
NOVA ROTORS®
Progressing cavity Pumps
WINE INDUSTRY

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The wine-making industry has always played an important role in the history of humanity in both economic and social terms. The wine tradition has such ancient origins that its roots are buried in legends: the Bible attributes the discovery of wine to Noah after the Flood. The earliest historical documents that bear witness to the production of wine date as far back as 5000 B.C. in Mesopotamia in the Fertile Crescent, where the ancient Sumerians began cultivating wild grape vines and fermenting grapes.

Currently in Italy and in countries like France and Spain the wine making industry is a leading sector in continual change that is investing heavily in the development of new viticulture and winemaking techniques, with the aim of producing an ever higher quality of wine.

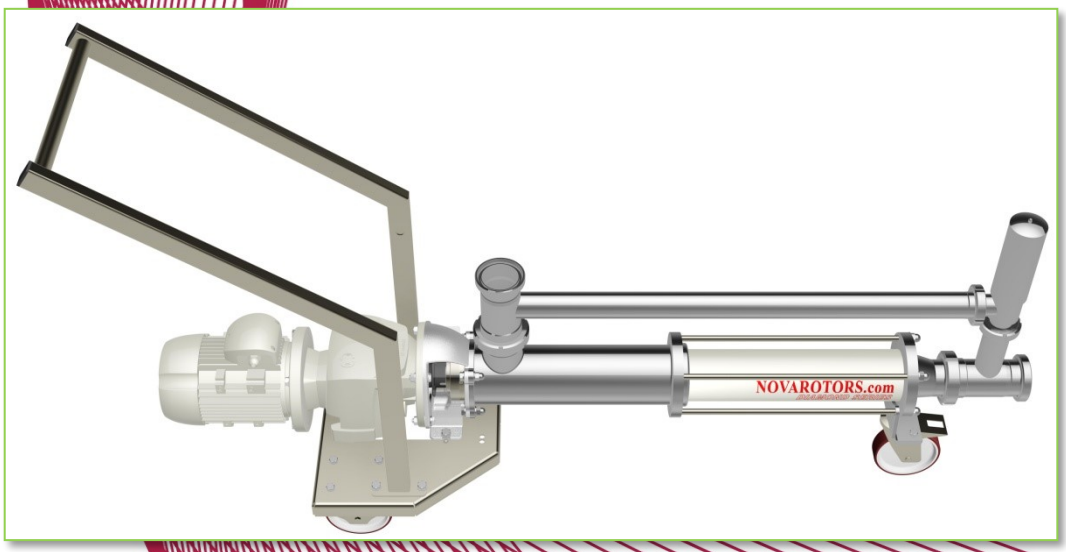
The winemaking process varies depending on the type of wine to be produced and includes all processing and fermentation stages from the delivery of the grapes to the final product.

Progressive cavity pumps are ideal for the various process stages as they convey the fluid throughout the entire process in a particularly delicate way, from the berry crushing stage through to the bottling of the wine. The tensile stress to which the pumped fluid is subjected is very limited compared to other pumping systems being pulsation-free above all with heterogeneous products such as for example pomace and crushed and destemmed grapes.

WHY CHOOSE NOVA ROTORS?

