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INTRODUCTION TO THE NEW FONDAREX MODULAR MOBILE

The first machine in the HIGHVAC range came out of production in 2010. Already revolutionary in its time, this range of machines has completely changed the vacuum market in the die-casting industry. Since then, Fondarex studied and implemented more than 3,000 projects worldwide, using HIGHVAC technology. This is by far our most popular and widespread range among our customers.

Over the years, the HIGHVAC system has gradually evolved to better meet your needs and the new standards and constraints of the market. This is part of continuous improvement and innovation that are at the heart of Fondarex's genes.

The market has changed a great deal over the past five years and we have seen the emergence of new castings, more complex, technical and larger parts. We are talking about structural parts, safety parts or what we now call GIGA castings. The demand of our customers for systems that are always more efficient but also better integrated in terms of communication and data exchange led Fondarex to the project: MODULAR.

THE DEVELOPMENT

The development of the new version of a high-performance system like HIGHVAC was not an easy task and a real challenge for Fondarex to satisfy its most demanding customers.

This is not a simple evolution but a real new product that we offer you; we have drawn on our 75 years of experience in the field, taken into account the smallest details of our customers' feedback and started again from a blank page.

After two years of R&D and numerous tests in partner foundries, the new mobile MODULAR was born. This new vacuum machine is the worthy heir to the HIGHVAC range. It offers great flexibility with the ability to evolve at any time and therefore adapt perfectly to the current and future needs of HPDC processes.



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This new concept is mobile and incorporates robust and modern technology to guarantee the best satisfaction throughout usage. The user interface has also been completely re-evaluated to allow for easier and more intuitive operation while offering more precise controls as well as a comprehensive process analysis.

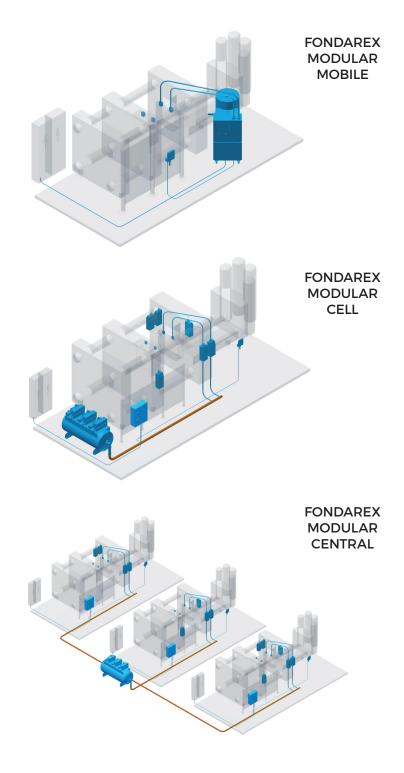
The MODULAR system remains compatible with all DCM and offers a communication standard based on wired, Profinet, Profibus and OPC UA technologies. Maintenance has also been completely revised to reduce machine downtime and thus use the time to focus on production.

Most of the controls and features that have made the reputation of Fondarex machines are found as standard; such as profile control, pollution control, calculation of the volume of air evacuated and many others.

NOW IT IS ALSO POSSIBLE TO UPGRADE THE MACHINE AT ANY TIME WITH OPTIONS SUCH AS:

- Real-time vacuum regulation
- Air flow measurement
- Humidity measure of the exhaust air
- ID Key
- Analog outputs
- Industry 4.0

The Industry 4.0 option has been at the centre of development and is part of Fondarex's ambition to be a major player in digitization within the HPDC. Directly integrated into the system, the I4.0 option allows data collection, processing and communication to generate process statistics and quality reports. It includes a web platform to track your production directly from your laptop. The new MODULAR generation is also available in CELL and CENTRAL versions, these two versions will be presented in detail in a future newsletter.



"QUALITY IS NOT AN OPTION BUT A COMMITMENT THAT WE MAKE."

THE OPTIONS AVAILABLE

Here below is the list of options available now on the new MODULAR. As mentioned, these options can be added at any time, when configuring the machine or later when the machine is already in production. The list is not exhaustive, the objective of Fondarex is to continue to develop and propose new options in the coming years.



INDUSTRY 4.0

A new way to manage, communicate and treat the data through integrated vacuum process statistic and quality reports. This option includes the Web Dashboard to follow your production from your laptop.



REAL TIME VACUUM CONTROL The butterfly valve controls precisely the evacuated air flow. The high-speed control is done independently through each vacuum channel.



AIR FLOW MEASURE

This module measures the evacuated air flow and air volume per vacuum channel.







HUMIDITY MEASURE

This option measures the humidity present in the evacuated air volume.

ID KEY

The ID key enhances the parameters and data security with up to four different access levels, one dedicated key for each level.

ANALOG OUTPUTS

Allows to forward the vacuum curves, contamination and profile control curves to the DCM panel.

TECHNICAL DATA			
	MOBILE SU	MODILE 750	
TANK [l]	500	750	1000
PUMP [m ³ /h]	40 / 60 / 100	60 / 100	100
CHANNELS	2	2	2
DCM [t]	Up to 1400	Up to 2200	Up to 3000
DIMENSIONS L x D x H [m]	0,9 × 1,2 × 1,9	0,9 × 1,4 × 1,9	0,9 x 1,5 x 1,9

If you would like to get more information contact our team members at sales@fondarex.com