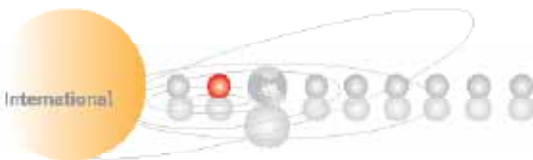


Zhafir **Venus**<sup>2</sup> Series



An outstanding success story

## ZHAFIR VENUS II SERIES

During the last years of the introduction phase of the Venus Series, it has without question earned the respect of both the domestic and overseas customers. The Venus has already established itself in the all-electric machine sector because of its excellent price to performance ratio.

We now want to expand on that success, with a clear focus on the needs of our customers. Since its launch in 2007, we have performed over 2,000 mold applications with the Venus and have gained valuable feedback from a number of cus-

tomers interviews. Since the development began on the generation 2, we have placed field test machines with customers worldwide and have very carefully analyzed these prototypes regarding performance, flexibility and usability. The integration of German state-of-the-art R&D enhanced the overall performance of this series.

The result: The new Zhafir Venus II Series – high dynamic, cost-efficient and more customer oriented than ever.



### WE EXTEND ADVANTAGE

.....> **Manufacturing Power**

*Zhafir in Germany (picture on top) has a total area of 4,500 m<sup>2</sup> to provide the European customers with their requirements regarding manufacturing, quality control and service. The subsidiary in Ningbo (picture below), China enlarged the production area up to 18,000 m<sup>2</sup> to reduce delivery times.*

.....> **More than a network**

*The integration of highly qualified specialists into the development team opens options for planning resources, depending on the stage of the project. The exchange between Germany and China creates synergies: The different demands of the market are taken into consideration and use is made of Haitian's production experience of many years.*



Zhafir Venus II Series / 900 kN  
400 kN — 5,500 kN

Zhafir Venus II Series / 2,300 kN  
400 kN — 5,500 kN



The all-electrical solution

## GENERATION 2 AT A GLANCE

### Optimized structure

More efficiency and a smooth operation performance through optimization of the mechanical structure.

### Updated software

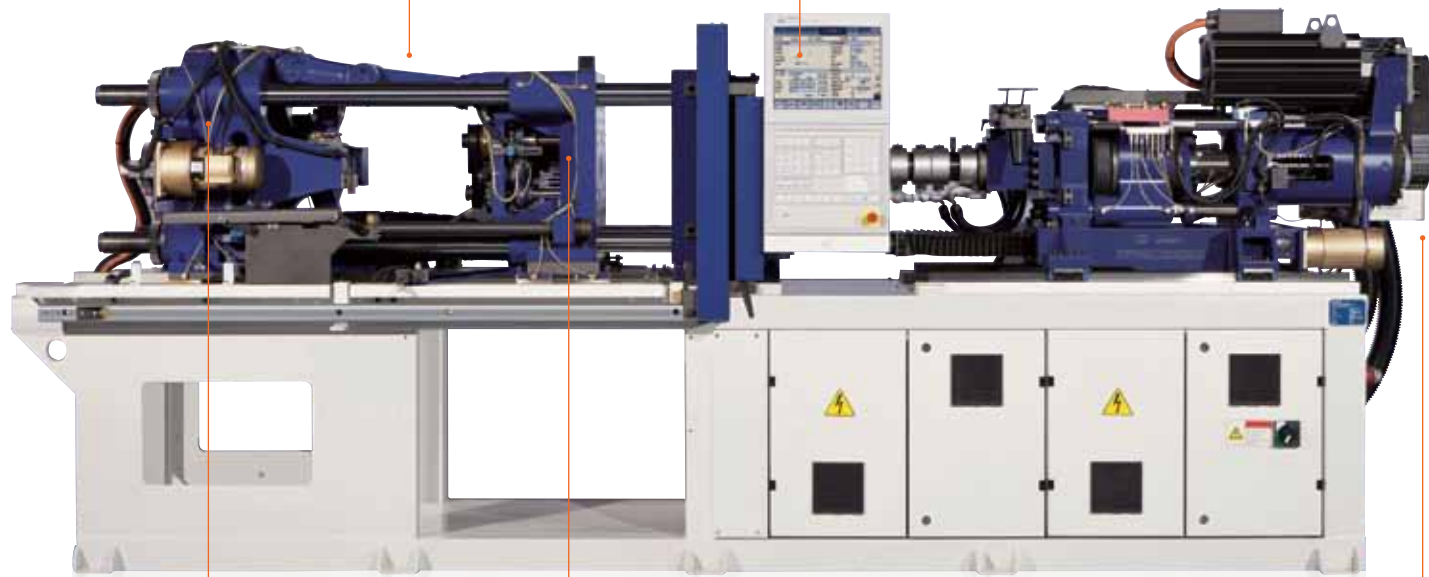
Improved usability and performance with new software features.