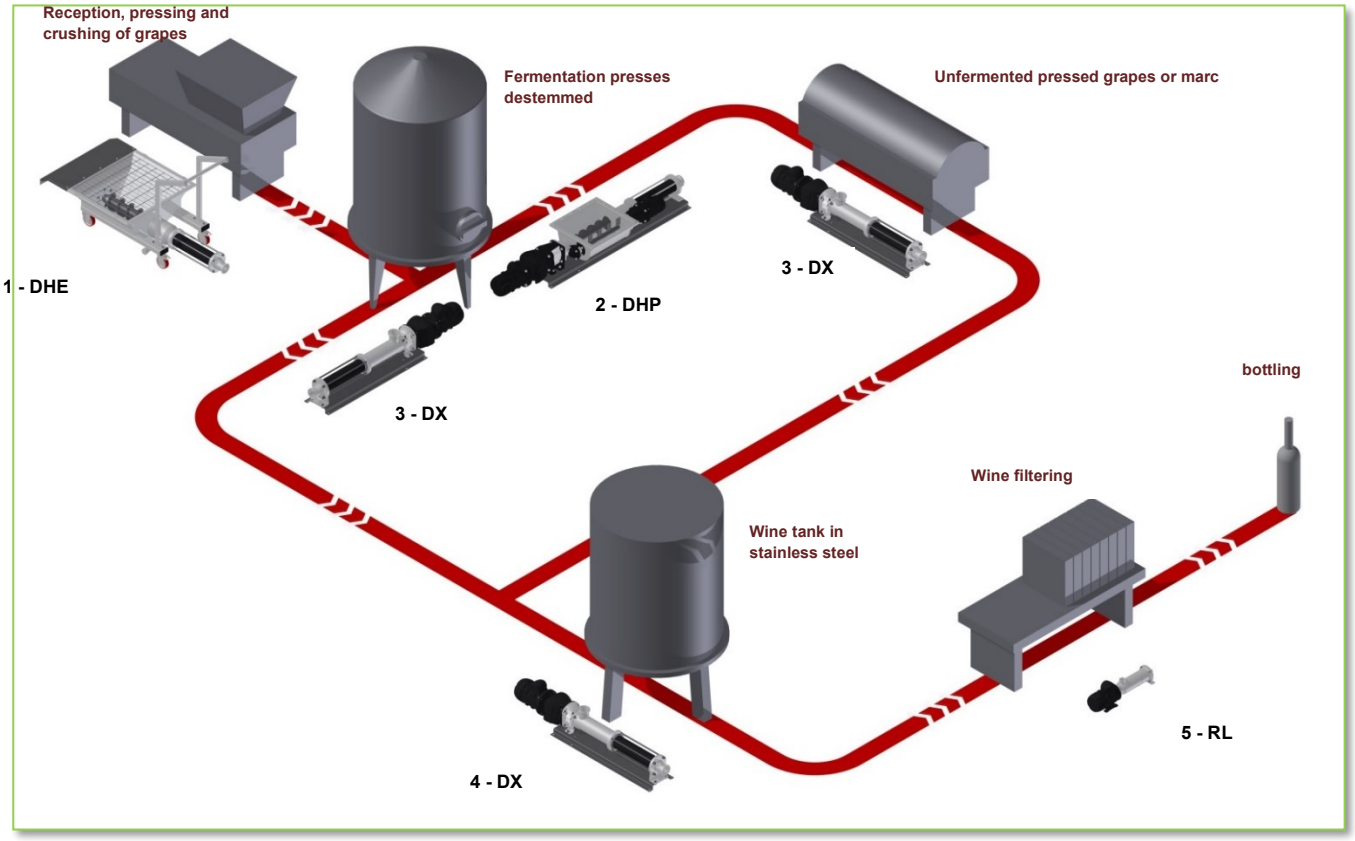
Nova Rotors has worked in the winemaking industry for years seeking to provide the best possible solutions, a wide range of products, services and experts to find the most suitable configuration based on the customer's specific requirements. The various testimonials received from our customers around the world over the years attest to the commitment of a dynamic company focussed on meeting the constantly growing market demands.

Nova Rotors progressive cavity pumps are developed scrupulously in compliance with the strictest hygiene and industrial standards to guarantee high standards of quality, reliability and duration, by providing the best solutions throughout the entire winemaking process. In particular, special attention has been given to each transition from one process stage to the next, by making various construction types available in order to optimise each and every transfer. Moreover, **FDA-compliant materials** are used in the production process, and several pump models are **certified according to 3-A Sanitary Standards** or designed in **compliance with EHEDG guidelines**, ensuring maximum hygiene and food safety.



DX-E
Typical pump for oenological use

FLOW CHART

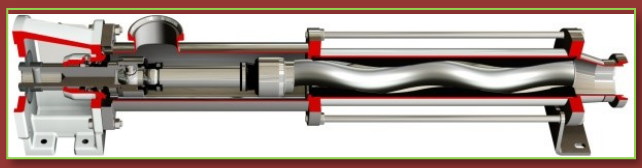


Application (refer to the above diagram):

1. DHE: pump designed specifically for the winemaking industry, used for pumping crushed and destemmed must from the crusher-destemmer to the fermenter
2. DHP: hopper pump with bridge breaker blades for pumping pomace that is prone to bridging from the fermenter to the pomace press
3. DX: pump designed specifically for the food industry used to convey the wine and must from the fermenter or from the pomace press to the stainless steel tank
4. DX: pump used to convey wine from the stainless steel tank to the subsequent wine filtering stage
5. RL: compact stainless steel wobble pump used to convey the filtered wine to the subsequent bottling stage

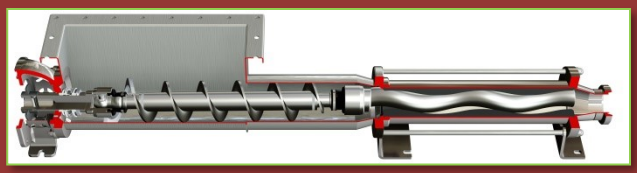
Product for wine industry

DN SERIES



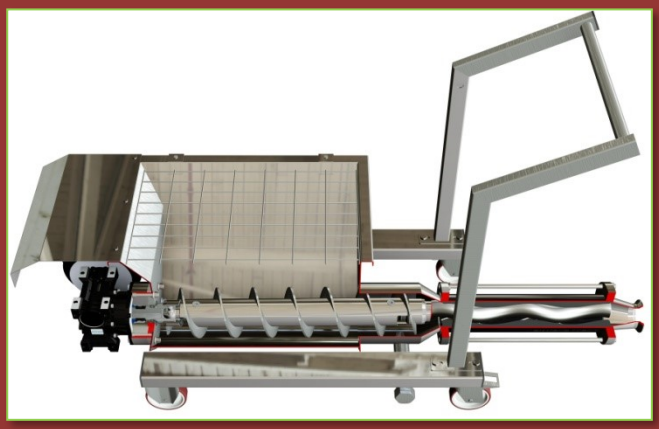
Flanged industrial series ideal for heavy duty applications. It is the **best solution for the industrial sector for pumping a vast range of fluids**; available with UNI, DIN and ANSI flanged and GAS BSP threaded connections.

