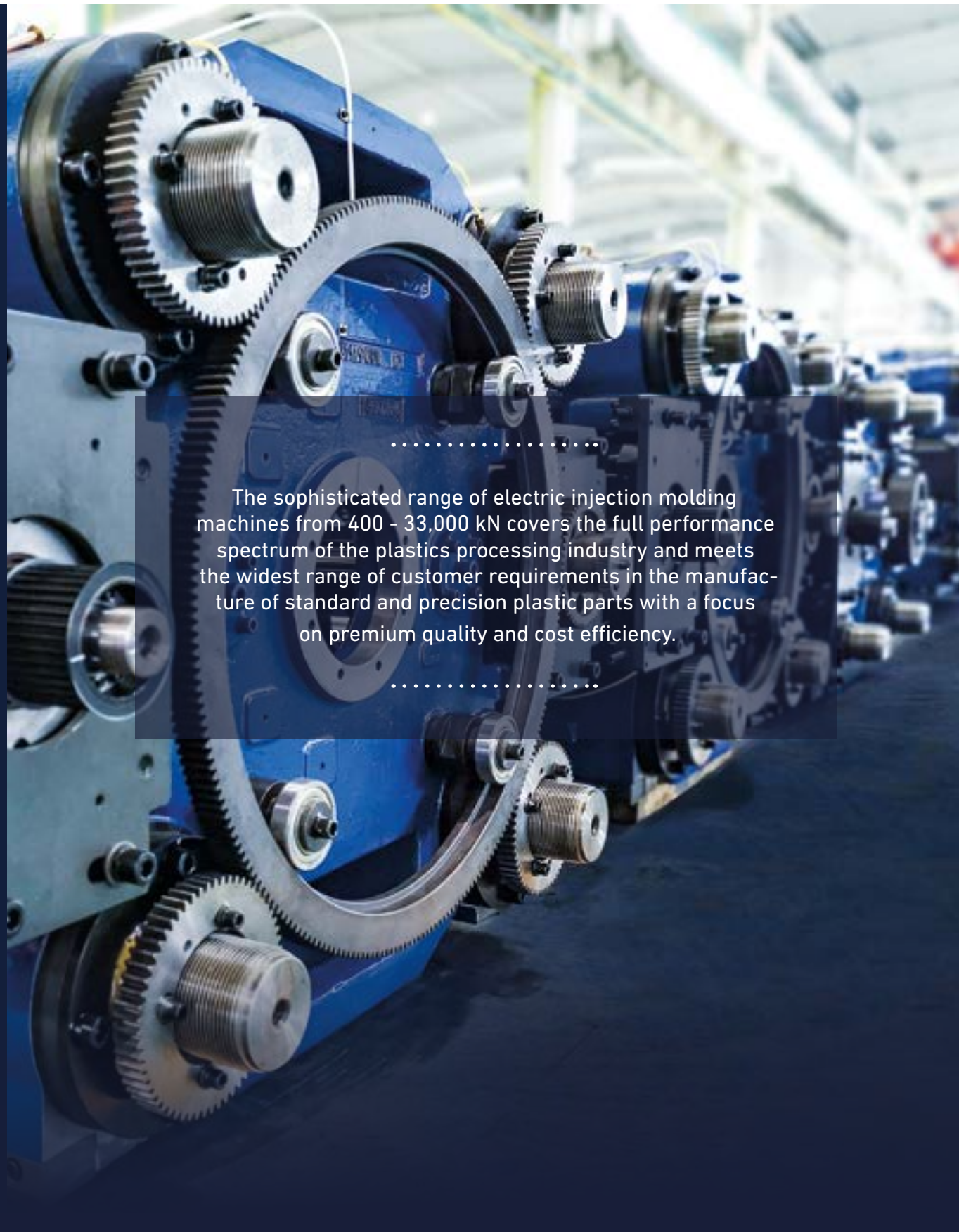


WE
EXTEND
ADVANTAGE



ZHAFIR
PLASTICS MACHINERY



.....
The sophisticated range of electric injection molding machines from 400 - 33,000 kN covers the full performance spectrum of the plastics processing industry and meets the widest range of customer requirements in the manufacture of standard and precision plastic parts with a focus on premium quality and cost efficiency.
.....

HIGH PRECISION . MODULAR . PREMIUM

.....

EXTEND THE POSSIBILITY OF ELECTRIC INJECTION MOLDING SOLUTIONS

.....



THINKING ELECTRIC FOR MORE THAN 20 YEARS.

1998-
2004

THINKING ELECTRIC SINCE 1998



1998-
2004

THINKING ELECTRIC SINCE 1998

At this time, Haitian had already initiated the development of electric machine technology – acting from the deepest conviction that ultimately electric drives offer a whole range of advantages when compared with standard hydraulic solutions.

2005

FOUNDATION OF ZHAFIR, GERMANY



2007

INTRODUCTION OF OUR FULLY ELECTRIC MACHINE SERIES

VENUS



2008

FOUNDATION OF ZHAFIR, CHINA



2009

OPENING OF MANUFACTURING HALL
IN GERMANY

2005

2006

2007

2008

2009

2010



2012
INTRODUCTION OF 2nd GENERATION

VENUS

★★★
2015

DELIVERY OF THE 10,000th ZHAFIR MACHINE.

2015

GRAND OPENING OF ZHAFIR CHUNXIAO PLANT

Lean production according to international standards guarantees very cost-efficient production, greatly shortened production times and high manufacturing quality.



