



## WKPT Update

### Joining Forces with New Startups: Investing in Future

“Corporate Startup Engagement” refers to the interaction and collaboration between corporations and startup companies, leveraging the strengths of both entities to foster a mutually beneficial model. This concept began to gain prominence around 2010 and gradually became known to the public.

In the fourth quarter of last year, WKPT was invited to participate in the Industry Linkage Matching Meeting of the 2nd Entrepreneurship Competition organized by the Taichung City Government. During the event, WKPT interacted with startups

from diverse fields, showcasing its support for innovative technologies and a proactive attitude towards engaging with new startup entities.

During the matching meeting, WKPT engaged in face-to-face discussions with award-winning youth entrepreneurship teams. These startups covered various fields such as biotechnology, software development, and the production of parts and tools. Maintaining an optimistic outlook towards these startup forces, WKPT particularly anticipate future collaboration involving new materials

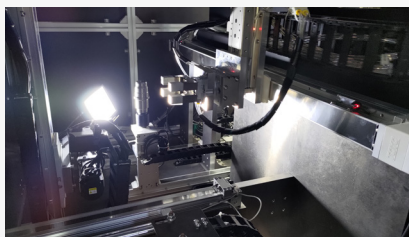
or innovative processing technologies. Through mutual cooperation, both parties aim to stay competitive in the rapidly changing business environment.



WKPT was invited to participate in the Industry Linkage Matching Meeting with award-winning entrepreneurial teams, engaging in discussions to explore potential business opportunities. (Economic Development Bureau of Taichung City Government)

## Information Express

### Practical Applications of AI-Assisted Visual Inspection in the Machining Industry



WKPT has established the "Smart Image Recognition System for Automotive Components," resulting in significant improvements in workforce, yield, and processing efficiency.

Since the advent of generative AI, applications have emerged in areas such as text, images, and speech have emerged, representing a significant breakthrough in the development of AI technology. While generative AI has gained considerable attention, the applications of discriminative AI may not have ignited the same level of excitement globally. However, discriminative AI, with

its accuracy, robustness, and interpretable characteristics, still holds advantages in the manufacturing industry.

WKPT has recently introduced a "Smart Image Recognition System for Automotive Components," which upgraded traditional visual inspection methods with a discriminative AI. This image recognition system built upon WKPT's existing smart manufacturing production line, incorporates features such as automatic loading/unloading of components using robotic arms for machining. Additionally, it integrates online automated dimension measurements, and now introducing AI-assisted defect detection, which is an evolving smart production line.

Through deep learning with thousands of data, the AI has been trained to recognize good-quality products and common

casting defects such as sand holes, shrinkage, and air holes. The integration of AI-assisted defect detection into the production line has yielded significant positive outcomes. In practice, it has resulted in a reduction of 1.6 person-times in workforce on the production line, an increase in yield to 96%, and improvements in in-house processing efficiency and time ranging from 5 to 30%. The implementation of AI-assisted defect detection has noticeably enhanced the utilization of workforce, product yield, and processing efficiency.

Reference: [Why discriminative AI will continue to dominate enterprise AI adoption in a world flooded with discussions on generative AI](#)

## Industry News

### Global Trends in the Agricultural Machinery Equipment Market

Critical influences are shaping global agricultural regions, and these factors are directly impacting the sales of agricultural equipment. Dynamic changes in the global supply chain are still having serious implications for suppliers of agricultural components. [What's Shaping Ag Equipment Trends in Key Global Markets?](#)

A recent article from the Agricultural Evolution Alliance has disclosed factors influencing global trends in agricultural machinery equipment. These factors encompass extreme weather conditions affecting harvests, rising prices of raw materials impacting farmers' willingness to invest in equipment, and political and economic uncertainties influencing decisions related to equipment investment. Positive impacts rely on national policies supporting agricultural development. In summary, the global agricultural machinery equipment market still faces numerous challenges in 2024 that need to be overcome.

In the face of challenges presented by trends in the agricultural machinery market, WKPT is committed to continuous

improvement in smart manufacturing, robust processes, and supply chain management to serve global customers in agricultural machinery equipment sector. Our core competency lies in precision machining, and we have expanded our capabilities to additional value-added services such as prototype design, material procurement, surface treatment, assembly, packaging, and logistics. We provide comprehensive support across all stages that customers may encounter in the manufacturing of their products.

We specialize in manufacturing components for various systems of agricultural machinery, covering steering, hydraulic, suspension, and transmission. As a longstanding supplier to global agricultural machinery brands, we are

dedicated to providing high-quality solutions. If you have any manufacturing needs for agricultural machinery components, feel free to [contact us today for services](#).



The global agricultural machinery market is facing challenges due to extreme weather conditions, rising raw material costs, and political and economic factors. Looking ahead, the challenges for the year 2024 remain significant.