### More flexibility

Modularized injection units in different performance levels per clamping unit available.

### More options

Extended standard for a broader range of applications.



### More dynamic

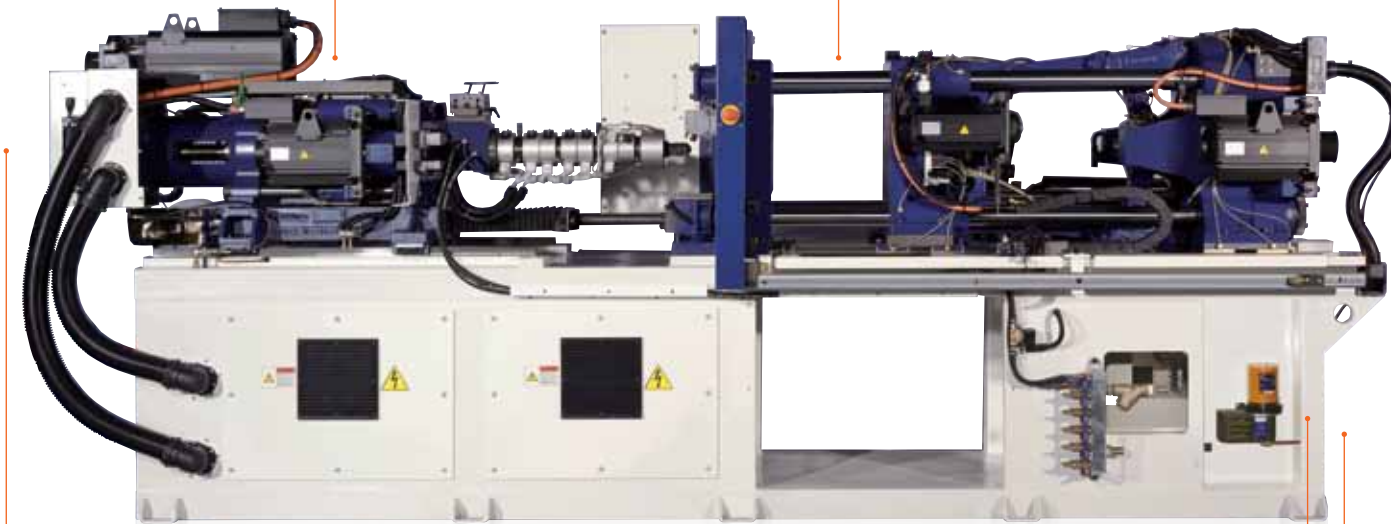
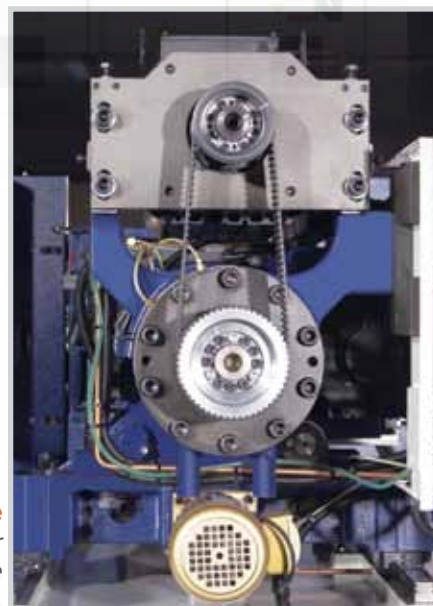
Overall improvement of the rigidity; prolonged service life of both machine and mold.

### Rational and efficient

Extended application scope; enhanced human oriented operation and maintenance.

### Highly sensitive

Enhanced dynamic for improved response time and reliability.



### Easy maintenance

Enhanced operation and maintenance convenience through the swiveling injection unit and the quick ejector coupling structure.

### Lubrication system

New lubrication system for reduced oil consumption and lower maintenance costs.

