading to a global reputation in the field. The market has been slow to adopt green technology, but now there is a global market shift towards decarbonising and alternative cleaner power generation. I managed industrial R&D programmes at Adelan funded by the US, EU and Chinese governments.

What qualities must future leaders have?

Diversity, and the ability to recognise and deploy talent in all forms.



Bharath Karumuri

Production Supervisor, Associated Dental Products Ltd



In their own words

What is your favourite engineered/manufactured product?

Airbus – one of the greatest inventions ever made in the aviation industry.

Please give one interesting fact about yourself that not many people know.

Cooking is one of my best hobbies but recently I started hiking and I started discovering a new me.

If you weren't in manufacturing what would your dream job be?

I would have been a moviemaker

Bharath joined Associated Dental Products Ltd as a Graduate Process Developer and was promoted to a production supervisor after one year. He says, “My job is always challenging, managing team leaders and process workers and working towards deadlines in a busy manufacturing environment. Most of my routine work is based on managing production activities, identifying improvement projects, and working towards continuous improvement.”

Of his academic achievements Bharath completed a bachelor's degree in Industrial Engineering (first class) followed by a master's degree in Mechanical Engineering with Merit, achieving the second highest mark for his thesis. He is currently working to acquire Chartered Engineer status. He also holds Certified Lean Six Sigma Black Belt and Green Belt in addition to being a certified lean practitioner and is well recognised for the work which he did on lean manufacturing in his organisation.

His inspiration from his undergraduate years was the Toyota Production System,

especially the philosophy behind it. He was inspired by the lean principles in this system in addition to the way they approach people management. Bharath believes that a combination of Toyota Production Systems, total quality management and Kaizen just-in-time manufacturing form the backbone for any manufacturing industry.

As a production supervisor Bharath has a passion for supervising process workers and team leaders with over ten years of experience because of the knowledge they've accumulated. He also enjoys problem-solving but what motivates him the most is working in a busy manufacturing environment.

On his greatest challenge so far in his career Bharath cites his migrating to the UK as a post-graduate but eventually with the support of his university he found his feet and excelled in his studies.

Recognising the importance of promoting STEM he contributed around 30 hours towards STEM activities between 2019 and 2020. He believes it's important that we encourage more

young people into manufacturing as he says, “It's important for the future of the industry that we have that pipeline of young people going into the manufacturing industry especially with all the developments around Industry 4.0, it's going to be crucial that we have young people with the right skills and digital skills in particular to help the industry move to its next phase.”

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It's important for the future of the industry that we have that pipeline of young people going into the manufacturing industry.



Dan Lloyd

Manufacturing Engineering Manager
Airbus



I found my love for aircraft at six years old when my dad took me to my first Broughton Airshow, from then I pursued a career working on aeroplanes. I won the Airbus Innovation Awards (Team work category) for a six figure efficiency improvement initiative. I achieved a first class honors in business management and the outstanding achievement award for the highest mark in the Cohort. Some of my key professional achievements are, delivering the new A350 Wing modifications and making multi million pound savings by delivering a portfolio of projects that secured rate capability and cost base, plus delivery of a priority Airbus “Wing” quality improvement project.

My favourite manufactured product

Airbus A380 - The scale of this product is just truly mind blowing and the engineering to be able to make such a huge aircraft fly always astounded me.



Kelvin Marner

Head of World Class Productivity & Quality
Boeing United Kingdom



Starting as a Mechanical Engineering Apprentice I quickly developed a passion for manufacturing and maintenance in the aerospace industry. I’ve achieved a Masters in Leadership from Henley Business School and I’m an accredited Lean Leader by the Lean Competency System, a licenced service of Cardiff University. An experienced Senior Lean Transformation Leader with a successful career developing cultures of high employee engagement in continuous improvement, my most significant achievements and when I’m at my happiest revolve around helping others develop and achieve their own career goals.

What qualities must future leaders have?

Being a leader in a world with a new norm of constant uncertainty and high levels of ambiguity requires courage, belief in oneself, belief in your people and personal commitment to do the right things in an unbiased manner.



Vicky Lovegrove

Development Chemist
Ideal Manufacturing Ltd



I joined Ideal Manufacturing soon after graduating from The University of Birmingham. In just a year I have learnt how to formulate detergents and household/industrial cleaning products. I love to see products I have developed go through to production successfully. A lot of my work has focused on formulating products that are better for the environment, this is something I believe is going to be extremely important in the coming years.

If I wasn't a manufacturer, I'd love to be...

A zookeeper, I have always loved animals.



Darren Martin

Operations Director
Musk Process Services



I am the Operations Director of Musk Process Services, an asset care engineering service provider to the manufacturing industry. I’m daily in awe of the value our engineers from a small to medium size business can give to global manufacturing businesses. They demonstrate that the skills to maintain the reliability and engineering compliance standards matches that of our client’s engineers. This is evident by the longevity of the contracts with our client partners, some going back through the entire history of our business. The flexibility we have shown to maintain these sustainable relationships for such a long time makes me immensely proud.

If you could have a quiet word with your younger self...

Dare to dream, they do come true if you stay focused



Julia Mansfield

Technical Manager, Fuel Additive Science Technologies Ltd



In their own words

What is your favourite engineered/manufactured product?

The printing press, obviously. It has been brilliantly surpassed by technology, but we wouldn't be at this point without it.

Please give one interesting fact about yourself that not many people know.

I'm a yoga teacher.

If you weren't in manufacturing what would your dream job be?

Leading walks in the countryside.

Julia is a chemist with a rich experience in chemical manufacturing, most of it working in fuel additives. She says, "I've got a great job because I love the application of our products and the opportunities that gives me. I travel, I meet lots of different people around the country and talk to them about diesel fuel – what's not to like?!"

Fuel Additive Science Technologies Ltd is a small company with "a great team of only 20 people". As Technical Manager, Julia has a variety of responsibilities which keep her engaged in the business. She says, "I'm responsible for product development, product management, technical service and technical training. I thrive on the variety and especially like chatting to customers about product applications to solve problems or to improve their fuel quality, while being very aware that fuel is only a tiny part of their process and is often regarded as an expensive inconvenience."