2011-
2018

WORLDWIDE EXPANSION

2013

CHUNXIAO:
EXPANSION OF PRODUCTION CAPACITIES FOR FULLY ELECTRICAL MACHINES

2014

PRODUCTION START AT CHUNXIAO



2016

START OF FIELD TESTING

JENIUS



2018

PRODUCTION CAPACITY EXPANSION AT CHUNXIAO, WITH FINALIZING THE 4 PLANT AREAS.



2014

INTRODUCTION



ZERES

2018

INTRODUCTION OF FIRST ZHAFIR MULTI SOLUTION, ADAPTED ON ZERES SERIES



3rd GENERATION TECHNOLOGY
NEW DEVELOPMENTS
NEW MODULARITY
OPEN INTEGRATION

2019

THE NEW TECHNOLOGY GENERATION 3

2011

2012

2013

2014

2015

2016

2017

2018

2019

THE NEXT GENERATION TECHNOLOGY.



2019

GENERATION 3 IS READY FOR MARKET

20 years of electrics - Zhafir injection molding machines have arrived on the markets all over the world. As an advantageous alternative for the processor, more economic efficiency and many other competitive advantages can be generated through an attractive price-performance ratio.

The vision of „electrics for everyone“ has become reality. Up to date, around 20,000 Zhafir brand machines had been installed in around 50 countries worldwide. Flexibility and productivity at the best cost was an important key to success.

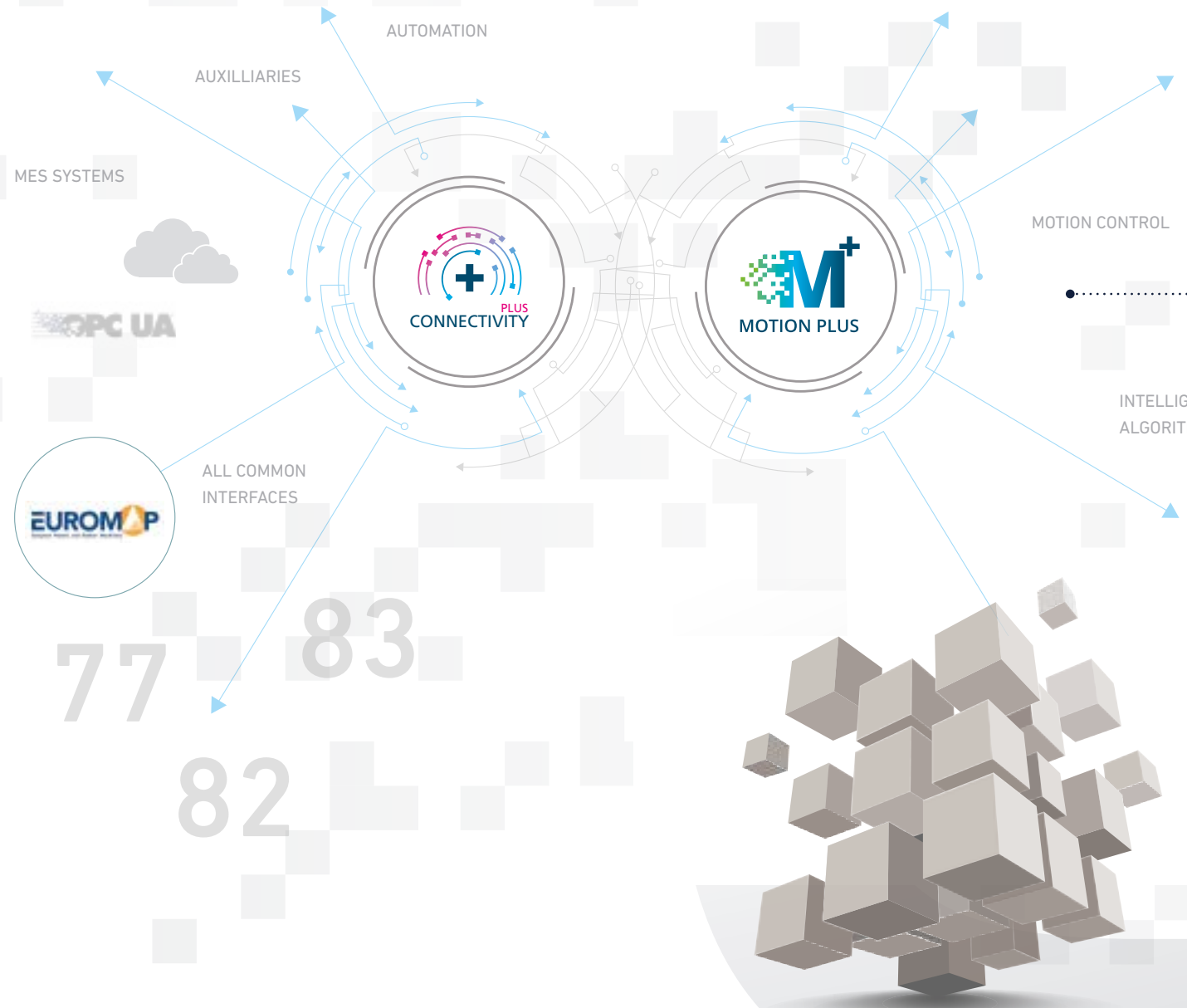
With the new technology generation 3 and the modularization of the product portfolio, our range of technological solutions is now even more varied, application-oriented and flexible.

