

Partnership Between São Martinho and Case IH

Ethanol-Powered Two-Row Sugarcane Harvester Tested at São Martinho Unit in Pradópolis (SP)

Aiming to revolutionize the agricultural machinery market while contributing to the decarbonization of agriculture, Case IH is introducing its ethanol-powered machinery project. The first step in this transformation was the field testing of the first ethanol-powered sugarcane harvester.

"Case IH has been investing in alternative propulsion systems for years, and we have found that ethanol is the best solution, especially for Brazil, for several reasons: it is a widely produced and used fuel in the country, and it does not require new infrastructure or logistics investments from producers," explains Christian Gonzalez, Vice President of Case IH for Latin America.

The first phase of the project was presented during Agrishow 2024, when the brand announced and showcased the ethanol-powered engine prototype for sugarcane harvesters. Developed by FPT Industrial, the engine is a Cursor 13, and its main differentiator is being an Otto Cycle engine—the same technology used in flex-fuel cars.

The engine then underwent bench testing for the rest of the year before being installed in a two-row Austoft 9000 series harvester for field trials. The first tests were conducted at the end of 2024, lasting about 10 days, at one of São Martinho's units in Pradópolis (SP), a long-time partner of the brand in developing solutions for the sector.

The results were positive, and the machine will return to the field at the beginning of the next harvest. "The two-row harvester requires a lot of power due to its high efficiency. This means we are already testing the engine very close to its maximum potential," says Gonzalez.

For Fábio Venturelli, CEO of São Martinho, the project has the potential to transform not only the sugar-energy sector. "We believe it has the potential to bring a significant transformation in terms of carbon footprint, not just for our industry but for agriculture as a whole," he emphasizes.

Using ethanol as a fuel alternative for agricultural machinery offers several benefits. It is a renewable fuel that reduces carbon emissions, contributing to environmental and regulatory goals in the agricultural sector, such as the CBIOS (decarbonization credits) market.

Studies show that when considering the full life cycle of fuels, ethanol can reduce greenhouse gas (GHG) emissions by up to 90% compared to fossil fuels. Additionally, it can lower operational costs related to transportation and logistics while offering more stable prices than petroleum-based fuels.

Case IH firmly believes that ethanol is the future of agricultural machinery—a sustainable fuel that requires minimal investment from farmers and is abundantly produced in Brazil. That is why the sugarcane harvester is just the beginning of a broader project that will include a portfolio of ethanol-powered machines.

“It makes perfect sense to start this project with the sugarcane sector, helping them achieve a self-sufficient cycle within their own farms. But ethanol is also produced from corn, and there is a high demand from the grain sector as well. Our goal is to offer other ethanol-powered machines, such as tractors and grain harvesters,” concludes the vice president.

History

Case IH's pursuit of ethanol-powered machines that deliver higher performance and autonomy is not new. In 2012, the brand began the first tests of an adapted diesel cycle engine in partnership with São Martinho. At the time, the project was a pioneering innovation initiative. A few years later, the brand also tested a hybrid engine in tractors that allowed for both diesel and ethanol injection. Although the results did not meet expectations, these experiences provided valuable insights for developing more efficient technologies.

The project was then revived a few years ago, and its first phase was presented at Agrishow 2024. Widely used in Europe, FPT has an extensive fleet of gas-powered engines for trucks, and the manufacturer leveraged this expertise to develop the ethanol-powered Otto Cycle engine. The project is led by the Brazilian engineering teams of both brands, in partnership with São Martinho.

Case IH brings technology within reach of farmers, offering a complete system of products and services designed to prepare them for the challenges of daily operations. The brand's solutions include grain harvesters, sugarcane and coffee harvesters, as well as tractors with a wide range of power options, self-propelled sprayers, and planters—making Case IH the best choice from planting to harvest. Case IH is a brand of CNH. More information can be found at caseih.com.br.

Case IH Press Office

Jéssica Adriani

(15) 99660-5667

jessica.adriani@redecamunicacao.com

São Martinho is considered one of the world's best and largest producers of sugar, ethanol, and bioenergy. A reference in sustainable agro-industrial management and innovation, it plays a pioneering role in promoting the energy transition towards a circular and low-carbon economy. With an approximate crushing capacity of 27 million tons per crop year, including 24.5 million tons of sugarcane and 2.5 million tons of equivalent corn (500 thousand tons of corn), and a maximum harvesting mechanization rate of 100%, the Company is recognized for its credibility, efficiency, and excellence in its processes. São Martinho boasts a differentiated logistics platform for product distribution, high storage capacity, and proximity to important highways and railways, in addition to owning its own sugar truck-rail transshipment terminal, with access via an exclusive railway branch. A publicly held corporation since 2007, its shares trade on the Novo Mercado, the listing segment of the B3 with the highest corporate governance standards, under the ticker SMT03. For more information, visit: www.saomartinho.com.br



São Martinho Press Office

Rodrigo Pinto

(16) 99782-0797

rodrigo@conceitocomunic.com.br