Discussing the inspiration behind her decision to begin a career in manufacturing and current interests

Julia says she has, "an almost obsessive interest in hydrocarbon fuels and I'm a member of the Energy Institute and chair of one fuels test methods committee and a member of others. Thinking back, my career was inspired by a photograph of the BASF chemical plant at Ludwigshafen in Germany in my chemistry textbook, *Chemistry in Context*, the plant is huge, and I was impressed. I started work at a now little known British chemical company, ICI in Wilton and then to the world's biggest, BASF. It was always nice to see a chemical plant out of the window to remind me."

On the topic of encouraging more women into manufacturing Julia believes it shouldn't be forced but instead they should be made aware of, "having the choices open to them and aware of what's available, rather than saying we should have a certain percentage... when I was choosing my A levels, I chose to do economics, maths and English. And was persuaded to do the sciences because I was apparently a good all-rounder and they wanted more women in science. And I've

been successful in what I've done, but I don't think you should force people down rings. I think people have natural tendencies for and abilities and subjects they enjoy."

Discussing sustainability and the potential challenges ahead Julia reflects, "I think power and emissions are going to and are in fact becoming greener. I work in the extreme end of the hydrocarbon side of it, which is going out of fashion and will disappear to an extent over time. Certainly the fuel side is going to diminish, but we still need a lot of oil derived chemicals to make all the clothes that we're wearing and everything we use i.e. plastics. I think that changes are on the way for green chemistry, and just changing the solvents that chemical reactions take place in and reducing the amounts of materials that are used and having zero waste even as well as emissions. And I think the chemical industry is working very hard on that. And it will improve significantly."



Peter Martin

Technical Manager
Vale Europe Limited



I've worked in manufacturing for over 21 years and have been in the nickel industry for most of that time. The variety of the role assures me I picked the right career. Almost every day there is a new challenge to overcome. Also, there are not many jobs where you can be elbow deep in grease in the morning, developing detailed mathematical models at lunch and then presenting to customers in the afternoon. My current inspiration is to develop a sustainable future for the site I work on. We have been operating there for over 115 years and I want to help develop the site so we can continue to operate for another 115 years.

Something else you'd like to tell us?

I run ultra-marathons



Rorie Martin

Panels & Structures Manufacturing
Engineering Team Leader
Airbus Defence and Space



I have been involved in manufacturing for 14 years since I joined Airbus as an apprentice. I have been constantly learning throughout my career and have worked hard to be where I am today. I started in Operations as an NDT inspector and worked up into Manufacturing Engineering where I found a passion to challenge the ways of working, resolve problems and to improve processes. I have been lucky enough to visit many Airbus sites in lots of countries and worked on many different projects. Now I am in a leadership role and enjoy developing my team.

If I wasn't a manufacturer, I'd love to be...

I'd like to be a teacher of young adults, probably in a STEM subject. It would be really rewarding to spark young people's imaginations and hopefully inspire them to pursue a career in engineering. I would also like to be involved in the school's sports, as a coach.



Corrie Mayne

Engineering and Compliance Manager
Honda of the UK Manufacturing Ltd



I've always been a strong believer in the concept of transcendence, without blurring the boundaries of idealism. As a young graduate I sought inspiration from a select group of people in history – those who created change without being in a position of authority/power. Examples of such people are Martin Luther King, Einstein and William Edwards Deming, the latter being a historic icon in manufacturing. Through the work of William Deming I developed a passion for manufacturing because I grew a sincere sense of empathy towards the potential of its influence.

If you could have a quiet word with your younger self...

Even though you are a perfectionist, embrace the paradox of being a perfectionist and welcoming the mistakes you may make. Invest energy into learning from them with pride rather than fearing them or being ashamed. One day you will find the courage to conquer the fear of small mistakes.



Craig Mayoh

Operations Director
Associated Dental Products Ltd



I have worked at Associated Dental Products Ltd in a manufacturing capacity for 10 years now, before that within IT, developing and implementing systems. My inspiration comes from analysing, improving processes and developing and encouraging my team to do the same. Change is difficult but once a change is made and the results/efficiency are improved it gives everyone motivation to go again. We're a small company but the improvements we have made in our manufacturing processes mean we can compete and sell to markets all over the world.

My favourite manufactured product

It has to be Lego! I'm a kid at heart so I'll take any excuse to get the Lego out with the kids!



Michele Marigo

Global CAPEX and MRO category procurement manager

Johnson Matthey



In their own words

What is your favourite engineered/manufactured product?

Apple products. Simply fantastic

Please give one interesting fact about yourself that not many people know.

I moved to the UK taking a job without really understanding what it was about! And I realised once there I signed up for the doctorate in chemical engineering through EU Marie Curie sponsorship. Best thing that happened to me!

If you weren't in manufacturing what would your dream job be?

AC Milan footballer

Michele describes himself as being quite creative and driven by curiosity. He has a passion for generation ideas and delivering solutions.

Since the beginning of his career Michele was excited by innovation. Starting from getting an innovation award for his mechanical engineering master's dissertation followed by his doctorate in chemical engineering his career developed in R&D at Johnson Matthey PLC in the field of manufacturing technologies for formulated products. He started out in a junior position, working towards becoming a leader in R&D managing, mentoring a very diverse team of Engineers, Chemists & Material Scientists.

Michele's work to date has delivered applied innovation for processes improvements, the development of novel bitter-tasting 3D printed materials, a novel catalyst product and devices for improved and accelerated catalyst filling.

He says, "My work has led to several patents and journal research papers, which have received multiple citations, in addition to invites to international conferences talks." He also received several awards for his work in R&D including: the Institution of Mechanical Engineers (IMechE) Bulk Handling 2017 Innovation Award; 3C Johnson Matthey collaboration award for Sustainable Technologies Bio-Butanediol Process; and the Johnson Matthey Inventor Recognition Award (2013).

Michele's open innovation approach has led to multiple academic collaborations including the supervision of several doctorate and master students and recently, he obtained an MBA from Durham University with a master thesis focused on assessing the Industry 4.0 readiness within Johnson Matthey manufacturing operations. Since completing the MBA he has spent time within the Corporate Global Procurement Team in

Johnson Matthey to drive innovative transformational projects in the area of Global Procurement for Maintenance, Repairs and Operation (MRO) in manufacturing.

