

New 3D: Digital, Decent, Dynamic

Reinforce Root Industry Competitiveness



The government has decided to promote 'Root Industry Competitiveness Reinforcement Strategy' for the so-called '3D' (Dirty, Difficult and Dangerous) industries.

On May 6, President Lee Myung-bak presided over the 57th Emergency Economic Countermeasure Meeting and discussed government strategy to strengthen root industries as a vehicle to foster small & medium industry and to help strengthen overall competitiveness of Korean manufacturing industries.

As basic process industries, casting, mold, welding, etc., root industries determine the final product's quality and functions. Since root industries, which had been the foundation for the growth of domestic manufacturing businesses, are undervalued, being called a 'synonym for 3D businesses,' recognition that they may lead to weakening of the domestic industrial infrastructure is spreading.



From Old 3D to New 3D

- Digital:** Implement digital innovation via process improvement & IT convergence
- Decent:**
- Enhance treatment of master technicians (myeongjang)
 - Expand root industry manpower to 1,000 by 2012
- Dynamic:** Build environment-friendly, apartment-type factories integrating root industry clusters



To strengthen the competitiveness of root industries, therefore, the government suggested four core strategies-structural advancement of root industries, expansion of manpower supply system, improvement of corporate management environment and reinforcement of technological capability and 11 policy tasks under its initiative to transform 3D industries into core industries that would drive the birth of new growth engines.

For structural advancement of root industries, the government decided to ease loan conditions for cooperative project funds that support grouping, commonization and business cooperation among them and also to introduce new cooperative business models that suit root industries. The idea is to pursue business invigoration and productivity enhancement.

The government also plans to establish environment-friendly apartment-type factories in urban centers and maximize their effects following grouping of root industries. In June this year, it plans to complete construction of a clean technology plating center in the Noksan Industrial Complex in Busan and also to build additional centers at the



Sihwa Industrial Complex in Ansan and Namdong Industrial Complex in Incheon next year.

Furthermore, the government plans to create a fusion-type industrial complex and arrange the accompanied entry of mold, casting and heat treatment companies that are able to establish mutual connections and maximize productivity enhancement through fusion of hybrid businesses. It also intends to support IT fusion at manufacturing sites with its decision to lower the product defect rate to 8% by supplying an IT fusion & control system to 1,000 enterprises by 2013.


Moreover, the government decided to operate root industry IT fusion support corps by region: Gyeong-In Jungbu Sphere, Daegu Gyeongbuk Sphere, Busan Gyeongnam Sphere and Honam Gwangju Sphere, and to supply IT fusion processes and support technologies centering on regional SMBAs, regional headquarters of Korea Institute of Industrial Technology (KITECH), research institutes and universities.

Site skilled manpower cultivation systems also will be strengthened. The government plans to increase the number of root industry-related meister high school students to 1,000 from the present 600, and install region-specialized technical high schools and nurture skilled manpower tailored to site demands after conclusion of employment contracts with root industry enterprises.

In addition, the government decided to extend the industrial skilled personnel system for a limited period, especially for SMEs.

The government also plans to actively support the welfare of employees engaged in root industries. It decided to mitigate its 'Myeongjang (most prominent artisan)' selection requirements and to increase the 'encouragement bounty' if selected Myeongjangs work continuously in the same occupational category.

In accordance with its plan to support the welfare of root industry employees, the government decided to



increase the priority supply of housing for long-term workers of over five years at root industries, expand its "Priority Housing Supply Project for Long-term SME Workers" and improve related systems as well.

To improve the management environment for root industries, the government decided to raise the credit guarantee ceiling through regional Credit Guarantee Foundations, exempt guarantee fees and simplify approval procedures. Centering on large demander enterprises, it plans to invest a certain amount in the Machinery Financial Cooperative and enable promising SMEs to benefit from performance bonds smoothly.

The government also plans to revise the SME Technology Innovation Promotion Act, prepare a legal basis and secure continuous momentum for related policies.

For identification of technology development tasks in the root industry field and for R&D support tailored to individual tasks, the Ministry of Knowledge Economy and SMBA decided to make available 21.7 billion won and 15 billion won, respectively.

To facilitate commercialization of excellent technologies, the government plans to support a 158-billion-won policy fund and also to provide commercialization loans for R&D successes in cooperation with banks and Korea Technology Finance Corporation (Kibo).

A Ministry of Knowledge Economy official said, "Through the competitiveness reinforcement strategy, domestic root industries are expected to grow 1,500 robust technology-innovative enterprises by 2013, creating 45 trillion won in production. As a result, they will be transformed into new growth, new 3D and artisan-centric industries, while becoming the new foundation for the nation's manufacturing sector at the same time."