

Increasing Response to Pandemic, Toyota Partners with American Safety Company Bullard

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Plano, Texas (August 10, 2020) – Producing high-quality personal protective equipment (PPE) is a point of pride and passion to the team at Bullard – a fifth-generation safety equipment manufacturer located in Kentucky. Now, in the face of the COVID-19 pandemic – it’s downright personal. From team leader and cancer survivor Danny Barnett whose daughter has lung issues, to 33-year employee Brenda Hall whose daughter is a nurse caring for patients with coronavirus – every team member knows their work is impacting the world in a very serious way.

“With every single unit we make, I imagine my doctors, nurses and others on the frontline needing them to do their job,” Barnett said. “We know we are doing our part to save lives and protect families, communities and people around the world in this battle against COVID.”

With demand of its healthcare-related products skyrocketing, Bullard teamed up with Toyota to increase production in warp speed. Shortages of faceshields, respirators and hoods – all critical to caring for patients with COVID-19 – led to increases in demand for Bullard’s products reaching as much as **30-times normal orders**. Doing nothing to meet the high demand was not an option.

“We are very grateful for the partnership with Toyota and proud of what we have accomplished together,” said Wells Bullard, CEO of Bullard, who is the great-great granddaughter of the founder, Edward Dickinson Bullard. “We are driven every single day to advance human safety and it was incredible to see that Toyota shares that same mission.”

“It’s in Bullard’s DNA to protect people and save lives – we’ve been doing it for more than 120 years, starting with our invention of the hard hat.”

Toyota reached out, offering help to Bullard in whatever way it could – free of charge. That offer turned into Toyota Production System Support Center (TSSC) working with Bullard team members to apply the Toyota Production System (TPS) in those areas of greatest need.

<https://toyota-cms-media.s3.amazonaws.com/toyota-videos/Bullard+Cutdown+3min.mp4>

“Considering the urgent need to supply medical gear to caregivers on the frontlines of the fight against COVID, we were very eager to share our know-how to help increase output as fast as possible,” said Jamie Bonini, vice president, TSSC.

“TSSC has been sharing TPS outside Toyota since 1992. This is a natural extension and speaks right to our mission of making a positive impact on society.”



For all three products (faceshields, respirators and hoods), work was broken down from one person making units in batches, to multiple people each having a small part of creating the product. Units are now made one-by-

one, in a continuous flow. In other words, completed products come off the line every couple minutes, versus not having a completed product until the middle of a shift. This means Bullard is getting the necessary products to healthcare workers quicker and in higher quantities.

Faceshields

There was a huge increase in demand for faceshields and the previous batch method just wasn't producing enough to meet the growing demands. To increase production, Bullard added employees to the area and created two new continuous flow lines, quadrupling production in just a few days. This new method led to a **700-percent increase** in production between March and April.



Respirators

Creating the continuous flow line in respirators led to quick results. Toyota engineers from the Production Engineering Headquarters just down the road in Georgetown, Ky., stepped in to help with the bottleneck – a calibration machine. The machine cuts the time in half needed for calibration and automates the process so employees can work on another step while the respirator calibrates. The result was more respirators being made in April than in all of 2019.

Bullard doubled production capacity for respirators and significantly reduced the time from when a customer placed the order to when that order was shipped. Initial improvements cut that time in half; the addition of the automated calibration machine made **deliveries 85-percent faster**.

Hoods

Bullard mobilized workers to create a new sewing line for its hoods – which are used in conjunction with a respirator. While it's difficult to find experienced sewers to build a hood from start to finish, breaking the process down into multiple steps meant these new employees could learn and master the process faster. These new sewers **doubled production capacity** for hoods, and they didn't need to have any sewing experience.

“It's our responsibility to respond to and support all the brave men and women on the frontlines of this pandemic,” Bullard said. “I'm proud of our team, not just for changing the way we do things to protect more workers, but for doing it while also putting in strict COVID-19 prevention protocols, including social distancing and mandatory face masks, to ensure their own health and safety.”

For Barnett, the partnership has been a blessing. “We know there's a PPE shortage and we want healthcare workers to know we hear you and we're working as fast as we can to get you more supplies.”