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My work has led to several patents and journal research papers, which have received multiple citations in addition to invites to international conferences talks.



Chris McDonald

Chief Executive Officer
Materials Processing Institute



I lead an inspiring team of engineers, turning innovation into commercial reality. Having the opportunity to visit businesses across the country and help them to improve their products and processes is a great privilege. I feel a deep responsibility in running a national institute that was set up in the last months of the Second World War, ensuring it remains both cutting edge and sustainable for the future. Having worked internationally in the steel industry, my greatest achievement, and for which I received a medal from the Institute of Materials, was in rescuing the business in 2014, taking it independent as a not-for-profit organisation, and transforming its business and culture through positive leadership.

Something else you'd like to tell us?

Outside of work I am quite heavily involved in my community, supporting local institutions and volunteering in local projects, but very few people are aware that I am an active youth leader in the Methodist Church.



Stuart Mitchell

Lean Manufacturing Manager
Adder Technology Ltd



I'm passionate about UK manufacturing, and have been in and around manufacturing for the past 30 years. I have had a wide variety of roles within manufacturing including assembly operative, team leader, supervisor, consultancy, and various management roles, including my current role as Lean Manufacturing Manager. I've gained a broad and varied knowledge of Lean Manufacturing through working with many large UK manufacturers, including automotive, engineering based, medical, food and beverage manufacturers.

What qualities must future leaders have?

Be familiar with new technologies and be prepared for kick back to those changes. Courage to demonstrate integrity... personal and professional.



James McDonald

General Manager For MINI Assembly
BMW (UK) Manufacturing Ltd



I am first and foremost a time served engineer, who learnt his trade within the Military & Aerospace engineering sector at a company called Alvis. It was here that I first stepped into overalls at the dizzy age of 16, straight from school, wet behind the ears and eager to make a name for myself within the industry. Twenty-five years on, at least one Cold War and numerous job roles later I find myself working as a general manager for the BMW Group at its MINI plant in Oxford, responsible for production of our very successful MINI.

If I wasn't a manufacturer, I'd love to be...

Military commander



Dave Mooney

Managing Director
Drallim Industries Limited



I'm an Engineer and Chartered Quality Professional. I graduated as a Material Scientist spending 20 years in corporate technical roles before joining SME Drallim as Technical Director, later becoming MD. I am intensely proud of running an independent, employee owned, British manufacturer. I faced the leadership challenge of a lifetime when our factory burned down in February 2019 with a total loss of building, stock and data. Within days the staff had been gathered to engage in their disaster recovery plan. A temporary factory was identified, and they moved in on a handshake. Basic operations commenced on 1st April. They moved home to a rebuilt HQ in October 2020.

My favourite manufactured product

From an early age I have always loved the steam engine in all guises from splendid railway locomotives to magnificent pumping beam engines. They inspire me by the tremendous blend of engineering and art to produce truly beautiful things.



Paul Perera

VP Technology and Founder, MyMaskFit Ltd



In their own words

What is your favourite engineered/manufactured product?

A380 with Airbus where I did the trade and future programmes work

Please give one interesting fact about yourself that not many people know.

I have had six children, and my wife and I lost our son Fèlix and it changed my world and now I focus less on politics of work

If you weren't in manufacturing what would your dream job be?

Solving the world's largest challenges

Paul has spent 30 years in manufacturing starting out as an apprentice with Airbus, working in the UK, Australia and in Europe developing future programmes and strategy for technology, and in digital manufacturing applying this to programmes in Rolls-Royce, Airbus, GE, Baker Hughes and GKN Aerospace. His path into manufacturing was inspired by his grandfather, whom he never met, who was an engineer in REME (Corps of Royal Electrical and Mechanical Engineers) and his great-uncle who was an Admiral and an engineer in the Royal Navy.

With a passion for computer programming at school, having designed a solar panelled Red Arrow at the age of 11, and an interest in design, the foundations of Paul's career were already set. Paul has been passionate about sustainability from an early age too and says, "I do believe we're going to see something different in aerospace because of the nature of where we're heading with zero emissions."

On changes to the industry in his career, Paul reflects on how we use technology not as an end in itself but actually to improve processes. "How do we leverage

what we've got in front of us in a much broader way than we ever thought of before? I think we could improve quite a lot of the aspects of our current design thinking in addition to improving the manufacturability and quality."

Most recently Paul worked on the Ventilator Challenge UK where he set up innovation and technology to aid the delivery of the 14000 ventilators required for the NHS, working with partners like Autodesk, Microsoft, PTC and Avanade, building a solution for the scale-up of a regulated manufacturing and supply chain at speed. On how he first got involved with this incredible manufacturing project, Paul explains, "My wife and I lost a child a couple of years ago, and we were very concerned about the loss of lives of other families. And so, it was probably two weeks before the government decided that we needed to go into a lockdown, my wife showed me data from John Hopkins University of infection rates around the world, showing these big spikes."

After reading the data and conducting his own research Paul realised that

ventilators were going to be important to solve the crisis. Realising there were few companies making ventilators in the UK he contacted Dick Elsy, CEO, HVMC. They formed a small team implementing collaborative working methods and capturing data about ventilators and the requirements for making them. After two days, and with the technology partners mentioned above, they were less than 10 individuals but after one week, hundreds were involved from across the manufacturing sector. Paul was able to draw on his experience with Rolls-Royce, bringing in sourcing and procurement specialists which, in Paul's words, "changed the game".

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They formed a small team implementing collaborative working methods and capturing data about ventilators and the requirements for making them.



Penny Morton

Project Engineer
Koolmill Systems



My drive is engineering a better future. I have been incredibly lucky to find a company that shares my passion of using innovative technologies to bring about positive and sustainable change. As a project engineer at Koolmill Systems, a world leader in delivering a modern sustainable approach to cereal milling, I am contributing to their vision of transforming a globally significant industry into one which has a sustainable future and can lift millions from poverty. I believe as engineers we have an opportunity, and responsibility, to use a holistic approach to end the overproduction of products which pollute our planet.

Something else you'd like to tell us?

I was the first ever female labourer to work at Gallowglass in the whole of Scotland!



