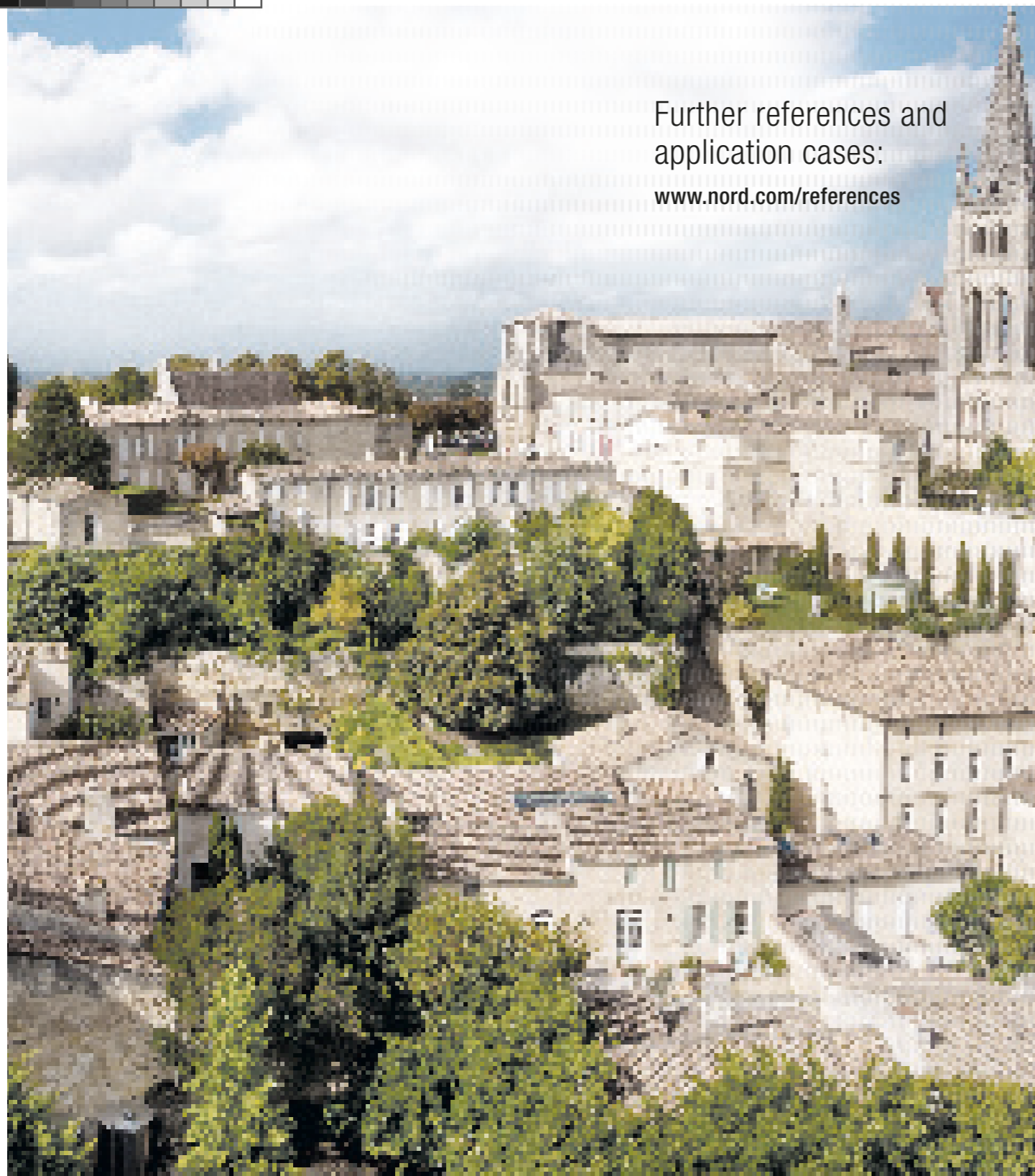Further references and
application cases:

www.nord.com/references

Sensitive control for
sensitive pump operations,
high flow rate at low speed

Low noise emission in
continuous operation

Drive Solutions for
Wine Pumps

Case study: Cazaux Wine Pumps

NORD
®
DRIVESYSTEMS

Beverage industry
Wine pumps

Frequency inverter
NORDAC *FLEX* SK 200E

Project requirements

During wine production, pumps frequently run in continuous operation. From filling the fermentation tanks to the repeated clarification of the wine, there are numerous pumping operations during which the medium has different consistencies.

High precision regulation. – Wine is a sensitive product. This is why the transfer must be carried out as gently as possible without strong turbulences impairing the quality. This puts high requirements on the drive technology. In order to transport high volume flows at low speed, a precise and sensitive drive control is required, ensuring high and uniform flow rates even with very viscous intermediate media like mash.

Compact design. – Pumps for mobile use in wine cellars must be easy to move. Like the entire design, the drive technology in use should therefore not only be robust, but also compact and at the same time weight-saving. Aluminium gear units with integrally mounted frequency inverters have proven themselves especially suitable. In addition to precise control of speed, pressure and flow rate, the lowest possible noise level is also required as the pumps often run for several hours without interruption. Cazaux Rotorflex equips numerous of its wine pumps with the robust decentralised drive units from NORD. The drives feature a very compact design and high precision regulation over the entire speed range.

Application solution

Cazaux has been working with NORD DRIVESYSTEMS for electrical drive technology since 2009. In addition to its reliability, both the compact design and the high cost-efficiency as well as quiet running and the versatile functional range of the drive systems convinced the pump manufacturer.

High functionality. – This way, the speed can be self regulated and adapted to specified pressure ranges. Density, temperature and volume of the media can be measured at the same time. In addition, the frequency inverter ensures slow starting and stopping of the motor, enables simple flow reversal and provides effective protection against dry running.

Full of drive power. – This is why Cazaux equipped its LOB series rotary lobe pumps with drive systems from NORD. They allow for pumping distances up to 80 metres and fill a barrique barrel within two or three minutes. The decentralised NORDAC *FLEX* frequency inverters are available in four sizes with controllable drive powers between 0.25 and 22 kW. The standard equipment includes four-quadrant operation, PLC functions and a brake rectifier for controlling the motor brake as well as encoder interfaces for HTL and CANopen signals.

Versatile
Sensitive drive control with versatile functional range and various control options.

Customer Profile

Cazaux Rotorflex from Montussan near Bordeaux is the leading French manufacturer of wine pumps. Founded in 1954, the company is located in the heart of the Bordelais, the world's largest wine-growing area for AOC/AOP wines. Cazaux now manufactures around 70% of its pumps for export – mainly to Italy, Spain and South America, but also to China. In addition, the company is continuously expanding its wide range of products with innovative product series.

The project at a glance

The decentralised NORD drive systems with integrated NORDAC *FLEX* have been driving the mobile wine pumps of the French manufacturer Cazaux for years. As an economical and compact solution, and thanks to their weight-saving aluminium design, they ensure:

▸ Constant high flow rates even at low speed ranges

▸ Quiet pump operations with high precision regulation

▸ A long-life and reliable pump drive