SYNLawn: Improving sustainability in production with Visual Inspection AI

Why Google Cloud

Responsible usage of resources and implementing circularity in the sport surface business are important factors to securing a sustainable future for next generations. This goes along with improving production efficiency to reduce waste in the case of low-quality products and minimizing energy usage. Surface defects in turf can be easily detected with the human's eye, but are difficult to quantify with standard methods.

Solution

In collaboration with GFT, SYNLawn implemented Visual Inspection AI from Google Cloud to automatically detect surface defects in terms of type, location and severity in artificial turf manufacturing. This helped streamline the process and minimizes the need for extensive AI expertise. Where needed, AutoML Vision was used in conjunction with Visual Inspection AI to refine the model for specific defect types or challenging edge cases.

About SYNLawn

Part of Sport Group, SYNLawn is one of the industry leaders for commercial, residential and golf synthetic grass landscape.

About FormaTurf

FormaTurf is the first turf recycler with a recycling rate > 99% and patented process.

Industry: Manufacturing

Location: Germany

Partner: GFT

Impact

- **Minimizing quality defects** in artificial turf production
- Increasing **production speed by 15%**
- Significant contribution to **reducing the CO_2 footprint** of artificial turf

> The implementation of Google Cloud's Visual Inspection AI is just the first step to detect the previously undetectable. These blind spots represent the roadblocks in the past, that decelerated our continuous improvement in production, but also in many other areas."

Dr. Sven Hamann, Global Director R&D, Technology and Recycling, Sport Group Holding GmbH