Timothy Mulqueen

Director
Ramfoam



I started off my university life on a law degree and decided that this was not the path for me and so diverted to international business. Finishing university with my degree I was unsure what direction to take. I knew I had an interest in manufacturing and making things. Fast forward a couple of decades and here I am doing what I love. I set up a manufacturing plant in the Middle East bringing European best in practice manufacturing to the Middle East and Africa. I created more than 500 new jobs through COVID with the safeguarding of more than 1250. I'm very proud of our business, helping so many people and local economies.

If you could have a quiet word with your younger self...

Believe in yourself more, don't be afraid to jump in, you learn from your mistakes, A quote that has stuck with me is one from Charles Darwin, "it is not the strongest of the species that survives, nor the most intelligent it is the one most adaptable to change."



Sophie Murta

Trim & Chassis Engineer
Nissan



The part of manufacturing I really love is seeing customers enjoy the products we make. Seeing a product that I have played a part in bringing to life, out in the world is really rewarding. I also love to be able to bring a designer or inventor's idea from concept into being available to a mass market. What keeps me interested in manufacturing is that there is always something new to learn or a new challenge to be overcome. I also hope my own journey can provide similar encouragement to anyone wanting to pursue a career in the STEM sector.

Something else you'd like to tell us?

Whilst at university I was president of the brewing society where we ran our own microbrewery which supplied a number of pubs across Newcastle.



Helen Mutter

General Manager - Product & Production
Planning, Kia Motors (UK) Ltd



A career in automotive was a bit of a happy accident for me! I undertook a summer placement whilst I was at university to gain some work experience, rapidly became fascinated with the industry and never looked back. I love the scale involved working in this field – the huge commitment that it takes to get a car from its first concept through to customer delivery, and there aren't many industries where you can see the output from what you are working on almost anywhere you go. Working on the current and future UK vehicle lineups is a real privilege – giving an insight into forthcoming developments in design and technology at a time of enormous and massively exciting evolution in the industry.

Something else you'd like to tell us?

I'm a qualified scuba diver who has been a support diver on two world record dives.



Steve Shinton

Operations Manager, ZF Lemforder UK Ltd



In their own words

What is your favourite engineered/manufactured product?

Marine Aquarium Controller

Please give one interesting fact about yourself that not many people know.

I have written and published a thriller

If you weren't in manufacturing what would your dream job be?

Caretaker on remote island

Steve was guided into the world of manufacturing by his father. Once he left education, having wanted to join the ranks of IT, he completed his engineering apprenticeship whilst training to be a toolmaker and then moved on to quality roles. Joining ZF Lemforder in 2004 has pushed him on a whirlwind journey from supplier quality, into quality management and then in his own words, “a flip into the dark side of manufacturing”, as Operations Manager in 2019. He is a driven individual whose passion is the development of others. He says, “I’m relishing the challenges facing our UK manufacturing sector and together with all the experience we have we can thrive and build on our past.”

Working at his father’s company, which closed in 2004, Steve said to himself, “You’re kind of out in the big bad world”, with no interview experience and no previous companies except for the one he’s just worked for he found himself having to look for a role outside of his comfort zone. Steve says, “A big part of me is trying to push that boundary of comfort zones that came from that day.

I found the job at ZF, I attended my first real interview, and was successful in that application. So, to kind of go from nothing with no previous experience in interviewing or techniques or anything like that, to get the job, that was great.”

On his greatest achievements Steve says, “I’ll have to rewind to the quality management role. We oversaw 44 months of supplying zero defects into our customer base as well as driving internal quality improvement, so a 70 per cent improvement in the overall cost of quality. But I’d also say, developing people. One of our previous quality shop floor associates, who started in 2004, the same time as me, and has progressed through the company, too, took over my old role when I moved to become quality manager. And he’s now taken that step as Quality Manager. So, I’d like to think that it’s the way that I developed him, and he’s grown alongside me. Now, I always take pride in his progression throughout the company.”

“

We oversaw 44 months of supplying zero defects into our customer base as well as driving internal quality improvement, so a 70 per cent improvement in the overall cost of quality.



Eliot Palin

Specialist, Production Innovations
BMW (UK) Manufacturing Ltd



I started my career with BMW as a graduate, based at Plant Oxford. This was a fantastic way to quickly develop my understanding of the business as it gave me the opportunity to rotate through a series of placements. Highlights include 3 months at BMW's headquarters in Munich in a technical planning role and working on the MINI Electric project as my final assignment. I currently work in the assembly building at Plant Oxford, where I'm responsible for introducing innovative solutions to improve our production processes.

If I wasn't a manufacturer, I'd love to be...

Running an animal rescue centre. I've always loved animals and I'd love to be able to offer a home to all animals that need one.



Andrew Peters

Managing Director
Siemens Digital Industries



Passionate about making businesses better, creating ownership cultures, and developing talent, by leading through engagement. I'm committed to business transformations which are sustainable and built to last.

Something else you'd like to tell us?

I was a professional snooker player for 3 years after winning the Welsh Amateur Snooker Championship in the early 1990s, alas I couldn't sustain a living doing it!



Rebecca Phillips

Chief Operating Officer
In-Comm Training & Business Services Ltd



My role ensures that I have the satisfaction of seeing youngsters who do not fit the typical academic routes achieving qualifications in manufacturing and engineering that see them position themselves as leaders of the future. I am inspired by working closely with the team around me, who all have eclectic backgrounds but their passion, dedication and professionalism to nurture apprentices and push them to be the very best they can be is second to none.

Something else you'd like to tell us?

Used to air rifle shoot for schools GB Team



Nigel Platt

Division Head, Robotics and Discrete
Automation, UK and Ireland. ABB Robotics



My strong belief is that manufacturing is the foundation of the UK economy. This belief has guided my whole career. I started my working life as a technical apprentice in Mechanical and Production Engineering with ICI, a UK based manufacturing icon of the era! Having joined ABB as a sales engineer more than 30 years ago I am immensely proud to head up and lead the business in the UK for the past few years. The UK remains top in the design, development and manufacture of many world leading products. I plan to spend the rest of my career doing all I can to help us do that competitively.

Something else you'd like to tell us?

My Great Grandfather was a music hall artist from Hackney - famous for writing and performing the song "Any old iron".



Georgina Slack

Specialist Technician, JCT600



In their own words

What is your favourite engineered/manufactured product?