This technology portfolio, which is consistently geared to demand, offers our customers new scope for action in order to exploit production capacities even more variably and to be able to react more quickly to new market requirements.



NEW DEVELOPMENTS

- » NEW GENERATION OF SERVO DRIVE SYSTEMS – TAILOR-MADE, HIGH-PERFORMANCE
- » ELECTRIC INJECTION UNITS IN A NEW DIMENSION
- » ECONOMICAL MACHINE CONCEPTS



OPEN INTEGRATION

- » FLEXIBLE AND FAST CONNECTIVITY
- » HIGH PERFORMANCE MOTION CONTROL

NEW MODULARITY

- » MODULAR COMBINATION OF MATURE CORE TECHNOLOGIES
- » HYBRID SOLUTIONS FOR INCREASED FLEXIBILITY

THE ZHAFIR FAMILY ELECTRIC SOLUTIONS.



FROM
400-33,000 kN

INJECTION PERFORMANCE

- h** up to 350 mm/s for thinwall parts
- hs** up to 500 mm/s for extremely thin wall parts

APPLICATION PERFORMANCE

- F** **ZERES**
Performance version for short cycles and high injection performance
- M** **ZERES JENIUS**
For multi component precision parts

ENERGY SAVING

- DES** **VENUS ZERES JENIUS**
Optional DES dual energy saving solutions for additional energy saving of 10-30% as compared to standard machines.

WE ARE FULLY
CONVINCED
THAT THE FUTURE
IS ELECTRIC.
WHAT ELSE.

TECHNOLOGY TO THE POINT - IN A NEW DIMENSION: WITH THE VENUS, ZERES AND JENIUS SERIES, OUR PORTFOLIO INCLUDES ELECTRICAL SOLUTIONS FROM 400 TO 33,000 kN.

In 2007, the all-electric Venus Series set new standards in terms of dynamics, precision and energy efficiency. With the Zeres Series developed from this, the basic features of which are identical and designed as an entry-level electric model with integrated hydraulics, the second „jewel“ is now established on the market. With the introduction of the new Jenius Series, a modular hybrid with a two-platen solution, both the clamping force spectrum of our product family and its variety of applications have been significantly increased. This enormous range is supplemented by various performance variants, for example for short cycles, as well as application-oriented packages, such as for precise multi-component tasks.

This means that we are already ideally positioned for the electrical future, because with the Zhafir series available, the advantages of electrical systems can be used effectively for all areas of application in plastics processing. Precision. Dynamics. Speed. High manufacturing quality. All this at affordable, simple cost structures.

The modular platform strategy opens up further advantages for the processor: On the one hand, proven drive components can be profitably combined with each other. On the other hand, all Zhafir machines are uniformly equipped with state-of-the-art control technology.

INJECTION UNITS SOPHISTICATED TECHNOLOGY.

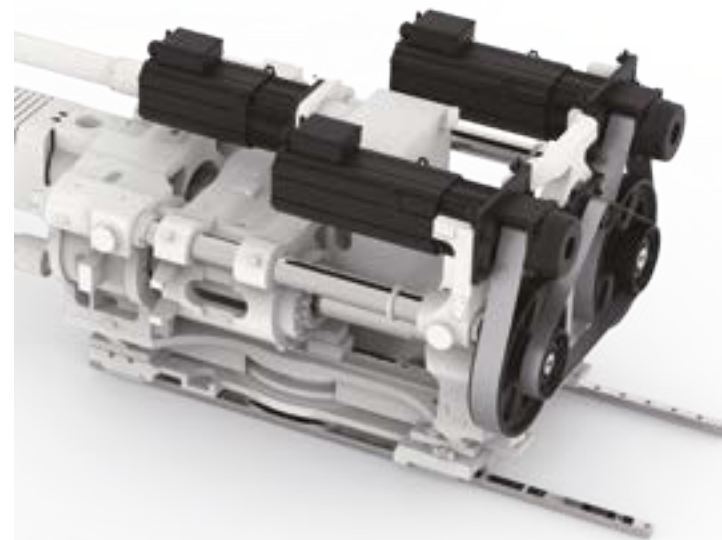
ONE SPINDLE CONCEPT CHARGING MOTOR & BELT

A one-piece and extremely compact architecture. Spindle and screw are arranged in one line. This promises high precision and efficiency.



