

Insider trading

With the September trade event circuit now in full swing, Rachael Taylor examines the trend for a new breed of show organised and managed by exhibitors themselves

When the inaugural Get Stoned gemstone trade fair opened its doors in Brighton, there was already a queue forming along the side of the red-brick building. While ticket sales had given an early indication of numbers, the feeling of instant success still took the founders – who themselves were exhibitors at the event – by surprise.

Over the course of the day, back in May, 170 buyers crushed into the small space, jostling to have the chance to view the gemstones and services on offer from 13 exhibitors. Some were local to the city, but many had travelled from London, as well as further afield – Dublin, Amsterdam – to attend.

Companies taking part included names well known in the trade, such as Misfit Diamonds and Marcus McCallum. For others, including Steeles Intaglios and Natural Spinel Gem, it was the first time exhibiting at a trade show. In the basement, a series of talks offered visitors insights on topics including what to look for when buying gems, lapidary, ethics and marketing.

The idea for the event originated from a conversation between Stuart Pool of ethical gem dealer Nineteen48 and gemstone carver Sanni Falkenberg, who pondered whether they could get members of the trade together in Brighton. The city is a hub for jewellers yet there is no longer a professional networking scene there. As discussions progressed, they brought in Gemology Rocks managing director Kerry Gregory, and Emma Perry, founder of Emerald Studio, which provides creative services for the jewellery industry.

"That was the humble beginning, really," says Pool. "It was about just bringing people together, and then once Emma got a hold of it, it was suddenly 13 exhibitors and branding and a website and Instagram."

Perry is a skilled marketer. She is the driving force behind the marketing activities at Hatton Garden retail and



co-working space Forge, and brought the same sort of energy to this new project. Rather than opt for what she saw as a staid luxe approach to the event, she instead strove to create an atmosphere that prioritised fun over formalities. This ran through everything from its shocking pink and luminous green branding to a themed wall covering Perry made by hand, and an after-party sponsored by Brighton Gin. "We were making it an experience, a day out," says Perry.

They succeeded, with many visitors making social media content about day trips to Brighton to view the gems. It felt more play than work, which was the aim.

"There are [some trade shows that are] incredibly snobby and incredibly elitist," says Gregory. "The sort of gem fair that I want to go to is one that is fun, friendly and welcoming – somewhere I can meet new people, learn new things and do something that is business relevant. As an exhibitor, Get Stoned ticks all of those boxes. While our visitor numbers, in the grand scheme of things, were low, there were very few people who didn't buy anything, and I made more money

(Above) Get Stoned founders Sanni Falkenberg, Kerry Gregory, Emma Perry and Stuart Pool; (above right) an exhibitor at the show

"The sort of gem fair that I want to go to is one that is fun and friendly"
Kerry Gregory
Gemology Rocks



than I was expecting to on the day." This idea of exhibitors crafting the perfect show they would like to take part in isn't just for small showcases in seaside towns. Look to the international exhibition scene, and you will notice this ethos leading major shows.

Switzerland is a hub for this model. Watches and Wonders was founded by Rolex, Richemont and Patek Philippe, with the trio setting up the Watches and Wonders Geneva Foundation (WWGF) to run its events. This now has a full-time staff of nearly 30 people. Chanel, Hermès and LVMH joined the WWGF board in July, and the running of the event is influenced by an active exhibiting committee made up of representatives from all brands involved.

Jewellery trade show Haute Jewels Geneva, which runs at the same time as Watches and Wonders, was founded by Michael Hakimian, chief executive of pearl jewellery brand Yoko London, in collaboration with brands Roberto Coin, Sutra and Crivelli. The show is now expanding, with plans



really focusing on the jewellery." While the stands are simple, Melee does invest in creating a luxurious atmosphere. Events are catered and champagne flows. This elevated hosting is a key focus at many contemporary trade shows, including the Retail Jeweller Festival and Watches and Wonders. Long gone are the days of queuing for hours for overpriced sandwiches.

While shows like Melee and Get Stoned are focused on cutting costs for exhibitors, Dekeukelaire believes this is only part of the equation for exhibitor-led shows. He says GemGenève might in fact be willing to spend more in some areas than a traditional exhibition organiser, such as on its education programme, which it sees as a way to lift the trade as a whole, and therefore benefit its exhibitors.

When it comes to selecting exhibitors, an exhibitions company not invested in any one particular industry might sell space just to hit sales figures. Exhibitor-led shows tend to take a more holistic approach. The founders of Melee don't have a set list of criteria for the type of brands they accept, but are curatorial.

"What we're looking for is somebody who's really true to their craft, dedicated and has a unique point of view," says Wolf. Gregory believes such peer-to-peer vetting can lead to a better visitor experience. "They've got to be people who we trust, who we would recommend to somebody," she says.