The 4.3 litre V8 engine, fitted in a Ferrari F430!

Please give one interesting fact about yourself that not many people know.

I live with 5 cats!

If you weren't in manufacturing what would your dream job be?

It would be something to do with helping others. A midwife maybe.

Georgina is a Ferrari technician at JCT600 in Leeds, where she has worked for 9 years. Of her passion for her job she says, "I love the fact every day is a different challenge, no two days are identical. I like the buzz of all the new technology, advanced systems and innovative programs Ferrari release when a new model is produced." Ferraris hold a particular fascination for Georgina who explains, "Ferrari is constantly changing and evolving and this is a huge factor to why I wanted to be part of this industry."

A highlight, and one of Georgina's proudest moments, was winning the 2019 Automotive 30 club trailblazer award, an organisation that is increasing awareness of gender imbalance in the motor industry. Now she is also one of *The Manufacturer's TOP 100* Exemplars – an incredible achievement at such a young age!

Of her own work and developments in the industry Georgina notes, "This year I was selected to be trained to work on the Ferrari Challenge 488 race cars, a huge honour. I am massively inspired

by other strong women who are leading the way in the automotive industry. It motivates me to continue to be a strong advocate for other young women in the automotive/engineering sector to prove that anything can be possible if you put your mind to it! The new technology in the coming years is so exciting and that is what keeps me fired up day after day."

Georgina is a strong advocate for apprenticeships and industry talks in schools as a way of encouraging more young people into manufacturing, "I can't preach about apprenticeships enough, so that you can learn and work at the same time and also having more industry people doing talks in schools, because I didn't have anybody come in to talk to me to say 'you can you can be a mechanic, you can be an engineer'."

“

I love the fact every day is a different challenge, no two days are identical.



Shane Preece

EU Research Technical Leader
Honda Engineering Europe Ltd



Referring to my current role, I can say that I have since discovered a new kind of teamwork. Unlike in the past when we were always busy and always in ‘do’ mode, I am now a thinker and the level of communication and creativity has increased 100-fold. So now my biggest challenges are no longer the solutions, but a culture that is struggling to come to terms with rapid change. The reality is that the world is changing more quickly than the culture wants to adapt so my goal is to develop ‘real teamwork’ by utilising digital tools. In the end technology will be our greatest driver for rapid success.

My favourite manufactured product

My Black & Decker workmate. It’s 35yrs old and still as useful as the day I bought it. I’ve used it countless times and it’s never let me down.



Jerry Redman

Operations Director
Sycamore Process Engineering



I left school at 16 with a handful of CSEs and worked initially within the motor trade. I spent time working in other industries including commercial diving and metalwork before embarking as a self-employed welder/fabricator specialising in stainless steel. I joined the business in 2001 and brought a small team with me and the capabilities to fabricate, manufacture and install. I have always been passionate about my work and doing things to the very best of my ability and as the business has grown, this still remains the case. My role has changed beyond recognition and having been ‘off the tools’ now for several years I have a day to day involvement with operations, health & safety and HR.

If I wasn’t a manufacturer, I’d love to be...

As strange as it sounds I would love to work outside and manage park or wild deer, to enjoy them and the environment that they live in.



Martin Rigley

CEO
Lindhurst Engineering



Like the previous six generations of my family my career started in coal mining. I had always had a keen interest in machines and from an early age I loved to take things apart. After my A levels in 1981 I started with British Coal as an electrical student apprentice. This led to me gaining a degree in electrical & electronic engineering from Nottingham Trent University in 1985. I remained in coal mining up until 1994 as I progressed from apprentice, technician, shift engineer and eventually engineer at Thoresby Colliery. In 1994 I joined the family business, Lindhurst Engineering, initially as Technical Director, becoming Managing Director & CEO in 1996. My main highlight was being awarded an MBE in the 2016 New Year’s Honours list for services to business and innovation.

If I wasn’t a manufacturer, I’d love to be...

Simple, a jazz guitarist. I’ve played guitar since I was 11 and would love to be able to communicate the emotions I feel when I listen to a great jazz guitarist like Martin Taylor.



Chris Rowlands

General Manager, Goole Rail Facility
Siemens Mobility Limited



I love making things, seeing people develop and improvements made. I value safety above all, QCD of course, and how people behave, and the culture is critical to success. My career highlights to date include leading a huge business in Denmark, working in Germany and now in Austria and as the GM of the newest Siemens factory in the UK.

What qualities must future leaders have?

Leaders must take their responsibility seriously - to the people, the environment, the business, the brand. They need to encourage diversity, equality, inclusion. They need to understand that new ideas will come and should be encouraged... you can always improve.



Richard Thayer

Value Adding and Rework Manager, Accolade Wines



In their own words

What is your favourite engineered/manufactured product?

Probably the power screwdriver

Please give one interesting fact about yourself that not many people know.

Before joining the Port Police I was a lifeguard at Pontins

If you weren't in manufacturing what would your dream job be?

Running a B&B, although given the current situation probably a bad idea

Richard currently works at Accolade Wines as Value Adding and Rework Manager, problem solving and enhancing products for the customer. He recounts his journey into manufacturing. "It was more by accident, to be honest. I had a young family and I was a poor police officer and I found I could earn more money in heavy industry. The money came first, but it's the best decision I ever made."

When redundancy hit in 2003 and after rejecting an offer to move to Australia, Richard applied for several jobs with what is now known as Accolade Wines, and he was taken on as a shift manager. "When I first moved to Accolade, Matthew Clark as it was then, was based on an old building so I helped with the logistics of a business move to a different site without affecting any production chains or customer satisfaction. It was all done with a lot of good people and a lot of support, and I will say Accolade is still full of top-rated people which is so important."

He continues, "One of my greatest personal challenges has been

overcoming the barriers of not being a graduate. If I go back to my furnace days, if you weren't a graduate, you were never going to get to the higher positions such as a superintendent, smarter managers etc. But luckily for me someone gave me a chance and I became the first non-graduate superintendent which I'm particularly proud of."

