

CNH Industrial recognized as Manufacturing Leadership Awards 2021 winner

CNH Industrial has been recognized as a Manufacturing Leadership Awards winner for its partnership with the University of Turin (<u>en.unito.it</u>) and RADA (<u>www.rada-mdm.it</u>) for its real-predictive maintenance project.

London, May 20, 2021

CNH Industrial N.V. (NYSE: CNHI / MI: CNHI) today announced that it has received a 2021 Manufacturing Leadership Award for outstanding achievement in the Artificial Intelligence and Advanced Analytics Leadership category. The awards, chosen by a panel of expert judges, were presented at the virtual Manufacturing Leadership Awards Gala on May 19, 2021. This is the second consecutive year that CNH Industrial has received such a recognition. The awards, which are conferred by the Manufacturing Leadership Council, a division of the National Association of Manufacturers, which is the largest manufacturing association in the United States, honor manufacturing companies and individual manufacturing leaders that are shaping the future of global manufacturing.

The award-winning project, entitled *Dolphins*, is the result of a collaboration between CNH Industrial, the University of Turin, Italy and RADA (an IT Solutions company based in Turin). Launched in 2019 at the IVECO commercial vehicles manufacturing plant in Brescia, northern Italy, *Dolphins* is a software program that uses Machine Learning (ML) and big data analytics for the purposes of real-predictive maintenance within the manufacturing process. The goal of real-predictive maintenance is to anticipate when equipment failure might occur, thereby enabling preemptive corrective maintenance. Furthermore, working as a digital twin of the equipment, *Dolphins* also offers virtual sensoring performances as well as cybersecurity basics.

The *Dolphins* project is a low cost by design solution now embedded and running at the IVECO plant in Brescia, where it has already generated significant cost and time savings as equipment maintenance is only carried out when necessary, resulting in increased uptime, improved operator safety and greater productivity.

Using pre-existing big data from the plant, a detailed multivariate analysis of production line conditions was performed by the Chemistry Department of the University of Turin and the results displayed on a dashboard for the operator designed by RADA. *Dolphins* provides maintenance technicians with information which can accurately predict, several hours in advance, any potential issues which would cause an interruption to the production line



enabling predictive or pre-emptive maintenance to be carried out. The results speak for themselves: at the Brescia plant *Dolphins* has shown that it can predict a failure with a 90% reliability level a few hours before the event happens. It has correctly predicted 100% of machine downtime.

This award recognizes CNH Industrial as a pioneer in the advancement of Industry 4.0 as it aspires to optimize its production processes and revolutionize the nature of industrial work. The award winning *Dolphins* project marks another a significant step towards achieving one of the Company's key objectives: the digitalization and implementation of data driven projects in manufacturing.

CNH Industrial N.V. (NYSE: CNHI /MI: CNHI) is a global leader in the capital goods sector with established industrial experience, a wide range of products and a worldwide presence. Each of the individual brands belonging to the Company is a major international force in its specific industrial sector: Case IH, New Holland Agriculture and Steyr for tractors and agricultural machinery; Case and New Holland Construction for earth moving equipment; Iveco for commercial vehicles; Iveco Bus and Heuliez Bus for buses and coaches; Iveco Astra for quarry and construction vehicles; Magirus for firefighting vehicles; Iveco Defence Vehicles for defence and civil protection; and FPT Industrial for engines and transmissions. More information can be found on the corporate website: www.cnhindustrial.com

The National Association of Manufacturers' Manufacturing Leadership Council is the world's first member-driven, global business leadership network dedicated to senior executives in the manufacturing industry. The Manufacturing Leadership Council's mission is to help senior executives define and shape a better future for themselves, their organizations, and the industry at large by focusing on the intersection of critical business and technology issues that will drive growth today and in the future. The Council offers an extensive portfolio of leadership networking, research, thought leadership content, and professional development products, programs, and services — including the Manufacturing Leadership Community Website, an online global business network with over 7,000 members around the world.

The National Association of Manufacturers (NAM) is the largest manufacturing association in the United States, representing small and large manufacturers in every industrial sector and in all 50 states. Manufacturing employs more than 12 million men and women, contributes \$2.25 trillion to the U.S. economy annually, has the largest economic impact of any major sector and accounts for more than three-quarters of all private-sector research and development in the nation. The NAM is the powerful voice of the manufacturing community and the leading advocate for a policy agenda that helps manufacturers compete in the global economy and create jobs across the United States.

The NAM's world-class staff of policy experts provide unmatched access and information on the key issues affecting your business and bottom line. We are on the front lines of a wide range of policy battles, from immigration reform and labor relations, to energy and the environment, to trade policy and taxes. At every turn, we are working on behalf of manufacturers in America to advance policies that help manufacturers do what they do best: create economic strength and jobs.

www.nam.org



Sign up for corporate news alerts from the CNH Industrial Newsroom:

bit.ly/media-cnhindustrial-subscribe

Media contact:

Francesco Polsinelli Corporate Communications Manager, Europe CNH Industrial

Tel.: +39 335 1776091

E-mail: mediarelations@cnhind.com

www.cnhindustrial.com