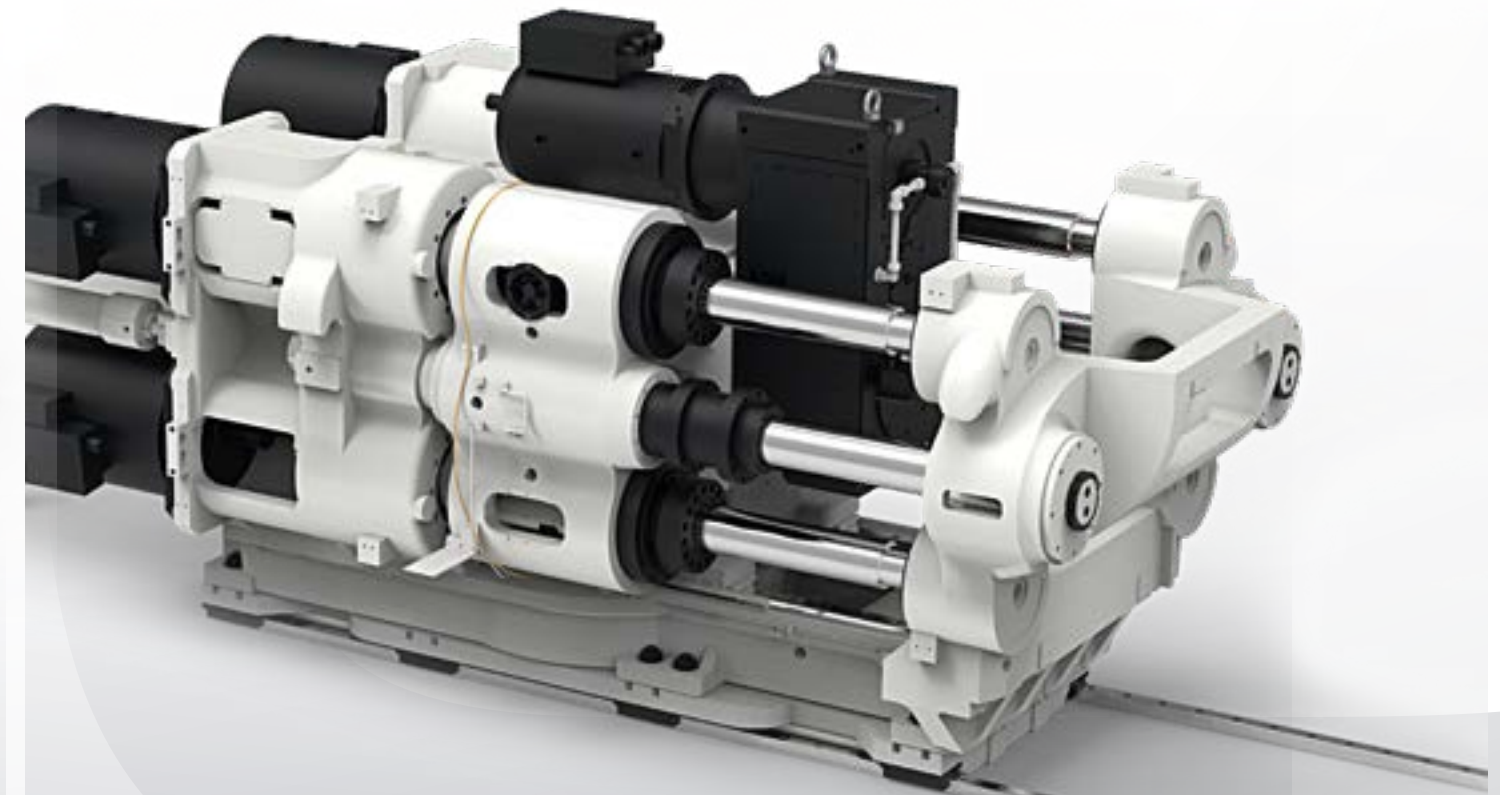
DUAL SPINDLE CONCEPT CHARGING MOTOR & GEAR BOX

The synchronously placed servo motors are equipped, among other things, with symmetrical injection of a function for correcting deviations.



4-SPINDLE CONCEPT NEW DIMENSION OF INJECTION UNIT

Intelligent algorithms and an innovative design enable exact synchronization of all drives. For dynamic acceleration and a fast response time.



50 80 120 160 210 300 430 640 830 1100 1400 1700

2250 3350 5200 7000 9200

12800 17800 22800

400-8,000 kN
VENUS III SERIES

FULLY ELECTRIC. PRECISE & DYNAMIC

The Venus Series influences the global market for electric injection molding machines more than ever before. With clamping forces of up to 8,000 kN and injection speeds of up to 500 mm/s, Venus produces clean, high-quality precision and extremely thin-walled parts at an attractive price/performance ratio. With exemplary energy efficiency.

FLEXIBLE
 We supply the customer with intelligent injection molding machines which are open to all possibilities, leaving the customer free to choose his integration partners.

HIGH PERFORMANCE
 Tailor-made electrical servo drive systems in combination with a new inverter generation enables a high-performance and unique price/performance ratio with high precision and dynamics.

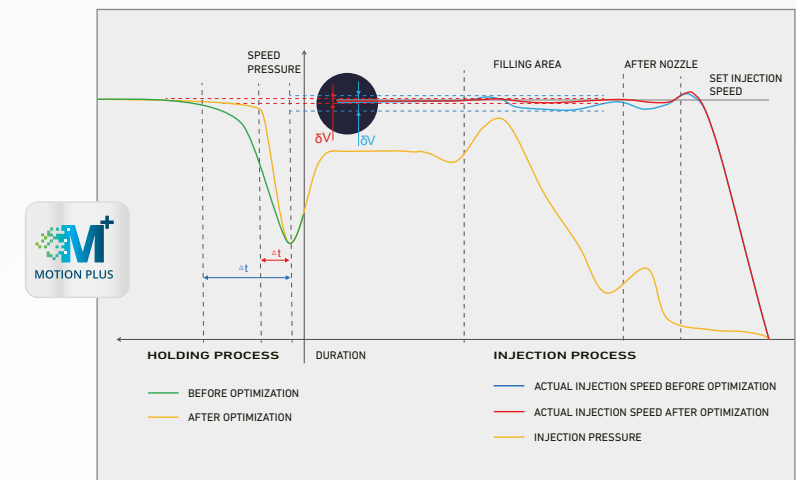


ZHAFIR VENUS III SERIES INJECTION UNIT FEATURES

- » New design with 1, 2 and 4 spindle concept
- » Constant injection speed, precise repeatability
- » Linear guides on the injection unit
- » Tailor-made performance versions of injection units with low speed and high speed
- » High injection speed up to 500 mm/s



