**Hankook advances digital innovation with AI-driven quality control**

**With the use of artificial intelligence (AI) and sensor-driven machine learning, Hankook sets out to automate the tyre testing process in the future and forges ahead with digital innovations. Research and development shall particularly benefit throughout the partnership with the renowned South Korean Technical University KAIST in the 'HK-KAIST Digital Innovation Center'. The latest result of the partnership is intended to particularly optimise complex inspection processes and therefore further accelerate the production process.**

***Seoul, Korea / Neu-Isenburg, Germany, April 15, 2020*** – Premium tyre maker Hankook is introducing an automatic testing system in quality control. The AI-supported system uses digital sensors and is constantly learning to improve the efficiency and accuracy of product testing. During the entire tyre testing process, specially trained experts as well as the new systems will be used in the future to ensure the required product quality and therefore driver safety. To this end, three thorough inspections will be carried out in the final phase to identify possible defects. The Hankook internal inspection with the Interferometer Tyre Tester (ITT) will check the tyre for air bubbles. An X-ray inspection will also be carried out to examine the inside of the tyre in detail. This will be followed by a final external inspection by the quality control department. Until now, image processing for defect detection has been a time-consuming challenge because the air bubbles to be identified are not exactly identical in size and shape. In addition, highly qualified technicians have had to give their opinion on the detection of irregularities based on criteria and their expertise gained through years of experience.

From now on Hankook will apply the newly developed automatic inspection system using AI technology to the ITT process. The computer-driven inspection body will independently and systematically detect and report irregularities in the products by comparing samples of the scanned product cross-sections. At the HK-KAIST Digital Innovation Center, the joint venture of Hankook and the Department of Industrial and Systems Engineering at the Korea Advanced Institute of Science and Technology (KAIST), development was carried out with AI experts to implement this automation system. This will not only increase the uniformity and efficiency of internal inspection with the ITT process, but also reduce production time. In the long term, the Group also plans to use AI technology for X-ray inspection and external inspection.

"Hankook has positioned itself as a digital market leader. The development of the automatic inspection system is another feature focused on this innovation and will enable us to secure a leading position in digital transformation in this rapidly changing business environment," said Hyunshick Cho, Vice Chairman and President of the Hankook Technology Group. "We will continue to drive innovation and establish ourselves as a global leader."

In April 2019, Hankook signed an agreement with KAIST, the leading science and technology university in South Korea, to further advance the company's research and development and digital technology capabilities through digital transformation. Prior to this, the "HK-KAIST Digital Innovation Center" was established which cooperates with KAIST in all areas from manufacturing, logistics to research and development to gain further expertise in future technologies.

Investments in technical innovations are becoming increasingly important for the company, which has already been reflected in the name change to Hankook Tire & Technology in 2019 and underlines the tyre maker's increasing technological orientation. Last year, the tyre maker achieved great success with its 'Virtual Compound Design (VCD) System', a prediction model for the properties of tyre compounds using AI. Hankook plans to extend this technology to the entire tyre development process. The goal is to build smart factories that lead digital innovation in the tyre industry and ultimately produce products of outstanding quality, tailored to the needs of customers.

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**Über Hankook**

Hankook fertigt weltweit innovative, Hochleistungsradialreifen im Premium-Segment für Pkw, SUVs, Geländewagen, Leicht-Lkw, Wohnmobile, Lkw, Busse und den automobilen Motorsport (Rundstrecke/ Rallye).

Das Unternehmen investiert kontinuierlich in Forschung und Entwicklung, um seinen Kunden stets höchste Qualität in Verbindung mit technologischer Exzellenz zu bieten. In weltweit fünf Entwicklungszentren und acht Groß-Fabriken entwickelt und produziert Hankook Tire Bereifungslösungen, die speziell auf die Anforderungen und Ansprüche regionaler Märkte zugeschnitten sind. In Europa findet die Reifenentwicklung für die lokalen Märkte und die Erstausrüstung nach Maßgabe führender Europäischer Fahrzeughersteller im Hankook Technikzentrum Hannover/Deutschland statt. Produziert werden die Reifen unter anderem in der hochmodernen europäischen Fabrik des Unternehmens in Rácalmás/Ungarn, die 2007 eingeweiht wurde und kontinuierlich erweitert wird. Derzeit produzieren dort rund 3.000 Beschäftigte bis zu 19 Millionen Reifen pro Jahr für Pkw, SUVs und Leicht-Lkw.

Die Europa- und Deutschland-Zentrale des Reifenherstellers befinden sich in Neu-Isenburg bei Frankfurt am Main. In Europa unterhält Hankook weitere Niederlassungen in Frankreich, Großbritannien, Italien, den Niederlanden, Österreich, Polen, Russland, Schweden, Serbien, Spanien, der Tschechischen Republik, der Türkei, Ungarn und der Ukraine. Hankook Reifen werden direkt über regionale Distributoren in weitere europäische Länder vertrieben. Weltweit beschäftigt das Unternehmen 21.000 Mitarbeiter und liefert seine Produkte in über 180 Länder. Führende Automobilhersteller vertrauen in der Erstausrüstung auf Bereifungen von Hankook. Etwa 34 Prozent des globalen Umsatzes erzielt das Unternehmen innerhalb Europas und der GUS. Hankook Tire ist seit 2016 im renommierten Dow Jones Sustainability Index World (DJSI World) vertreten.

Weitere Informationen finden Sie unter [www.hankooktire-mediacenter.com](http://www.hankooktire-mediacenter.com) oder [www.hankooktire.com](http://www.hankooktire.com)

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**About Hankook Tire**

Hankook Tire manufactures globally innovative, award winning radial tyres of proven superior quality for passenger cars, light trucks, SUVs, RVs, trucks, and buses as well as motorsports (circuit racing/rallies).

Aspiring to bring consumers the utmost excellence in product quality, technological excellence and driving satisfaction, Hankook Tire continuously invests in research and development maintaining five R&D centres and eight production facilities around the world. Bespoke tyre solutions for the European markets as well as European Original Equipment according to the requirements of leading premium car manufacturers, are developed in the company’s regional Technical Centre in Hanover/Germany. Production for the European region is taking place in the state-of-the-art manufacturing site in Rácalmás/Hungary which was inaugurated in June 2007 and is continuously being expanded. Currently around 3,000 employees produce up to 19 million tyres a year for passenger cars, SUVs and light trucks.

Hankook Tire’s European headquarters are located in Neu-Isenburg near Frankfurt am Main in Germany. The manufacturer operates further branches in Czech Republic, France, Germany, Hungary, Italy, the Netherlands, Austria, Poland, Russia, Serbia, Spain, Sweden, Turkey, UK and Ukraine. Hankook products are sold directly through regional distributors in other local markets. Hankook Tire employs approximately 20,000 people worldwide and are selling their products in over 180 countries. Internationally leading car manufacturers rely on tyres made by Hankook for their original equipment. Approximately 34 percent of the company's global sales are generated within the European and CIS-Region. Hankook Tire has been represented in the renowned Dow Jones Sustainability Index World (DJSI World) since 2016.

For more information please visit [www.hankooktire-mediacenter.com](http://www.hankooktire-mediacenter.com) or [www.hankooktire.com](http://www.hankooktire.com)

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