

Spanish electrical motor manufacturer uses Inovance solutions for product testing

CUSTOMER PROFILE

Vascat is a Spanish electrical motor manufacturer, founded in 1974. The company initially made its name designing and manufacturing DC electric motors, before launching asynchronous AC motors in 1997, and synchronous torque motors in 2006. Vascat specializes in developing and manufacturing electric motors for special applications, including torque motors, liquid-cooled motors, and motors for marine applications.

THE CHALLENGE

Vascat needed to integrate a new AC drive into an existing system; supplying the drive in a common DC bus architecture while using EtherNet/IP communication to control the drive from a third-party controller. The integration was particularly challenging because the Inovance MD520 drive was replacing a competitor's drive with a fundamentally different parameter structure. The legacy drive also limited Vascat's ability to control a broad range of motors, from low to high power ratings.

THE SOLUTION

After a thorough survey of the market, Vascat decided to work with Inovance. The Spanish company used a series of Inovance products, which integrated well with its existing system without risk. Products used included:

- MD520-4T220S-INT AC drives
- MD500-ENI EtherNet/IP option cards
- MD38PGMD incremental encoder option cards
- SOP-20-810 LCD keypads



THE BENEFITS

Inovance's products have enhanced motor control performance in product testing. Two 220 kW (heavy-duty) MD520 AC drives are used by Vascat to test their own motors in-house, while also controlling a second motor that acts as the load to the motor being tested. Vascat can now use the same system to test a wide range of electrical motors, with or without feedback, including induction, synchronous reluctance and permanent magnet synchronous motors.

Vascat selected Inovance because of the performance of the Inovance products and the ease of integrating them into the existing control system via an EtherNet/IP communication card. The AC drive could be installed into the existing common DC bus architecture via access to the DC bus terminals. The drive's internal pre-charging circuit was also effective on these terminals, allowing a connection to the drive even when the DC bus system is already powered on. Vascat can now easily control a large range of motors from low to high power ratings, which was not possible with the previous AC drive.



The MD520 universal AC drive

KEY BENEFITS

- Enhanced motor control performance
- Wider testing capabilities, with or without feedback
- Seamless integration with existing system
- Strong technical and engineering support



Bilal Al Mard, Vascat Technical Office Manager, says: "Collaborating with the Inovance team during the MD520 commissioning was a technically enriching experience. Their commitment to adapting to our facilities and ensuring the successful execution of the project was highly appreciated. It was a very positive first collaboration, and we look forward to working together again in the future."

David Bedford Gaus, Country Manager at Inovance Technology Spain and Technical Director for Inovance across the Europe and North America regions, adds: "We enjoyed working with Vascat on this challenging yet rewarding project. We were impressed by the quality of the existing system and worked together to find a solution that integrated our solutions and enhanced it further. We very much hope to work with Vascat again in the future"