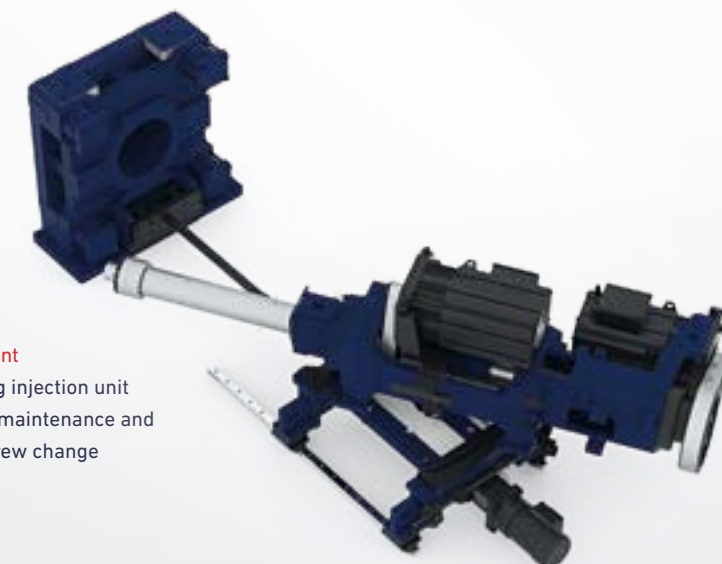
Constant
High stability for injection molding; Optimal servo dynamics and injection speed control



Precise
Linear guides for low friction provide fast response, clean operation, accurate pressure control. An improvement of back pressure and repeatability

