

# Braving the Epidemic

## 敢創抗疫



## Protect users and the environment with Hong Kong-developed re-usable masks

“I’m sorry, masks are all sold out...” This was the seventeenth pharmacy Stark has visited. The coronavirus outbreak in Hong Kong was first reported right around Chinese New Year. Surgical masks were hard to come by, so Stark wanted to gather as many as he could for his staff before they went back to work.

The tenacious Stark travelled to every district in Hong Kong, joined online forum discussions and tried various group purchase websites, but to no avail. Then an idea suddenly came to mind: if most of the people in Hong Kong are hunting for face masks, why don’t I make use of my knowledge to develop and produce a functional mask for the public?

Widely recognised as “Son of the Star” after he was awarded an asteroid being named after him as a teen prodigy, young entrepreneur Stark Chan always dreamt big. He established the tech firm Bull.b Tech with his friends in 2011, with a focus in mobile app development during its early days. Seeing that there was an acute short supply of face masks in the market, he decided to develop a Made-in-Hong Kong face mask.

At the beginning of the coronavirus outbreak, Stark noticed that, not only were people frantically hunting for face masks without success, for those lucky enough to get one, they just didn’t know how to make the most of it. At the same time, the large amounts of daily disposable masks had created huge amounts of garbage, putting serious pressure on Hong Kong’s already fragile environment.



To solve these pressing problems, Bull.b Tech collaborated with local garment manufacturers, and employed innovative medical technology to design the 100nm photocatalyst reusable mask and its complementary UV sterilisation pouch. The outer layer features medical-grade photocatalytic coated spunbond textiles, which releases a substance that kills or decomposes bacteria when exposed to UV light; the middle layer is a changeable filter made with melt-blown nonwoven fabrics; the inner layer is made with skin-friendly nonwoven materials. This innovative product can be cleaned and reused up to 50 times, far more environmentally friendly than the disposable ones.

With the unique UV sterilisation bag, users are able to safely keep their used mask when they eat or drink. They can simply put the mask in the battery-powered bag and activate the UV ray, getting rid of pathogens within three minutes. The sterilisation bag can maintain its capability for up to as many as 100 uses over one month.

“The 100nm Photocatalyst Mask is a product which combines technology, environmental protection, and design. This washable and highly reusable mask takes a basic hygiene product up a notch, helping Hong Kong people fight against the pandemic with innovative technology,” said Stark.



### Quick facts



- Taiwan Textile Federation certified that the photocatalytic coated fabric used on the 100nm reusable masks can retain 95 percent antimicrobial capability, even after 50 washes.
- The mask is available for sale in major home goods stores
- The changeable filter in the mask can be used continuously up to three to five days, reducing the costs per day to HK\$3.60, comparable to the disposable masks.

### Company Profile

Established in 2011, and an early adopter and promoter of digital marketing, Bull.b Tech is keen to infuse various degrees of creativity into marketing solutions. Supporting two of the most common mobile operating systems, iOS and Android, the company’s various applications have a track record of assisting clients to engage their customers via mobile apps. The company believes mobile technology is currently the best possible way for people to lead a personalised lifestyle, while being able to actively engage with each other.



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Learn more about  
Bull.b Tech (100nm Photocatalyst Mask)

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## 全港首個UV殺菌 重用口罩上市啦！



「不好意思口罩已經賣光了...」這已是Stark到訪的第十七間藥房。農曆新年正值新冠病毒在港爆發之初，市上一罩難求，Stark駕著車走勻全港，想在開工前為公司員工搜購口罩等防疫用品，又加入各大討論區和團購群組嘗試購買口罩，但都是無功而還。苦惱之際Stark突然有種想法：相信大部分港人都跟他一樣買不到口罩，既然如此，他何不運用自小以來的科研專長，為港人研發口罩？

Stark有這種想法，因為他不是一般年青人，而是「星之子」陳易希。Stark在2011年與朋友合組公司Bull.b Tech，初時以開發手機程式為主，眼見疫情嚴峻香港出現口罩荒，便決定著手研發港產口罩。

Stark留意到港人不但一罩難求，而且大部分人都不知道如何保存口罩，大量即棄口罩亦會為環境污染帶來嚴重壓力。因此Bull.b Tech結合本地製造業、資訊科技及醫療科技力量，設計並生產100nm光觸媒殺菌重用式口罩，配合內置紫外光燈的口罩袋，一次過解決三大問題。口罩最外層以抗菌布所製，配合獲認證的醫療級光觸媒，經紫外光照射後可殺菌防菌；中間一層是可更換的熔噴無紡布濾芯，內層是親膚性布料。口罩經超過兩個月研發，可清洗50次重覆使用，解決即棄口罩破壞環境的憂慮。



Stark表示：「「100nm光觸媒殺菌重用式口罩」融合科技、環保、設計於一身，將口罩這「疫境必需品」帶到另一層次，與香港人以創科力量，一同抗疫。」



每當要除下口罩進食或飲水時，用家更可將口罩放入團隊首創的UV殺菌口罩袋，按下紫外光按鈕，3分鐘就可殺菌。UV口罩袋的可進行100次滅菌，使用期長達1個月。

### 速覽



- 台灣紡織業拓展會證明，Bull.b Tech 100nm重用口罩採用之光觸媒織品，經重複清洗50次之後，抗菌能力也能維持在95%水平。
- 口罩已於大型連鎖家品店有售。
- 口罩的濾芯最多可連續使用3至5天，令每日使用成本平均為港幣3.6元，貼近即棄式口罩。

### 公司簡介

Bull.b Tech(寶貝科技)成立於2011年，熱衷將創意引入數碼營銷方案，協助客戶將創意想法以互動手機程式與顧客互動，並將最新的移動技術引入iOS和Android應用程式。Bull.b Tech相信個性化生活方式和促進人類交流的最佳方法是通過移動技術。



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