THE TEXTILE MAGAZINE

ASIA'S LEADING TEXTILE INDUSTRY MAGAZINE



EXCLUSIVE INTERVIEW

The CEO elaborates about the company's product portfolio, discharging its social responsibility to make the world a safer, healthier place and its future growth strategies.

HEIQ'S METALLIQ

A high-tech mask featuring groundbreaking copper technology shown to deactivate the **COVID-19** virus in five minutes

- CARLO CENTONZE Co-Founder & CEO, HeiQ

HeiQ launches MetalliQ

A high-tech mask featuring ground-breaking copper technology shown to deactivate the COVID-19 virus in five minutes

lobal leader in textile and materials innovation, HeiQ, launches HeiQ MetalliQ, a futuristic-looking, high-tech surgical mask that destroys all viruses and bacteria tested, up to 100% efficacy.

The mask with a patented design actually contains an ultra-thin pure copper coating applied via a high-tech vapor deposition process, called HeiQ MetalliX, which converts a minute amount of copper into vapour, allowing it to be deposited evenly to surround each fibre. HeiQ MetalliX is a patent-pending technology, created by HeiQ's innovation partner, the Australian company, Xefco.

Studies conducted by the Peter Doherty Institute for Infection and Immunity in Melbourne, Australia (Doherty Institute) showed that fabrics treated by the HeiQ MetalliX technology significantly deactivated the infectious SARS-CoV-2 virus in as little as 5 minutes.

Each sample was exposed to a high loading of SARS-CoV-2 followed by 5, 15 and 30 minutes incubation at room temperature before the amount of remaining infectious SARS-CoV-2 viruses was measured. The fabric samples treated with HeiQ MetalliX indicated a virus reduction of over 97.79% in five minutes, 99.95% in 15 minutes and over 99.99% in 30 minutes, relative to the inoculum control.



"Our team of experts continue their vital work to minimise the impact of the novel coronavirus." Dr Julie McAuley, Senior Research Officer at the Doherty Institute, stated, "testing the ability of different surface treatments to reduce infectivity of the SARS-CoV-2 virus is one way that our research can help provide insights towards helping to stop the spread of COVID-19", Dr McAuley added.

Copper is a trace element that occurs naturally in all humans, plants and animals. The antiviral, antibacterial and antifungal properties of copper have been known for centuries and have been demonstrated by many laboratory studies. HeiQ MetalliX treated materials release copper ions which deactivate viruses and bacteria. Treated materials have also been tested to kill 100% of Staphylococcus aureus and Klebsiella pneumoniae and deactivate 99.95% of H1N1 virus and 99.9% of Human Coronavirus 229E.

Made in EU, HeiQ MetalliQ is manufactured in HeiQ Medica in Spain where HeiQ also conducts R&D activities for medical devices. Throughout the development of the HeiQ MetalliX technology, Xefco worked closely with long-standing research partner the Institute for Frontier Materials (IFM) at Deakin University as part of the world-class ARC Research Hub for Future Fibres, of which HeiQ is also a member.

"You can pretty much 'heiq' everything to add additional functions to an every-day product. This time we up our game once again in antiviral protection, with an upgraded and premium appearance. Spring is calling. As we emerge from lock-down we want to be extra protected and protect the others. HeiQ MetalliQ is designed exactly to provide that extra level of confidence. Further, it gives an edgy look, making it an improved alternative to surgical masks in many ways," says Carlo Centonze, co-founder and CEO of HeiQ Group.



Protection against SARS-CoV-2

<u>Tested by Peter Doherty Institute for Infection and Immunity</u>

97.79%

99.95%

99.99%

5 Minutes

15 Minutes

30 Minutes

Protection against Influenza A (H1N1) & Human Corona Virus

Tested by Situ Biosciences

Influenza A (H1N1)

99.95%

As per ISO 18184 standard

Human Corona Virus

99.9%

As per ISO 18184 standard

02 IMPACT FEATURE

"INNOVATION IS IN OUR DNA"

Taking the global pandemic in its stride, HeiQ has been extra proactive in developing masks that have not only been labelled user-friendly but are also highly protective. For instance, fabrics treated by the HeiQ MetalliX technology deactivate most of the infectious viruses that cause corona virus in as little as five minutes. In this exclusive interview, Carlo Centonze, Co-Founder and CEO, elaborates about the company's product portfolio, discharging its social responsibility to make the world a safer and healthier place and its future growth strategies.

HEIQ HAS RECENTLY LAUNCHED HEIQ METALLIQMASK. WHAT MAKES IT THE MOST INNOVATIVE ANTIVIRAL PROTECTIVE SOLUTION?