As the final revellers were ushered out of the Get Stoned closing party, the organisers were already chalking it up as a success, and planning the next edition, set to take place in a different British city. It is proof, as are the other exhibitor-led shows around the world, that there is still power in the collective.

(Above and top right) GemGenève; (above left) Melee; (top left) Watches and Wonders

"[Melee] isn't about how wow your booth is. It's about really focusing on the jewellery"
Lauren Wolf
Melee

ANDRÁS BARTA, WWGF/KEYSTONE/VALENTIN FLAJRAUD

Proving its metal

Oxford-based Alloyed is working with metals in new ways, some of which could be relevant to the jewellery industry, as Rachael Taylor discovers

Inside what appears to be a typical unit on a standard industrial estate in Oxfordshire, extraordinary things are happening. In the heartland of academic research, scientists at a metallurgist called Alloyed are working to manipulate metals in new ways, some of which will open up fresh possibilities for the watch and jewellery industry.

Alloyed, which spun out of Oxford University in 2017 as OxMet Technologies before merging in 2020 with industrial design agency Betatype, started out focusing on the aerospace industry. It has also developed life-changing bespoke orthopaedic implants through its medical division, Meshworks. Walking around its two facilities in Yarnton and Foxcombe, it is not uncommon to see a rocket nozzle or a bone strut mid-print.

The other industry catching the attention of the scientists at Alloyed is jewellery and watches. The company was invited to exhibit at Watches and Wonders this year, where it teamed with Swiss design school École Cantonale d'Art de Lausanne (ÉCAL) to showcase the possibilities offered by 3D printing titanium. Students designed wild, imaginative watch straps; Alloyed fired up its laser beams to achieve the melting point of 1,600°C that its titanium, aluminium and vanadium alloy powder required, and made them a reality.

The idea, Alloyed programme manager Chloe Cunningham says, was to showcase to the watch world what the company is capable of. Also to change perceptions about 3D printing, and what is possible within additive manufacturing when you are willing to venture into the experimental realm. She gestures to a pair of spectacles on the table to make her point.

On picking up the glasses (a prototype made for a Silicon Valley wearable tech producer), it is an incredibly light material, akin to carbon fibre, but it's not. It is magnesium. "Lots of people don't believe magnesium is printable," says Cunningham.



Clearly it is, although the team conspiratorially nod when recounting the difficulties that had to be overcome to make it so. Namely that magnesium has a very low boiling point, so when the lasers would pass over it as part of the printing process, it would vaporize. A solution was discovered. "We're adventurous – magnesium is a case in point," Cunningham says.

Another intriguing material on the table is tantalum, an element with opposing properties to magnesium (it is super heavy, with a high melting point of 3,017°C). While it is more often used in electrical components or supersonic aircraft nose caps, it has been used to create the odd wedding band, and watchmakers including Audemars Piguet and Hublot have used it for cases.

Alloyed is collaborating with a major watch brand on pure tantalum cases that will launch in 2025. Why did the brand want this material, which weighs in at a quarter of a kilo for a blank case? Just because it's a cool material.

"That's something I do love within this sector," says Alloyed's Swiss-born design lead, Laurent Beirnaert. "In all these sectors we're used to – aerospace,

(Above and below facing page) Alloyed showcased experimental 3D-printed titanium watch straps at Watches and Wonders

medical, heavy industry and so on – [decision making] is very rational, targeted. Here, they wanted tantalum just because they wanted tantalum."

The tantalum watch cases are hollow on the inside to help reduce weight and cost, and this is a key benefit of 3D printing that Alloyed believes the industry can benefit from. Cunningham brings out two platinum wedding bands, both printed at Alloyed. They look identical, and it is only when you pick them up that you can spot the difference. One is solid platinum, the other is hollow (with the telltale hole laser-welded to conceal the trick). The saving is significant: the solid ring is 9.9g, the hollow band is 6.3g – a saving of about £83 per ring at today's platinum price (30 August).

Platinum has been somewhat of an obsession at Alloyed. It was approached by Anglo American in 2019 to develop a new platinum alloy that would alleviate some of the difficulties associated with its production. Namely, its porosity, a softness that damages tools quickly, a notoriously high melting point, and a generally slower processing time than white gold (that negates any savings that

might be made by switching to platinum).

Alloyed had just 5% of the alloy to play with, but managed to find a blend – using digital modelling and AI to speed up research – that it claims is 40% harder than standard platinum alloys, has a longer-lasting bright-white shine, can be polished 40% faster than platinum, and machined four times faster. It was named Inoveo, and was launched by the Platinum Guild International (PGI) at JCK in Las Vegas in June on behalf of Anglo American, which has given German refiner Stuller the exclusive global rights to produce and sell it.

