

27 July 2018

Cummins ISX475 engines give 30-year-old firefighting vehicles a new lease on life

Cummins is supplying specialist manufacturer Marcé Fire Fighting Technology of Centurion, Gauteng with six new ISX475 engines for firefighting vehicles to be deployed at various airports in Zimbabwe.

The Cummins ISX475 is an Inline (Straight) 6 diesel engine, specifically for use on heavy-duty trucks, with a power output of 475 hp and a peak torque of 2 237 Nm to 2 508 Nm at 1 000 rpm. To date, four vehicles have been fitted with the new engines, with the remaining two to be installed by end September.

Marcé manufactures 98% of its firefighting vehicles locally at the company's 8 400m² manufacturing plant in Centurion, Gauteng. It currently produces up to 120 vehicles a year, making it one of the largest manufacturers of its kind in Southern Africa. It is the only South African company with its own brand of locally-developed firefighting vehicle, the Marcé Rhino.

There are six vehicles in total earmarked by client Civil Aviation Zimbabwe (CAZ) for upgrade. Marcé Service Manager **Jubilee Jones** explains that the vehicles needed to be upgraded to a more modern engine system. Other upgrades were also required, including electronics, monitors and control systems, to ensure compliance with International Civil Aviation Organisation (ICAO) standards.

This means, for example, having at least three fire trucks that can carry a minimum of 12 000 litres of water, and able to accelerate zero to 80 km/h in 32 seconds. Such is the effectiveness of the Cummins ISX475 engine that, despite being over 30 years old, these vehicles will comply easily with such requirements.

"We opted for the Cummins ISX475 engine due to a number of factors, such as its high-quality reputation, and the fact it has an established presence in Zimbabwe to maintain the vehicles during the warranty period, plus the ready availability of spare parts and technical support," Jones comments.

Cummins Engine Business Unit and Distribution Business Unit Sales Engineer **Vernon Schroeder** highlights that the ISX475 has reduced fuel consumption for increased economy, and produces significantly less greenhouse gas emissions than other engines currently on the market.

The running engine initiates the power take-off device on the firefighting vehicle that, in turn, activates its water-suppression system to douse any fire, while propelling the vehicle simultaneously. Specific modifications undertaken included modifying the back axial crank shafts, while the voltage had to be increased from 12 to 24 V. In addition, the engine control module's calibration settings had to be modified accordingly.

Cummins' value-added services included commissioning the engines, and carrying out all first-line programming, which went a long way in ensuring the successful outcome of this project. "We received unconditional technical support, with Cummins always coming to our assistance whenever it was required," Jones points out. In addition, Marcé will undergo familiarisation training at the Cummins Training Centre in Johannesburg.

"We have an excellent working relationship with Cummins, and truly appreciate the unwavering support we continue to receive from them. As a result, we specify Cummins engines as part of our general refurbishment programme," Jones concludes.

—ends—

Connect with Cummins on Social Media to receive the company's latest news

Facebook: <https://www.facebook.com/CumminsAfricaME/>

LinkedIn: <https://www.linkedin.com/company/cummins-africa/>

Twitter: https://twitter.com/Cummins_Africa

About Cummins Inc.

Cummins Inc., a global power leader, is a corporation of complementary business segments that design, manufacture, distribute and service a broad portfolio of power solutions. The company's products range from diesel and natural gas engines to hybrid and electric platforms, as well as related technologies, including battery

systems, fuel systems, controls, air handling, filtration, emission solutions and electrical power generation systems. Headquartered in Columbus, Indiana (U.S.A.), since its founding in 1919, Cummins currently employs approximately 58,600 people committed to powering a more prosperous world. Cummins serves customers in about 190 countries and territories through a network of some 500 company-owned and independent distributor locations and approximately 7,500 dealer locations. Cummins earned \$1 billion on sales of \$20.4 billion in 2017. Press releases can be found on the Web at www.cummins.com. Follow Cummins on Twitter at www.twitter.com/cummins and on YouTube at www.youtube.com/cumminsinc.

Cummins Contacts

Deepa Rungasamy
Communications Manager
Cummins Africa Middle East
Phone: +27 11 589 8512
Cell: +27 72 630 7501

Amina Abugdanpoka Kaguah
Spokesperson
Cummins Africa Middle East
Direct: +27 (0)11 028 8622
Mobile: +27 71 608 6037
Email: amina.kaguah@cummins.com

Media Contact

Jonathan Ducie
NGAGE Public Relations
Phone: +27 11 867 7763
Fax: +27 86 512 3352
Cell: +27 84 709 0167
jonathan@ngage.co.za
www.ngage.co.za