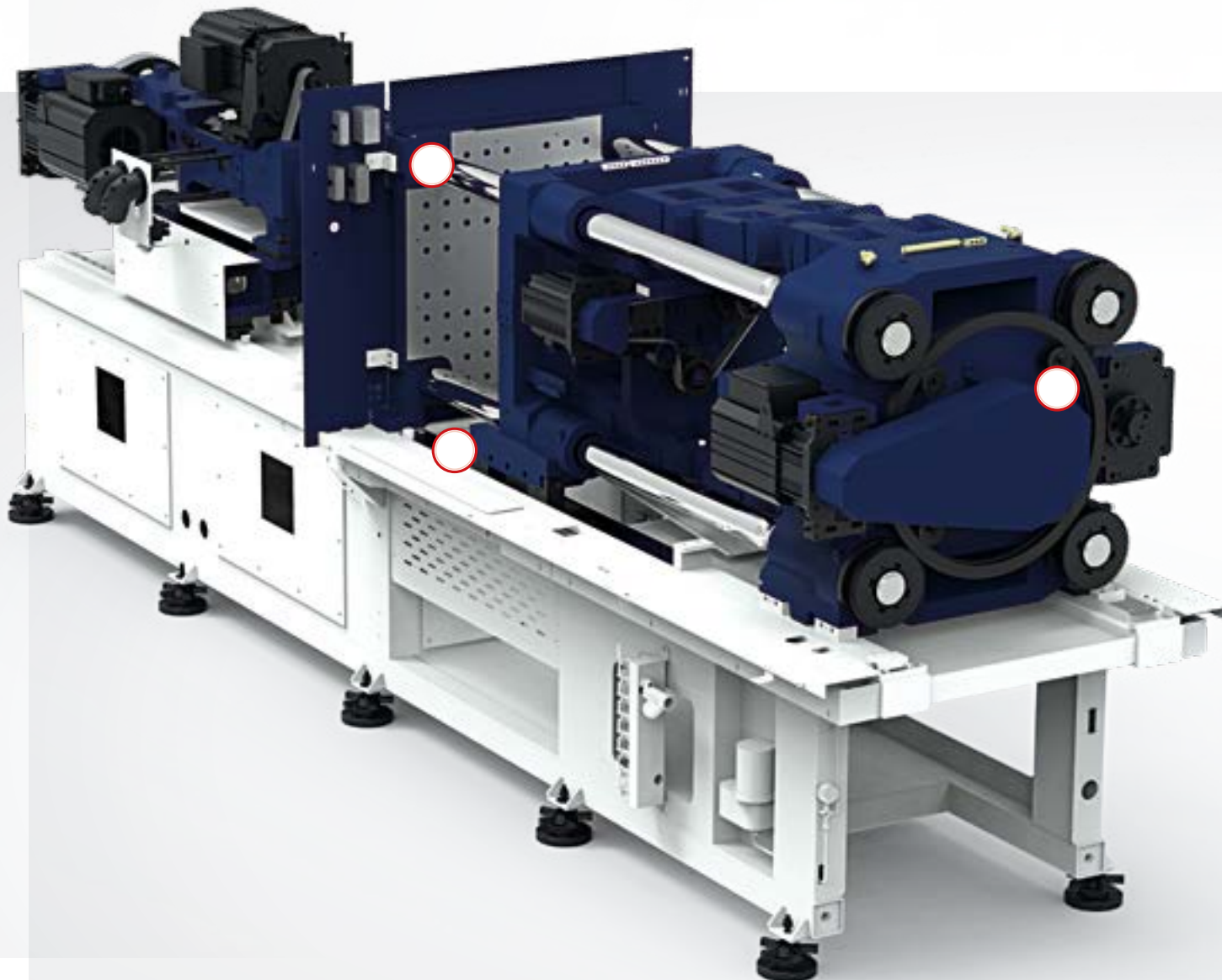


Convenient
Swiveling injection unit for easy maintenance and quick screw change

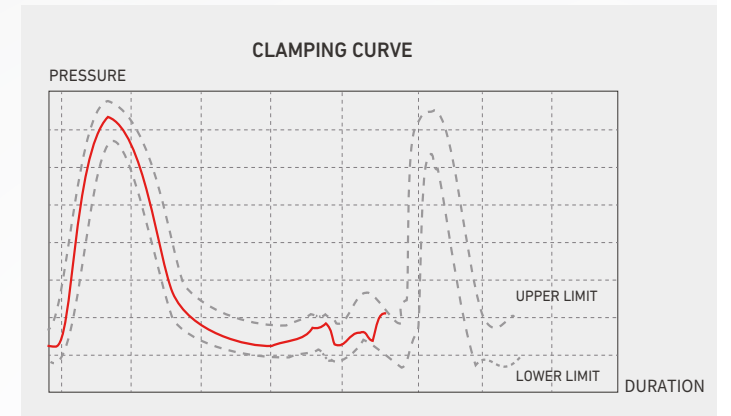


ZHAFIR VENUS III SERIES CLAMPING UNIT FEATURES

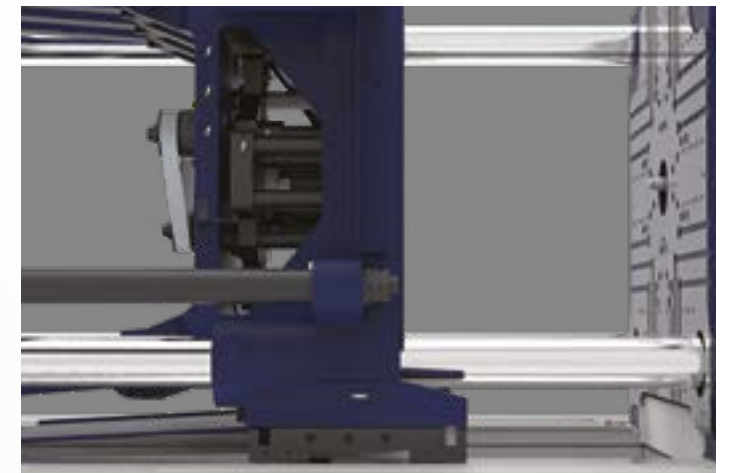
- » Intelligent algorithms ensure highly reactive and precise mold protection
- » Redesigned, compact structure of the toggle system for high rigidity and optimum plate parallelism
- » In combination with a highly reactive drive system, the dry cycle time could be decreased by 10% compared to Generation 2
- » Fully square tie bar distance offer more space for molds with high cavities
- » Linear guides ensure a dry, clean mold area and precise mold movements (optional)



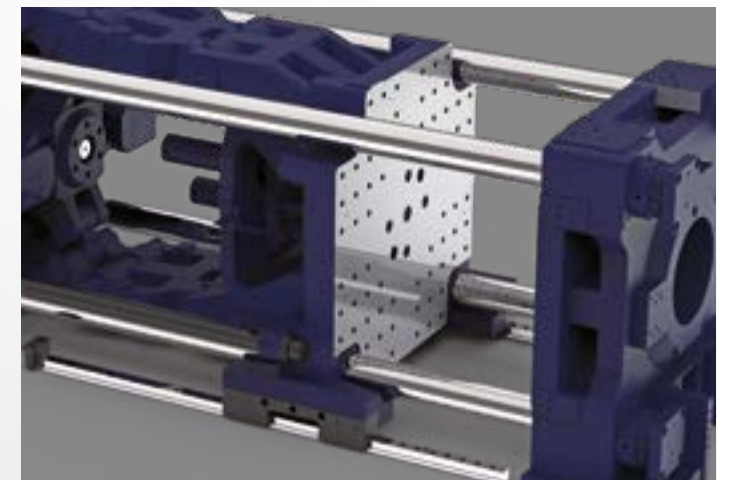
Mold Protection
Intelligent algorithms ensures highly reactive and precise mold



High Rigidity
More balanced and rigid supporting structure for movable platen, increased platen parallelism and higher loading capacity