### More space

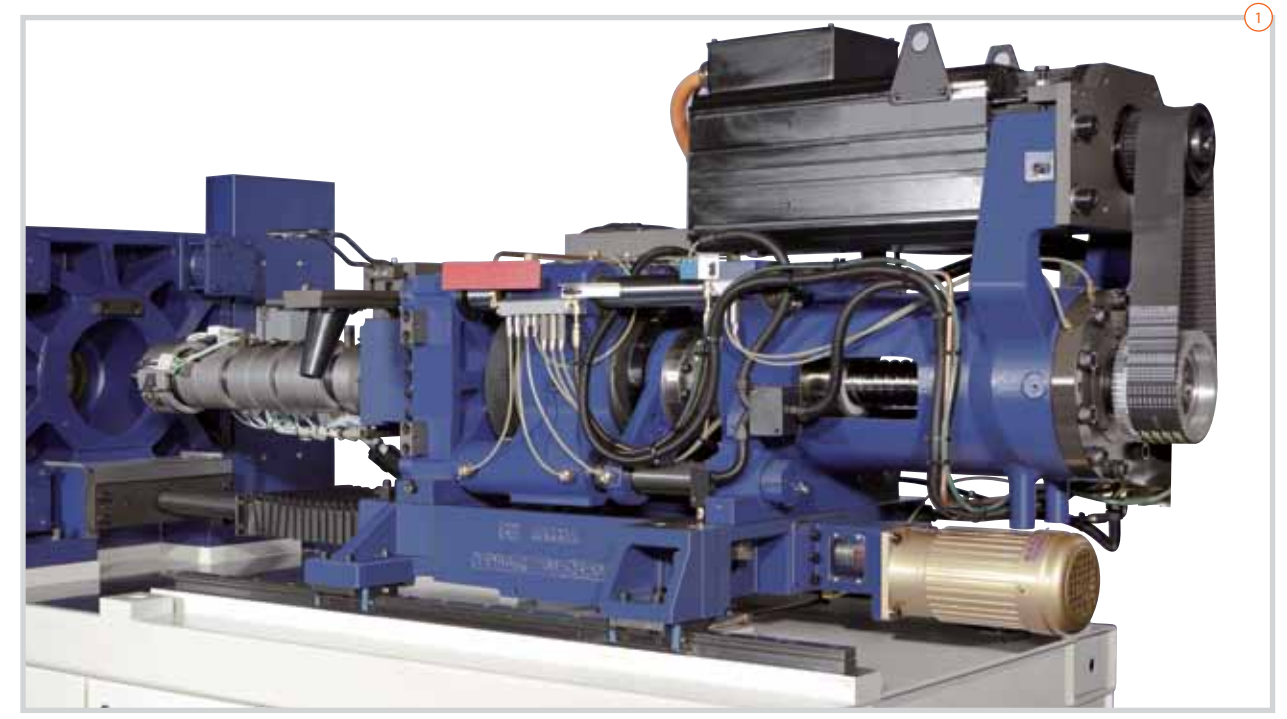
The open machine design and enhanced space below the machine can implement a conveyor or stow the Power Pack.



High acceleration & speed  
**THE INJECTION SIDE**



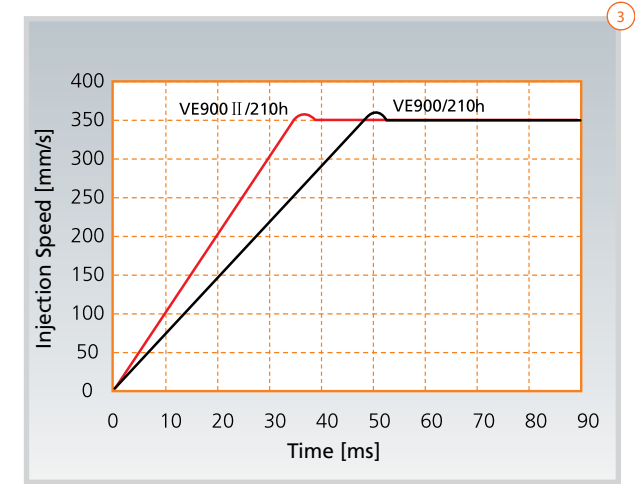
.....> **Easy maintenance**  
 The swivelling injection unit allows quick change of screw and plastication components and shorter set up times. For easy replacement of the modules and a accessibility for cleaning and maintenance much more comfortable.



**Image 1**  
 The new design of the injection unit is more compact. A reduction of single components bring more stability and dynamics in the injection movement.

**Image 2**  
 Matching of the servo motor and servo drive enables further improvement of the acceleration rate and utilization of renewable resources, realizing energy saving.