As it has been for everyone, Richard acknowledges that 2020 has been very challenging. "It was a case that we lost all our on-trade business almost overnight. But that was very quickly replaced by the off-trade, and trying to maintain customers' wants and desires. It has been difficult as drinking habits have changed so we have had to adapt. We've ensured staff are safe whilst they're working on site, from temperature check-ins to additional hand washing facilities that are operated by the knee and having automatic doors. We're trying to allay people's fears at what is a difficult time. It's been challenging right across the board in the industry this year. But I think the way that manufacturers have stepped up has been incredible."

"At 62 years of age I could be considered a management dinosaur, however I can honestly say I enjoy coming to work each day and importantly I am still learning. No one knows everything, and lessons can come from the unlikeliest of sources."

“

...luckily for me someone gave me a chance and I became the first non-graduate superintendent which I'm particularly proud of.



Ruben Salazar Frutos

Group Leader EU Research
Honda Engineering Europe



I am very passionate about leading a team. My specialty is to help people to achieve both the company targets and their individual career development. I do this by motivating individuals and making a good team. I have been successful because of my strong communication skills, leadership and hard work. I really enjoy what I do.

If you could have a quiet word with your younger self...

Don't be too fixated on a plan. Plans will almost definitely always change! Live life with open arms. You will go where you're supposed to be headed. Don't stress.



Andrew Sands

IT Infrastructure & Services Manager and
Business Security Officer, TSP Engineering



Ever since completing my work experience on a British Steel site, I was drawn to the noise and the smell of the manufacturing industry. I started my journey as a 17-year-old YTS Apprentice in Business Administration and found myself in a junior position in the IT Department. Within two years I was outsourced to a global IT Service Provider. I came through the ranks to hold the position of UK Team Leader for all on site Desktop Support staff based in the UK. 19 years later I moved into IT Contracting for 12 months. I then took on the role of IT Infrastructure & Services Manager with TSP Engineering where my challenge was simple - turn around an IT Department with a reputation of being one of the worst, underperforming departments in the business. Game on! Over the past 12 months we have received 5884 tickets and have a closure rate of 99.58%!! These are KPIs that I am proud of!

My favourite manufactured product

A coffee flask



Sam Smith

Lead Launch Engineer - Special Vehicle
Operations, Jaguar Land Rover



When I left Sixth Form at 18, I had no idea what I wanted to do for a career but in 2012 my sister pointed out that Jaguar were hiring for shopfloor work at Castle Bromwich. I applied and was selected, and that is where my eyes were opened to this wonderful work of manufacturing. With JLR, it wasn't just a job. They taught Business Improvement, provided on-the-job training, which led to an NVQ, and really nourished those of us that were hungry for more. From building the Jaguar XJ, I moved into New Model Programmes, as part of the Business Improvement team. I achieved Six Sigma Green Belt accreditation this year.

Something else you'd like to tell us?

Despite being quiet and introverted I'm actually a bit of an adrenaline junkie. I've skydived, jumped off New Zealand's Auckland Sky Tower, and love the dynamics of taking my motorcycle out on the roads.



Phil Stanley

Director
TWP Manufacturing



After leaving school I began an apprenticeship at a press toolmaker in Kent whilst completing City and Guilds in Engineering to level 3 followed by completion of my HNC in engineering. I moved to the West Midlands in 1991 working for Ross Courtenay as a toolmaker in high volume terminal manufacturing for 5 years. The opportunity then arose for me to start up Threeway Pressings in 1996 which is still flourishing 25 years later. Over the last 25 years I have registered more than 25 patents and design rights in manufactured products for ourselves and customers.

If I wasn't a manufacturer, I'd love to be...

Premiership Rugby Player and play for England against the All Blacks



Anil Thomas

Head of Business Operations and Strategy

Siemens PLC (Motion Control Manufacturing – Congleton)



In their own words

What is your favourite engineered/manufactured product?

Not a product as such but whenever I see an engineered piece, be it an jet engine or a Lego model, my mind naturally tries to work out how best one would have manufactured and assembled it.

Please give one interesting fact about yourself that not many people know.

I enjoy being part of stage productions, and like to perform and sing. I won't claim I am good at it but I do enjoy being part of a creative process.

If you weren't in manufacturing what would your dream job be?

I enjoy cooking very much and my grandmother always thought I would be a chef.

Anil started his journey in manufacturing after graduating in Mechanical Engineering from India. As a graduate engineer with Tata Group within their ceramics manufacturing division, he led shifts and departments, solving a variety of problems each day. He then had the opportunity to work in the Middle East with Etihad Engineering in their material planning division, which provided a great insight into a service organisation and how a wide variety of engineering activities come together. He says, "It was clear that what I enjoyed most was bringing products to life through various manufacturing process."

Anil decided to move to the UK to complete a Masters in Manufacturing Systems with WMG, and for the past 8 years has worked for "one of the best manufacturing plants within the Siemens network. I am fortunate to currently handle various operational and strategic roles, looking at the operations and business strategy of

the site, aligning with the network strategy and the global manufacturing plans as well as on-boarding new products. One of my greatest achievements recently was being part of the team that worked on the UK Ventilator Challenge and I am incredibly proud of what we achieved in collaboration."

He continues, "As a leader, I am always considering how Siemens Congleton can be a world class manufacturing location in the UK for generations to come. My passion lies in realising necessary organisational capabilities to answer tomorrow's questions, both within manufacturing and wider business contexts. I relate to the book by Jim Collins, titled *Good to Great*, where he defines a leader as a person with great humility and a persistent will to win. A few qualities that I keep close to my heart are showing great flexibility and adaptability to various situations and actively listening and showing sensitivity to people."

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Joe Subert

Project Engineer
FeTu LTD



I graduated from the University of Leeds in 2017 with a Masters degree in Mechanical Engineering. I have previously worked as a mechanical design engineer in Munich and a Control Systems Engineer in London. My current role at FeTu requires a depth of knowledge across different engineering fields. I find myself growing with the business, being able to use new software, something I always enjoy. My proudest engineering achievements up to date are the two academic papers published with my name at the International Compressor Conference 2019 and Rankine 2020 Conference, both showcasing the novel FeTu machine in different applications.