If there is one thing that makes it innovative, it is the ground-breaking technology behind it. The HeiQ MetalliQMask doesn't only look metallic; its patented design actually leverages the natural antiviral and antimicrobial properties of copper, which are applied via a high-technology vapour deposition process called HeiQ MetalliX to evenly surround each fibre of the mask.

HeiQ MetalliX is ideally suited to provide medical grade protection for Type IIR masks. It's a proven 'killer', as studies conducted by the Peter Doherty Institute for Infection and Immunity in Melbourne, Australia (Doherty Institute) showed that fabrics treated by the HeiQ MetalliX technology deactivated most of the infectious virus that causes corona virus in as little as five minutes. No less important is that it is actually a visible textile technology. We know that most textile functionalities are done via textile finishing.

Their advantage is that they don't affect the look and hand feel of the textiles, but it takes the brand and seller extra effort to convince the customer. We are visual animals & therefore seeing is believing.

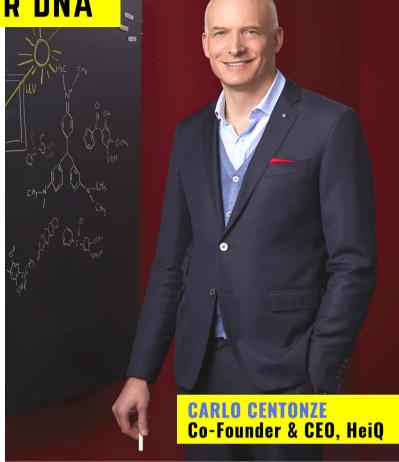
IT'S BEEN ALMOST A YEAR AND HALF SINCE THE CORONA VIRUS PANDEMIC AFFECTED THE WORLD AT LARGE. CAN YOU LOOK BACK ON HEIO'S PANDEMIC-RELATED JOURNEY?

The last year and half has indeed been memorable as it has proven to be a transformative and momentous time for HeiQ, characterised by fast growth, in no small part as a result of the pandemic. At the outset of the pandemic, we mobilised a global task force and worked relentlessly to serve the urgent need of protecting people.

By deploying what is widely believed as the world's most effective antiviral technologies, HeiQ Viroblock, for apparel, accessories, home textiles and much more, I trust we have contributed to stemming the spread and in protection. We thought it would take a while until any vaccine or cure would be innovated. But protecting people shouldn't be the job of only the pharmaceutical industry.

HeiQ as a leader in textile innovation ought to fulfil our responsibility to people. Therefore, just two hours after the Swiss government announced a state of emergency, we launched HeiQ Viroblock. HeiQ is known to use textiles as a medium to deliver all kinds of benefits such as the air-purifying curtain launched with the world's biggest furnishing retailer in 2019.

That technology is called HeiQ Fresh AIR. Now with the pandemic, our mission was to add extra antiviral functionality to textiles and through that we protect billions of people. By the end of last year, nine months into the pandemic, before any jab of vaccine was administered, we had treated at least 1 billion face masks with this technology. Our technology was also spotted to have protected the ladies of the royal family – on Cornelia James' gloves.



On a positive note, in that same period, we went public and are now listed on the London Stock Exchange Main Market. By the way, the exclusivity of HeiQ Fresh AIR technology with the first customer said above has now expired. We are opening it for all curtain and home textiles and upholstery producers for collaboration so that we can repurpose many of the home textile products into air purifiers.

Research says that 1.67 million people in India died in 2019 alone of air pollution; it is a worse problem than the pandemic! HeiQ thus puts itself up for the next mission to also tackle this big killer.

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WHAT ARE THE KEY PRODUCTS AND SOLUTIONS THAT HAVE BEEN DEVELOPED BY HEIQ TO COMBAT THE VIRUS?

As I mentioned above, HeiQ Viroblock was our first response technology we mobilised to protect and combat the spread of contamination. As a safe and sustainable technology that uses only cosmetic grade ingredients, its fast-acting efficacy on treated materials against SARS-CoV- 2 and other viruses, bacteria and germs has made it virtually a household name around the world with over 1 billion masks powered by HeiQ Viroblock and 150 brands using this technology, not to mention other PPEs and as of recently even paint emulsions and paper coatings.

We knew that face masks would be with us for a long while. So we combined our knowledge from textiles to create the most comfortable face mask. Why is that important? Because when it is comfortable, people don't mind wearing it, and thus more people are protected.