"So few new things happen in this industry, so when something really new, really ground-breaking [emerges], and addresses what were some of the major challenges with working with platinum – at a time when the price of platinum, which was historically higher than gold but is now significantly lower – it was a perfect combination of elements to really make a big splash at the shows in Las Vegas," says PGI USA vice president Kevin Reilly.

PGI reports that initial interest in Inoveo at the shows was "overwhelming". Inoveo has initially been launched as casting grain only, but the Alloyed team are already working on a powder for additive manufacturing, and they point out that platinum is better suited for additive manufacturing than gold because gold has a higher reflection that can interrupt the lasers.

Alloyed metallurgist Andrej Turk, who was part of the team that invented Inoveo (and notes how refreshing it was to have such a high profile launch, as so often his inventions are hidden behind NDAs), believes there is more innovation to be found in platinum.

"There's lots more we could do, especially in the higher hardness space and additive alloys," he explains.

A lot of the science has already been mapped out, he adds, and they are just



waiting for demand from the industry.

"We have a few high profile potential customers visiting soon," Beirnaert cryptically drops into the conversation, sparking knowing looks from his colleagues around the table.

While alloy development is the real cutting edge of what Alloyed does, it also offers additive manufacturing services, and hopes to expand its reach in the watch and jewellery industry with direct metal printing. It recognises that many manufacturers in the sector already use 3D printing methods, so staying true to its DNA, it is using science to push its offer further upmarket.

It has invested heavily in machinery. At its Foxcombe site there are 15 3D printing machines, with more at Yarnton. When it comes to operating these machines, Alloyed performs more than a button-pushing service.

"A lot of what we do with business development is convincing people of 3D printing quality [as] not all people with 3D printing machines are getting the full potential out of them," says Cunningham.

"The machine is a tool. You can hand that to anyone – they need to know how to get the best out of that tool," agrees Beirnaert. "That's really Alloyed's core IP [intellectual property] – how to put these machines to their best."

Cunningham gives the example of a 3D-printed platinum tension-style clasp that might be used for a bracelet or necklace. To ensure it is in working order, its measurements must be infinitesimally precise, with a key component being less than half a millimetre in length. They succeeded, she says, by repetitive refinement backed by tech. Each time a design is printed, it is scanned to identify flaws, and tiny adjustments are made each time to increase the future likelihood of it coming out of the printer as close to perfect as possible when it comes time to print a big batch.

"When you are going from the CAD design, you have to prepare the

(Above and below) Alloyed is working on projects for the watch and jewellery industry

"Not many other jewellery manufacturers are also producing parts for space rockets or the human body"



builder powder, you have to orientate it, and then you have to press go, but it's never guaranteed that it's going to print properly," says Cunningham. "So often, there is this preliminary bit of the project where it's all experimental. What we are doing with building our technology is increasing the likelihood that that first time is right by plugging into the simulation tools, the predictive tools, to back that up."

Taking a meticulous approach also means its methods can optimise builds to use less material on support structures, such as casting sprues, and due to a superior build and alloy, its printed goods require less finishing than standard 3D-printed jewels. Beirnaert hands over a Milanese watch strap and explains that it comes out of the printer as I see it; it just requires tumbling. Alloyed also has its own atomizer to transform discarded metal back into powder, ready to be printed again. This all leads to less waste, which brands with ESG targets to hit will no doubt find attractive.

It is far from plug-and-play initially, but with every new build, the hope is that the science will lead to a place where it can be.

"Our CEO, Michael [Holmes], likes to call that 'the hard stuff' because you have hundreds of engineers trying to make sure our parts are very consistent down to the micron, and that's very challenging," says Beirnaert.

It is an attention to detail unlikely to be seen at any other jewellery manufacturer, but then not many other jewellery manufacturers are also producing parts for space rockets or the human body. Get the alignment of a ring shank wrong and it is disappointing. Mess up the measurements on an aerospace component and it could be catastrophic.

The stakes might be lower, but Alloyed's ambitions to carve deeper into the luxury market are high. The team describes the Inoveo alloy as putting Alloyed "on the map" in the jewellery and watch industry, and they feel they have a lot to offer the sector, be it a formula for a bespoke alloy or a more efficient method of 3D printing.

Much of Alloyed's work is secret. No photography is allowed on the trip there, and companies and projects referred to during discussions remain shrouded in vague terms, but what is plain to see during a tour of both Oxfordshire sites is the potential of the work, and Alloyed's clear intent to be a beacon of innovation. ●

RJ on Instagram
Follow us to see what's caught our eye each day
@retailjeweller