My favourite manufactured product

BMW i8



Joanne Thompson

Company Director
A Fawcett Precision Engineering Ltd



I've been involved in the manufacturing sector for over 20 years. Fawcett's was a family business and I worked in the office for my father, learning the ropes. In 2009 dad sold his shares to myself and a management buyout took place. Since then the company has gone from strength to strength, increasing turnover and taking on new clients. Investment has been made in the last 10 years with numerous new CNC machines and wire erosion facilities to enable us to increase in production and be more competitive on price. In 2019 I was chosen to take part in the 100000 Goldman Sachs Small Business Programme of which I graduated in 2020. I was inspired by my father, who started as an apprentice and worked his way up the ladder to a work's manager.

If you could have a quiet word with your younger self...

Never give up on your dreams, always focus on the front windshield and not the rear mirror!



Lee Turner

Engineering Director, European Powertrain
Manufacturing, Ford Motor Company Ltd



I have worked with Ford now for over 30 years and I have spent almost all that time in manufacturing. I have been fortunate to work with so many talented teams of people – none more so than my current team in Powertrain Manufacturing Engineering – their outstanding knowledge of mass production process and engineering principles allowed us to demonstrate that skillset this year in the set-up of the Ford element of ventilator manufacturing for the UK Ventilator Challenge. Delivering over 15000 hours of Manufacturing Engineering the team turned an artisan process and empty warehouse into a mass production facility in just a few weeks - upscaling production by a factor of 100 and enabling the doubling of UK ICU ventilator stock in just over 100 days.

If I wasn't a manufacturer, I'd love to be...

Professional Golfer - I wouldn't make any money but the travel and lifestyle looks great!



Kerry Usher

Lead Engineer
Tata Technologies



I am a Body Structures Lead Engineer working for Tata Technologies on projects for a large UK based Automotive Vehicle Manufacturer. I graduated in 2017 with a First-Class Honours in Motorsport Engineering and I am currently completing a part time MSc in Advanced Manufacturing Engineering and Management at Loughborough University. Having graduated with my BEng from Oxford Brookes University I knew I wanted to be in a role where I could directly influence the design and manufacture of future vehicle models. My current role allows me to do exactly this through being design responsible for several components of the vehicle's structure.

What qualities must future leaders have?

Leaders of tomorrow must be flexible and open minded to allow for technological advancements to be taken full advantage of, without the need for their hand to be forced.



Dean Trappett

Group Engineering Manager, Autins Group



In their own words

What is your favourite engineered/manufactured product?

Cars

Please give one interesting fact about yourself that not many people know.

I have an identical twin brother

If you weren't in manufacturing what would your dream job be?

Racing car driver

Dean has been in manufacturing for 28 years, working for two first-tier and a second-tier supplier all within the automotive industry in different manufacturing segments. He is currently working as traffic Group Engineering Manager at Autins Group, supplier of acoustic and thermal insulation solutions for the automotive industry and other sectors.

After completing his apprenticeship, he progressed through the business to become the Engineering Manager at the age of 24. He says, "The key for me during this period was understanding how important everyone was in the company, from the canteen staff through to the MD, and how they all helped play a key role in my development."

Key highlights of Dean's career include various academic achievements, successfully leading the relocation of a £60m facility in 2008, moving to a new segment after 22 years in Powertrain, seeing team members develop and progress and, more recently, moving to a second-tier supplier, again in a new

sector and making a difference to the business prior to lockdown.

During the pandemic Dean was able to work with the team to develop new products to help the business survive which "was really rewarding. What inspires me is being able to bring a team together and start with an idea on paper and then see it flourish into reality and the sense of achievement we all get from this. After 28 years I still look forward to going to work each day due to variation of the job and not knowing what challenges me and the team will face and how we will overcome them."

He continues, "For me the key is treating people how you would want to be treated yourself, the people who work with you need to want to work with you. I always look to lead people, therefore you need to listen to everyone. You need to give your team the platform to share their ideas and to grow in the areas they want to progress. Giving feedback, both positive and negative, is critical but also promoting your team in higher

circles and making sure they get the accolades they deserve is important. As a leader one other key skill is remaining positive in adversity, your team look to you to guide them through issues, therefore even in difficult times you have to keep looking for the solutions and keep the team moving forward."

“

For me the key is treating people how you would want to be treated yourself, the people who work with you need to want to work with you.



Jordan Van Flute

Co-Founder & CTO
Inovus Medical



I started my career in surgical performance research as a psychology undergrad. To conduct the study, I needed a simulator. At the time nobody would allow me access to one due to their high value, so I built my own. It was during this project that I realised I was pretty good at solving problems. So, when a friend of mine told me that medical students and surgical trainees also struggled to gain the necessary access to the same simulation equipment, we decided to form a business that provided access. To do that we needed to take full control of the production process, at which point I shifted careers and became an engineer. Over the past eight years I have gone from hand crafting simulators in a garage to having a full-scale production facility that largely utilises SLS 3D printing as part of our mass production workflow.

If you could have a quiet word with your younger self...

Don't be afraid to jump, you'll figure out how to deploy the chute somehow.



Yati Varshneya

Prototypes and Samples Manager - Europe
Johnson Matthey



My passion for people and business developed early on. My first hands-on experience came at the age of 12 doing chemical analysis and I was fascinated by my father's approach of utilizing each member's potential to create the final product which was used in medicine and food products across the world. The beauty of creation and unlocking human potential for a bigger purpose was fulfilling which led me to pursue chemical engineering. After almost a decade of Operations and Commissioning in India, I was selected as a future senior operations leader in Johnson Matthey and moved to the UK following a Global Manufacturing Leadership Programme.

My favourite manufactured product

I would say my favourite product is a catalyst which makes the world cleaner and healthier for today's and future generations. I have contributed to several catalyst technologies and products which are used in automobiles, ammonia, methanol, oil and gas business to purify their exhaust systems.



Simon Walker

Operations Director
Lander Automotive



I began my career as an apprentice Machine Tool Fitter, learning how to repair and improve machine systems. I moved into production management in my mid-20s to expand my horizons and went back to night-school to build on my qualifications. 10 years later I'd gained an ONC, an HNC, and a degree in Manufacturing Management, and secured my first operational management role. I am inspired by the people I work with (and I've worked with thousands over the years!) and the results I and my teams achieve. I'm proud of the company I work for, and I'm passionate about UK manufacturing and its reputation within the global economy.

Something else you'd like to tell us?