03 IMPACT FEATURE

Our fabric face mask was constantly rated 'the most comfortable face mask of Switzerland'. HeiQ is dedicated to innovating in medical devices. This is an area where, because of the high level of restrictions and compliance requirements, manufacturers tend to be conservative, and this attitude restricts innovations.

The composition of the buying centre, many middlemen, also causes the margin to be very slim and this does not encourage innovation either. HeiQ only wants to make medical devices with better materials and better technologies to improve the lives of everyone involved in the sector.

End of last year we acquired a medical device manufacturing facility in Spain with which we conducted research and development in creating HeiQ MetalliQ, among many other projects. In less than six months, the HeiQ MetalliQ mask was born. HeiQ Pure is another excellent example of innovative antimicrobial technology that provides top odour control.

HeiQ Pure provides the ultimate feeling of cleanliness and freshness by effectively inhibiting bacterial growth on textiles. Also worth mentioning here is HeiQ Smart Temp, a revolutionary textile technology that provides fabrics with the ability to interact with body temperature and dynamically responds to body heat.

CAN YOU NAME SOME OF THE IMPORTANT GLOBAL BRANDS WITH WHOM HEIQ HAS PARTNERED FOR OFFERING PROTECTIVE SOLUTIONS?

In our 16-year history, we have built longstanding relationships with a wide range of clients. We typically work with brands in fashion, home textiles, sportswear, and work wear.

In recent months, we have broadened the field where our technologies are applied to brands in other industries such as industrial laundry, painting, coating and packaging. To date we have partnered with over 300 major brands to develop over 200 technologies.

"OUR GLOBAL BRAND PARTNERS INCLUDE SERTA SIMMONS, SPEEDO, OUTDOOR RESEARCH, BURTON, MAMMUT, PRANA, CORNELIA JAMES, ZARA, PATAGONIA, TO NAME JUST A FEW."

Particularly in our antiviral technology offering, we have partners with international brands Burberry, Serta Simmons, Outdoor Research, Mammut, Cornelia James, Kenneth Cole, Coats, Craghoppers, Buff, Uvex, Itochu from Japan, Akemi from Singapore and Malaysia and Zoya, a very famous modest clothing brand from Indonesia.

HOW HAS BEEN THE GROWTH IN BUSINESS IN THE LAST ONE YEAR AND WHAT ARE YOUR FUTURE EXPECTATIONS?

Innovation is in our DNA and therefore we must stay agile, continue to create, innovate and anticipate, staying one step ahead in times of rapidly evolving technologies and social needs and requirements. It has underlined the high value of all our partners around the world, be it research partners who keep us on our toes and brands and other collaborators that demand technological innovations that meet and exceed consumer wishes whilst being ecologically sound.

That said, to answer your question, with our listing on the London Stock Exchange, we have new opportunities to innovate in the interests of the citizens of this world and help improve their lives

The growth we saw last year was in multiple aspects that will further enable us to serve our mission in the years to come. For example, we have broadened our customer base by 124%. We thank them for their trust and will continue to introduce our other innovative solutions to all our old and new customers. Our brand equity has grown tremendously as well.

We have been mentioned over 7,000 times last year in the media; more people now know HeiQ and we will continue to bring new innovations to the market. HeiQ MetalliQ is one. But earlier this year we also launched several eco-friendly water-repellent technologies in our HeiQ Eco Dry range. Because of the continued interest in our antimicrobial technology, we have specially tested all these new ingredients to be compatible with our antimicrobial technologies. Among all, we also upgraded our water-repellent for leather.

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WITH THE SECOND AND THIRD WAVE OF INFECTIONS SPREADING ACROSS THE WORLD, HOW IS HEIQ GEARING UP TO COMBAT THE NEW VARIANTS OF THE CORONA VIRUS?

I could answer this simply by quoting our company motto: Dedicated to improving the lives of billions of people through pioneering textiles and materials innovation. With the onset of Covid- 19, we realised we could play our part in stemming the spread and keeping contamination in check and so we activated HeiQ Viroblock and as the saying goes, 'the rest is history'. By the end of 2020, over 1 billion face masks, gloves and countless other textile and non-textile materials have been treated with HeiQ Viroblock but the end of the tunnel is still not in sight which is why we need to continue to take precautions and to protect ourselves. That's why we have created HeiQ Medica with our research and development arm focusing on medical devices. In as short as six months after it was incorporated, we are launching HeiQ MetalliQ.

Summer comes and people here in Europe are more active in socialising. We want everyone to be protected through HeiQ MetalliQ. HeiQ will continue its pursuit of innovating to improve the lives and health of billions of people around the world.

