Selection of 11 "Korean Lighthouse Factories"

☐ Benchmarked the Global Lighthouse Network of the World Economic Forum(WEF), and finally selected eleven leading smart factories mainly of SMEs

○ Selected 10 companies in 2021, 11 companies in 2022 → Expand to 100 companies(cumulative) by 2025

☐ Support up to 1.2 billion won per a company for the next three years so that they can grow into a Korean-style lighthouse factory that signals the direction for advancing the domestic manufacturing industry

The Ministry of SMEs and Startups (Minister LEE Young, hereinafter referred to as MSS) announced that it has selected the final 11 companies of "K-Smart Lighthouse Factories" in 2022 to support the establishment of the highest level of smart factories equipped with artificial intelligence, big data, and digital twin technology.

"K-Smart Lighthouse Factories" refers to leading smart factories mainly consisting of small and medium-sized companies. It is based on the benchmarking of the Global Lighthouse Factory, wherein the World Economic Forum(WEF) selects mainly large companies that are leading the future of global industrial manufacturing in an innovative manner.

These selected companies by the MSS will point in the direction of how Korea's manufacturing industry can advance and will serve as a type of benchmarking model factory that leads the industry.

In the past, the MSS had supported customized diagnosis and design for companies recommended by local techno-parks, and then selected companies that ▲have advanced technology, ▲practise sustainability, and ▲have industrial and economic ripple effects.

The main contents of the selected K-Smart Lighthouse Factory are as follows.

Five small and medium-sized companies and six medium-sized companies were selected in the sectors of automobiles, mechanical equipment, and chemicals. These companies will prepare implementation strategies that are suitable for the smart factory of the future, build a new business model to enter into a new market, and establish an optimal process control solution using manufacturing data.

JVM is a mid-sized company that produces hospital and pharmaceutical preparation equipment and has the largest market share in the global market. The company will establish a cloud-type solution that collects facility data in real time through the Internet of Things (IoT) to introduce a business model that combines manufacturing and service markets, which provides services such as prediction and maintenance by detecting abnormalities of products in advance and immediate after-sales service.

Cheonil Engineering is a small and medium-sized company that produces automobile interior and exterior materials and exports 80% of their products. The company will bid to establish a zero defect rate by building digital twin and machine vision technology using manufacturing big data and artificial intelligence algorithms.

Shinsung Delta Tech is a manufacturer of home appliances including parts of washing machines. It will establish an optimal production plan that reflects customer orders in real time, as well as a product design based on simulation.

< Selected 11 K-Smart Lighthouse Factory>

Company (in Korean alphabetical order)	Location	Size	Industry	Main product
Dongjin Semichem	Gyeonggi-do	Medium-sized	Chemical products	Semiconductor components
Doosan Machine Tools	Gyeongsangnam-do	Medium-sized	Machinery and Equipment	Machine tools
Sambo ANT	Chungcheongbuk-do	Medium-sized	Automobile	Automobile parts
Sambo Pratech	Gyeongsangbuk-do	Small and medium-sized	Automobile	Automobile parts
Samhyeon	Gyeongsangnam-do	Small and medium-sized	Automobile	Automobile parts
Shinsung Delta Tech	Gyeongsangnam-do	Medium-sized	Electrical equipment	Home appliances
C-cube	Chungcheongbuk-do	Small and medium-sized	Chemical products	Effect Pigment
JVM	Daegu	Medium-sized	Machinery and Equipment	Refined classification packaging
Jinyang Oil Seal	Daegu	Small and medium-sized	Other	Oil seal
Jinhap	Daejeon	Medium-sized	Automobile	Automobile parts
Cheonil Engineering	Incheon	Small and medium-sized	Automobile	Automobile parts

The MSS will provide up to 1.2 billion won over the next three years so that the selected companies can systematically build cutting-edge solutions through suppliers' associations, universities, contributing research institutes, and open innovations.

In particular, after construction is complete, the MSS will support the operation of a factory tour programme to share and spread best practises with students and industries.

LEE Hyunjo, the Head of the Bureau of SMEs-Smart Manufacturing Innovation Planning of the MSS said, "We expect the K-Smart Lighthouse Factory to optimise processes by utilising manufacturing data and artificial intelligence algorithms to set a best practise for our manufacturers in the era of digital transformation." He added, "We will expand the supporting companies to 100 across the industry by 2025."