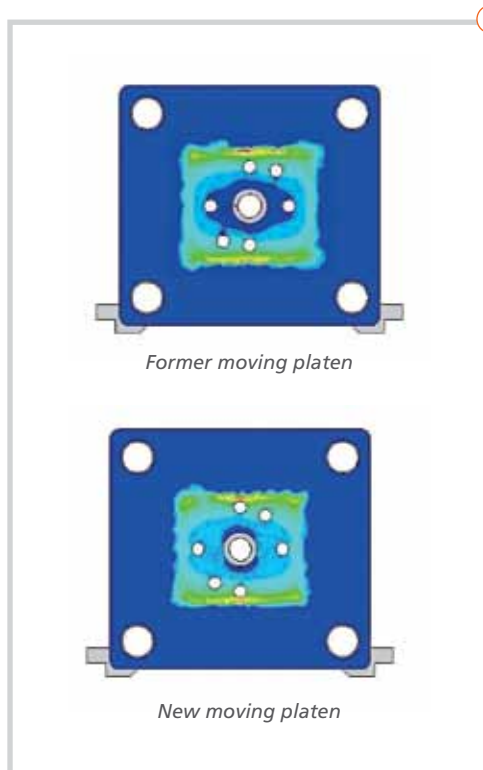
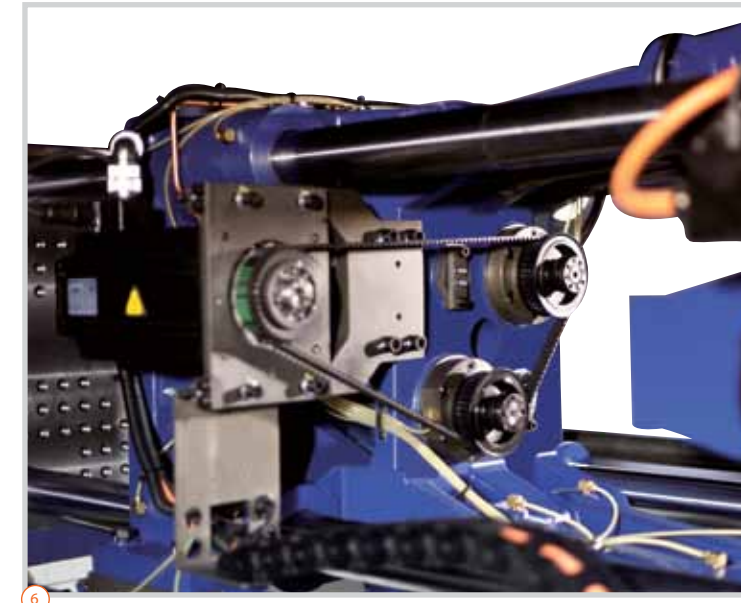
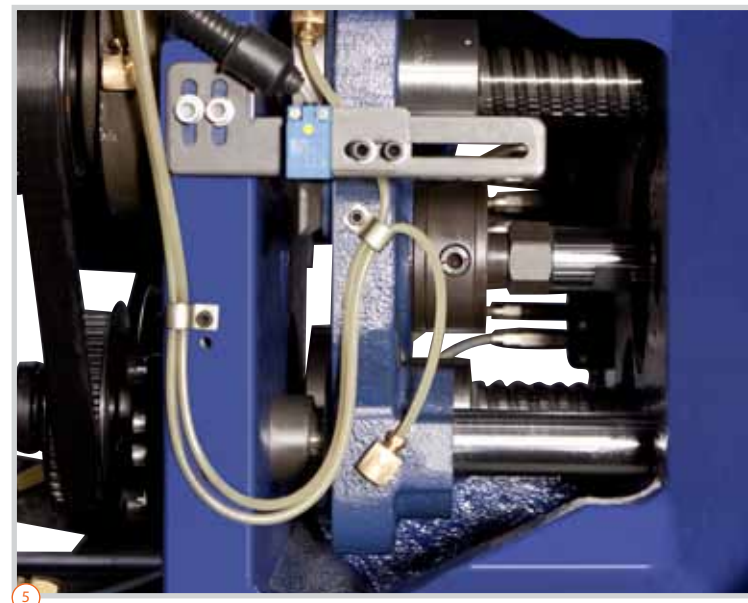
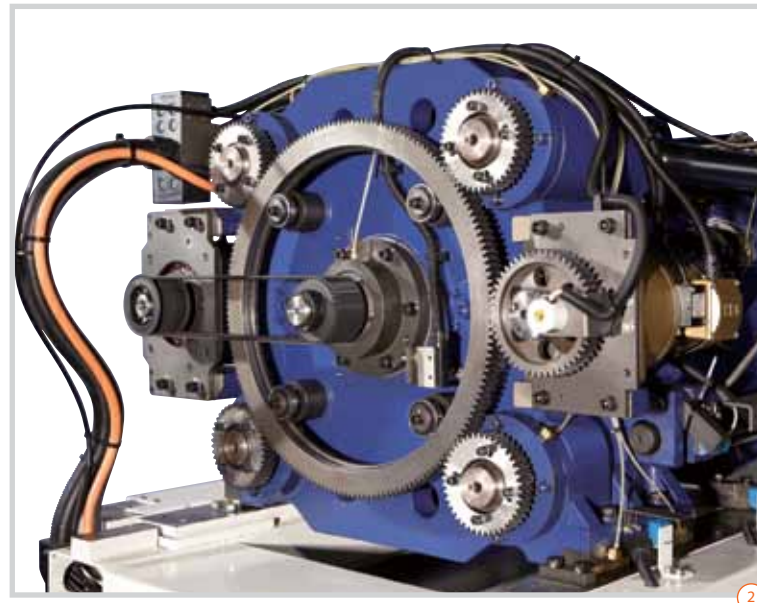
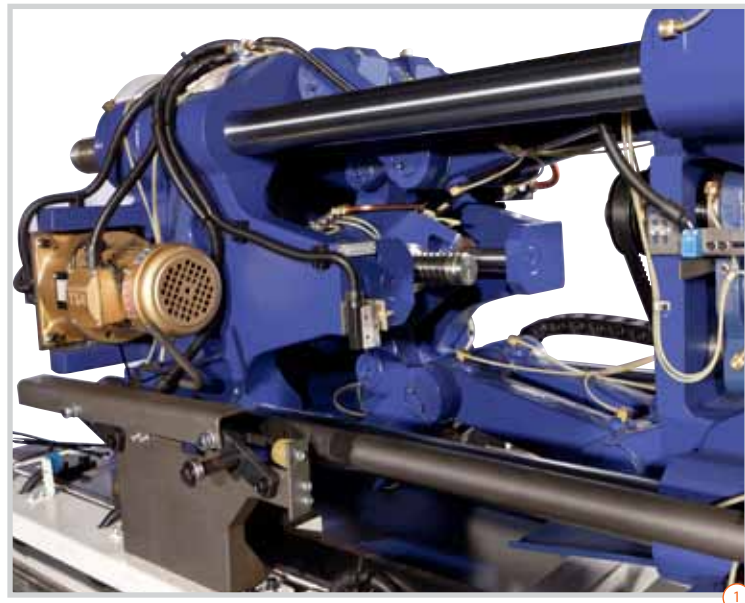
**Image 3**  
 To meet the different application requirements there are 2 variations of injection units. In this example, the injection unit 210h reaches an efficient reaction of 35 ms from 0 to 350 mmls.