I trained in martial arts for 25 years



Olivia Whitlam

Head of Sustainability
Siemens Plc



I joined Siemens in 2012 after retiring from the GB Rowing Team, having competed at the Beijing and London Olympics. My first role was to manage the strategic delivery of the business's societal programmes, improving measurement rigor and working to embed societal purpose across our operations. Nowadays I get to utilize my Environmental Science degree background to deliver on the wider sustainability portfolio with key areas of focus being Circular Economy, Supply Chain Responsibility and Decarbonisation. Whilst the task ahead of us all on these topics is massive, I feel privileged to go to work each day knowing what I am doing is quite literally helping to save the planet.

What qualities must future leaders have?

A wider perspective on what a successful business is. The leaders of the future will be the ones who can see past short-term gains and build companies that deliver something the customer really needs, in a better way than what they have already.



Paul Williams

Quality Centric Digital Systems Manager
Rolls-Royce



For almost 25 years, I have worked in the space where pioneering product development places demands on manufacturing capability and conversely, where modern manufacturing technology enables significant product performance and ultimately, customer delight. The creativity and value of the pioneering work I have been involved in has generated a modest portfolio of patents, paper publications and awards, yet much more remains out of the public domain. One highlight for me was the development of an Innovation process which won me the Cranfield University 'Best Thesis' award in 2012 and earned a place to present at ISPIIM 2013 in Helsinki. Recently I have become a non-executive director of a 'wearable tech' startup operating out of Coventry University, Feraru Dynamics.

If I wasn't a manufacturer, I'd love to be...

Medicine was always an ambition of mine.



Melvin Wingfield

Director
A&M EDM Limited



The importance of UK manufacturing will be thrown into sharp relief come the end of this year. As society and our economy deal with the greatest challenge of our lifetime a second shock is on the way. Remain or leave it doesn't matter all we know is change is coming. In addition, technological advances mean that the relationship between labour and capital has changed and that no amount of wistful thinking about the past will see manufacturers employ the large numbers they once did. What will happen in this process of change, however, is a sense that we as a country need to have various forms of security which includes food, the provision and maintenance of our utility services and the ability to secure our own markets whilst challenging for export sales in the provision of manufactured goods.

My favourite manufactured product

James Watt's steam engine



Thomas Wilson

Loads & Aeroelastics Expert/Semi
Aeroelastic Hinge Project Leader, Airbus



Since I was young, I have always been fascinated by aviation and space travel, and inspired by breakthrough progress made by projects such as Apollo, Concorde, A380 and the Falcon 9. At university I developed a strong and deep interest in the science and mathematics behind aerospace technology (especially in the fields of dynamics and aeroelasticity), and despite the knowledge gained I still think it is wonderful that in so many fields we can reliably predict how a physical system will behave. I have had the tremendous privilege to combine these interests to contribute to the development of aircraft across Airbus's portfolio from A320 hard landing detection through to predicting the dynamics of huge payloads inside the Beluga XL during turbulence.

If I wasn't a manufacturer, I'd love to be...

Astronaut and centre forward for the England rugby team.



Pawel Wojcicki

Design Engineer
Antech Ltd



I am a design engineer with a passion for electronics and new technologies. I am always looking for simple solutions as an alternative to expensive products, keeping the quality and functionality as key attributes to my designs. My electronics background and hardworking ethic allow me to manage and combine work and thus move forward in the programming, design, and modelling environment at the same time. Parallel to the position in Antech Ltd I am the founder of a simple ideas company. I have developed smart products for home automation and for photographers.

If you could have a quiet word with your younger self...

Read, Learn, Make, Share - read to understand principles of your subject; learn to remember and how to use principles you've just read; make an innovative product based on learned principles, and share and promote your ideas with others.



Simon Wood

Senior Capability Specialist –
Professional Development,
Jaguar Land Rover



I left school in 1989 and joined the Royal Air Force (RAF) as an Airframe and Propulsions Aircraft Engineering Technician Apprentice. I retired from the service as a Chief Technician. I then transitioned into the manufacturing world. I joined JCB as a Technical Excellence Leader to develop and deliver training to JCB staff. This role quickly evolved to include recruitment and retention of Early Careers employees. The role included careers events, local STEM activities with schools and managing the JCB Big Bang Fair stand for 6 years encouraging thousands of young people to get into STEM careers. 7 years at JCB I developed a passion for professional registration. Already registered at EngTech as I left the RAF I soon became IEng Registered and used this knowledge to develop other engineers, experienced or otherwise, to become professionally registered. Building on this experience I moved to Jaguar Land Rover to embed professional development and registration in the Jaguar Land Rover Early Career programmes and provide guidance to more experienced engineers to enable them to become registered.

Something else you'd like to tell us?

I once rowed 100Km in one sitting on an indoor rower for charity in a time of 8 hours 2 minutes



Laura Young

Apprenticeships Controller
Nissan Motor Manufacturing UK



What I enjoy most about working for Nissan is the variety within the job, from learning and development, to global projects and most recently managing the apprenticeships, each day brings a new challenge. My achievements include successfully completing a First-Class BA (Hons) in Leadership Management and a MA in Human Resource Management and Development, all whilst progressing my career within Nissan. I started as an administration apprentice, in 2009, and now can nurture and shape apprentices of the future. Currently an Apprentice Ambassador, I am a big believer in apprentice engagement and inspiring apprentices to have a voice. I take great pride in encouraging others to employ apprentices – they really can make an impact on an organisation.

If I wasn't a manufacturer, I'd love to be...

I have always been intrigued by how the mind works – so I think something in psychology.



James Myers

Head of R&D – Aerospace/Composite
Applications, Victrex

Growing up in Yorkshire in the 1980s I was always very practical minded, and at university it was clear my future lay in manufacturing. I was offered a couple of industrial-based projects with a university spin-off which led to my first patent, and I started my path towards composite materials and structures development. The ability to take an idea and turn it into something tangible that makes a better product, and positively impact someone's life, is an incredibly powerful thing. The UK has a rich heritage in manufacturing and, at this time more than ever, we need to be open to collaborating with the best the world has to offer.

If you could have a quiet word with your younger self...

There is no one single route to get to where you want to be, particularly educationally. Whilst I'm grateful for the opportunities I've had, I would be more likely now to conduct an apprenticeship rather than the more traditional higher education route.



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