DHXC SERIES



Basic version equipped with a hopper and feeding screw for the hydraulic section.
Suitable for pumping low-flowability substances that do not tend to bridge. This is the standard joint sanitary pump of the DN series. It combines excellent cleanability—thanks to the casing design that is completely free of dead zones and stagnation areas—with the performance of the patented Diamond pin joint system.

DHE SERIES

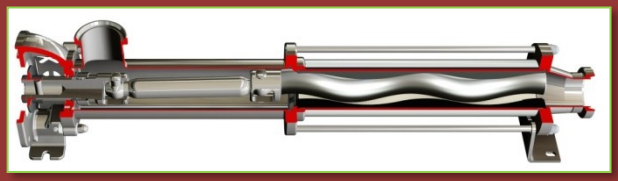


Model with a large eccentric hopper and integrated trolley, ideal in the winemaking industry for pumping crushed grapes with or without the stems. Standard AISI 304 stainless steel construction for all components.

DHP SERIES

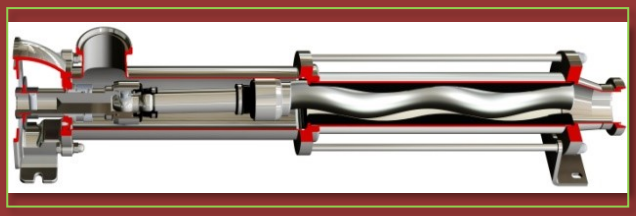
Model with enlarged hopper and auger feed screw to move the product to the hydraulic part, ideal for pumping materials with a low degree of flowability and prone to bridging. Standard AISI 304 or AISI 316 stainless steel construction.

DXO SERIES



The DXO series is the hygienic pump with open joint. The design of its casing and rotating parts that are completely free of standing water and dead zones makes it the absolute best sanitizing solution.

DXC SERIES

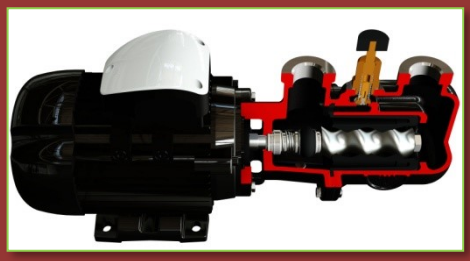


The DXC Series is a hygienic progressive cavity pump equipped with the standard DN Series joint. It combines excellent cleanability—thanks to a casing designed to avoid standing water and dead zones—with the top-performing, patented pin joint of the Diamond Series.

RL SERIES

The RL series is an extremely compact product thanks to the integrated pump-electric motor construction. The patented pin joint of the Diamond series ensures high reliability.

R SERIES



The R Series is our most compact floating pump, thanks to the elimination of the block between the pump and the drive. It features a cross joint, ensuring high reliability and easy maintenance.

APPLICATIONS

DN Pump
Transfer of wine from stainless steel tanks to wood barrels for aging.
The transfer occurs without any tensile stress and is pulse-free to retain the organoleptic characteristics of the wine.

DN Pump
Transfer of the must obtained from pressing the pomace to the tanks for the next aging stage

DHE Pump
Transfer of the fermented pomace from the tank to the press using a trolley-mounted press. The enlarged screw guarantees a constant flow rate.

DH Pump
Transfer of pomace and must from the crusher-destemmer
using a hopper pump connected directly to the machinery.

CONTACT US FOR A CONSULTATION

At Nova Rotors, we are dedicated to providing reliable and high-efficiency progressive cavity pump solutions for the wine industry. Our hygienic pumps are specifically designed to handle delicate products such as must, wine, and lees with the utmost care, preserving their quality and integrity throughout the process.

If you're looking to improve your winery's operations with gentle, efficient, and cleanable technology, we invite you to contact our team for a personalized consultation. Our experts will assess your specific needs—whether it's for transferring must, bottling, or managing by-products—and help you configure a custom pump solution that ensures product quality, process efficiency, and long-term reliability.

Whether you need assistance selecting the right model, integrating it into your production line, or maintaining performance over time, our technical team is ready to support you with responsive and knowledgeable service.

Contact us today and discover how Nova Rotors can enhance your winemaking process with tailored, high-performance pumping solutions.

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Via Carlo Cattaneo, 19/25
36040 SOSSANO (VI)
ITALY

Phone: +39-0444-888151
Fax: +39-0444-888152
E-Mail: sales.novarotors.com
Web site: www.novarotors.com

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