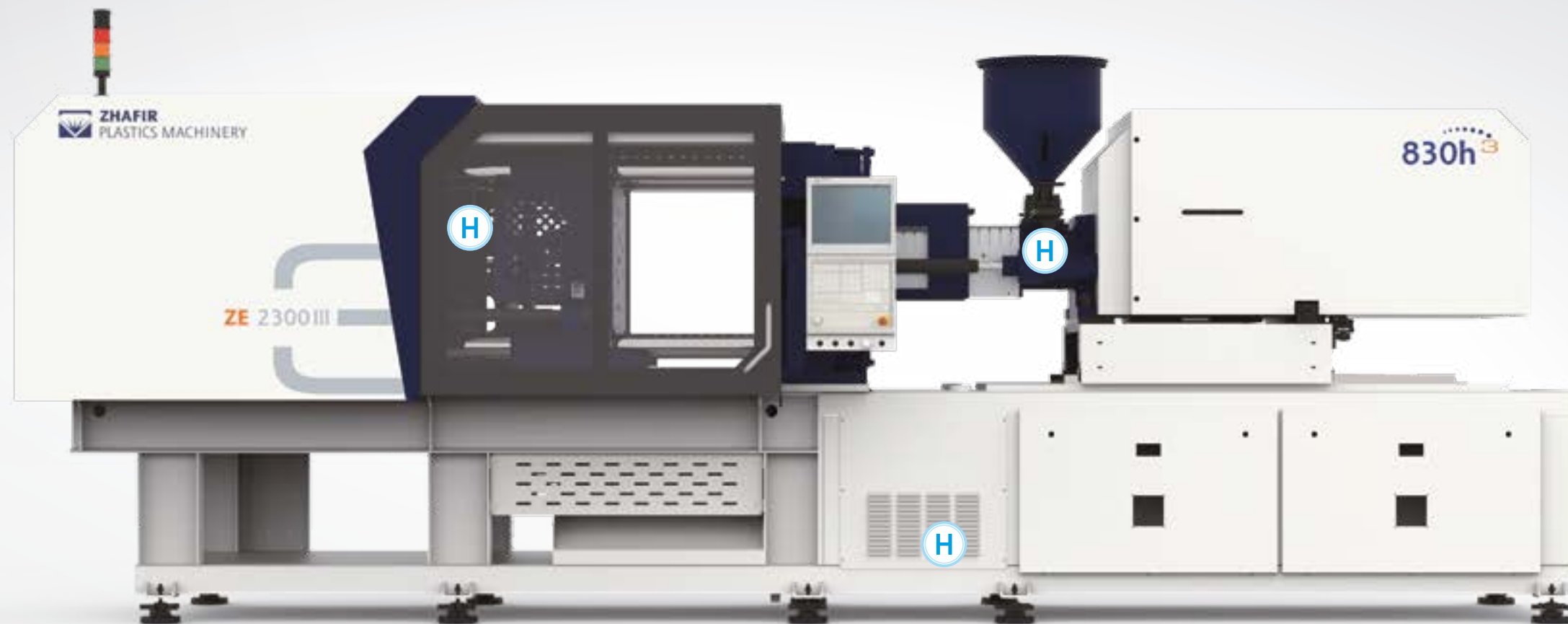
Clean & Precise
Optional linear guide for mold open/close and non-contact tie bar design for more clean and higher platen parallelism



400-13,800 kN
ZERES III SERIES

ELECTRIC. FLEXIBLE & EFFICIENT

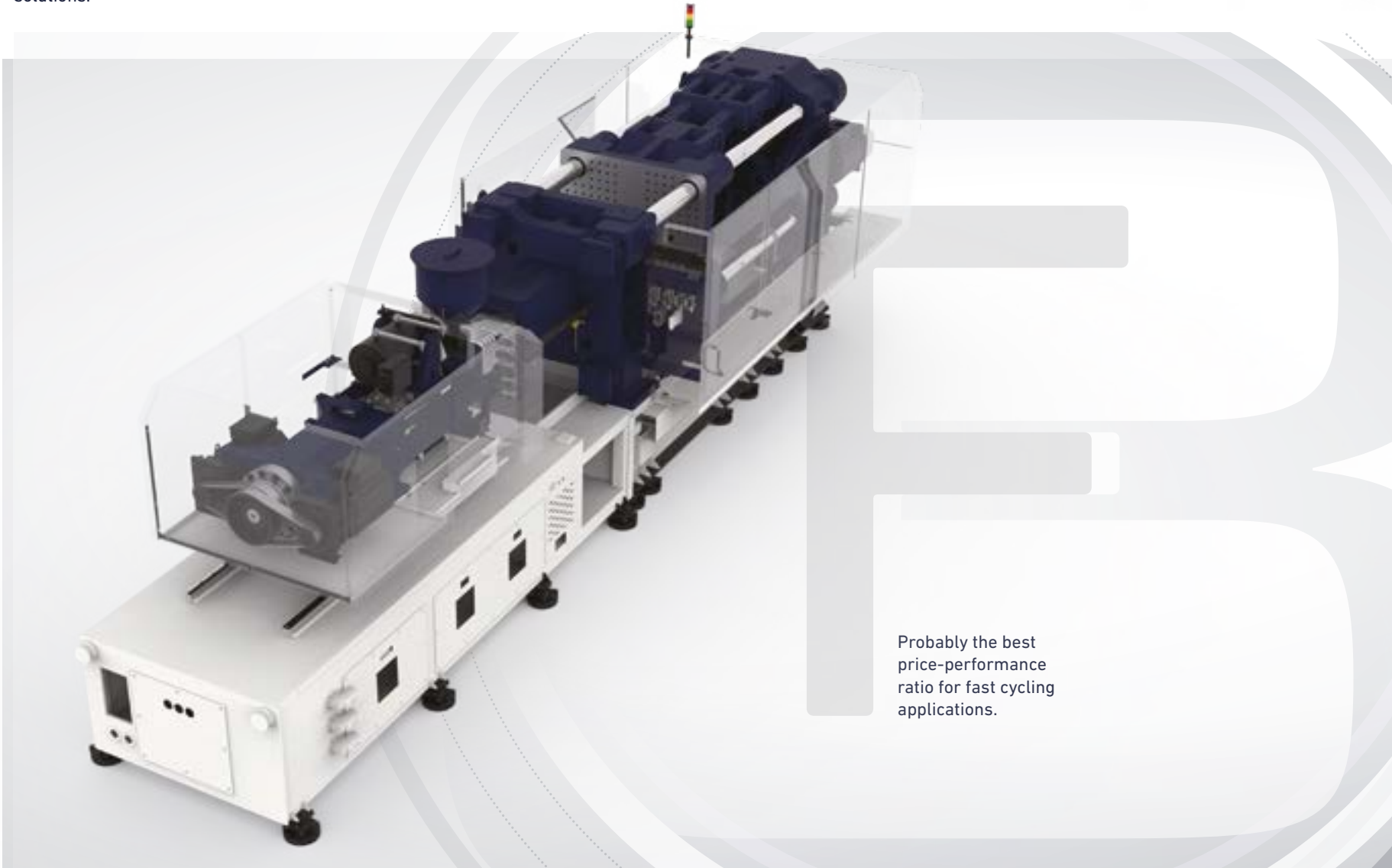
The Zeres Series builds a bridge from electric injection molding technology to traditional hydraulic machine applications. Identical in construction to the Venus Series, it also has integrated servo-hydraulics. Main movements such as mold and injection are electric, auxiliary axes such as nozzle contact, core pull and ejector are servo-hydraulic. The combination of both drive concepts enables a wide range of applications.