Dynamic & efficiency

## THE CLAMPING SIDE



3

Image 1  
Improved toggle design

Image 2  
The encoder on mold height adjustment decreases the setup times during mold changes.

Image 3  
New moving platen is centralized for more robustness and stability.

Image 4  
The new centralized lubrication system for less grease consumption.



4

### NEWS OF GENERATION 2

- .....> **Optimized toggle design**  
The redesigned 5-point-toggle-system increases the platen intensity, reduces platen inertia and joint stress. This delivers an optimized speed curve and reduced dry cycle times.
- .....> **Optimized set up times**  
The ejector rapid release coupling allows an ejector bolt connection within 30 s.
- .....> **Optimized moving platen design**  
Sliders for the moved platen support the mold weight and reduce the coefficient of friction. The platen moves smoother and can be replaced and maintained very easy.
- .....> **Improved mold safety sequence**  
New software is able to calculate the motor torque to monitor the mold safety sequence and avoid mold damage.

Image 5  
The ejector rapid release coupling for a quick removal of the mold decreases the mold change times.

Image 6  
The twin ball screw for the ejector balance speed and torque for high acceleration and precision.



Usability & flexibility

## SOFTWARE AND CONTROL



Mold protection function with 2 steps in standard.



Integrated set up for pressure and speed for Power Pack.



New flexible core sequence.



New production screen.



Dual ejector for separate handling of material or products.



Programmable I/O functions.



The Zhafir Venus II Series use the latest control technology from Sigmatek.

### THE NEW CONTROL

- .....> 15-inch color touch LCD screen
- .....> Three general-purpose USB interfaces
- .....> Mould profile data memory (up to 200 sets)
- .....> Powerful production profile monitor
- .....> Friendly human-computer interaction
- .....> Abundant software function modules
- .....> LED operation indicator
- .....> Clear and simple button to re-layout
- .....> Shortcut configuration for clear identification
- .....> Multi-language available(Chinese, German, English, Japanese etc.)

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