1,500-4,500 kN
ZERES-F SERIES

ELECTRIC. FAST & AFFORDABLE

Based on the 3rd Technology Generation, the Zeres-F offers all advantages of the electric Zhafir family. With an injection speed of 350 mm/s the ZE-F shows its strength for most of the packaging solutions.



Probably the best price-performance ratio for fast cycling applications.



3,600-33,000 kN JENIUS III SERIES ELECTRICAL HYBRID. TWO-PLATEN

The Zhafir Jenius Series is an innovative hybrid machine concept which combines the electric drive technology and the two-platen servo hydraulic system. Using our new modularity, the fully electric solution and the servo drive system can be combined in a highly efficient way, while their respective benefits are being retained.

- **MORE COMPACT DESIGN**
The compact design of two-platen structure offers a smaller footprint
- **BIGGER MOLD SPACE**
Extended opening and ejection stroke for diversified application needs

- **GROSSE DIMENSIONEN**
New solutions for injection units 12800, 17800, 22800
- **NEW GENERATION FOR HYDRAULIC SYSTEM**
Decreased dry cycle time and a remarkable energy-saving effect

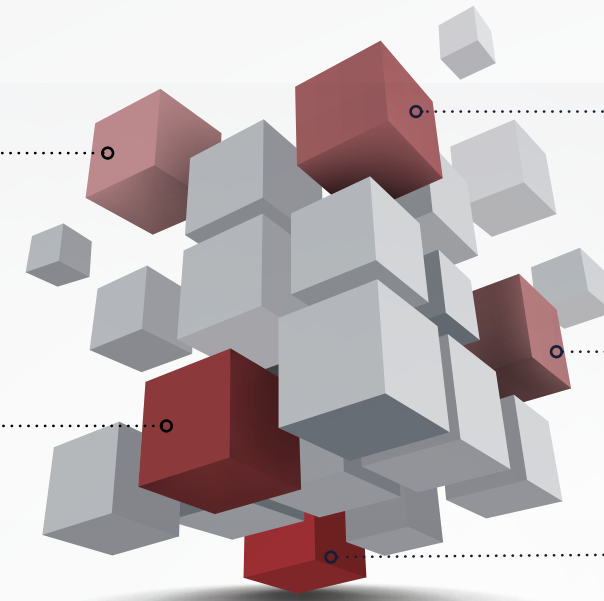
Electrical injection
Process constancy, precision, energy saving during charging

Servo-hydraulic mold open/close
Big daylight, large opening stroke

Servo-hydraulic core puller
Meets the requirements of 80-90% of European molds

Servo-hydraulic nozzle carriage
Adjustable nozzle touch pressure

Servo-hydraulic ejection
Keeps ejector back pressure during all cycles



Match sophisticated technologies together

TWO-PLATEN CLAMPING UNIT
Space saving, compact, cost effective, large mold space

ELECTRICAL INJECTION UNIT
Precise, dynamic, energy saving, parallel movements



ZHAFIR MULTI SOLUTIONS

PROVIDING IDEAL & ECONOMIC SOLUTIONS

Electrical multi-solutions from Zhafir offer all the advantages of electrical machine technology: precise, quiet, energysaving, maintenance-friendly and extremely flexible integration into upstream and downstream automated production processes.

Although any multi-component product can be achieved with any of the following injection unit layouts, the most suitable solution for the actual operating conditions should be selected to reduce time and economic costs.



MANUFACTURING POWER IN CHINA.



230,000+
SQM
production area
in China and Germany



600+
EXPERTS
available worldwide



20,000+
MACHINES
delivered to customers
until 2020

QUALITY AND AVAILABILITY THROUGH EFFICIENT PRODUCTION

The success of Zhafir Plastics Machinery is based on the careful and detailed planning of structures and processes in all areas of our plant. In addition, we can rely on our highly specialized management and over 50 years of experience of the entire Haitian Group.

At the same time, the combined use of innovative technologies, effective organisation and highly motivated employees ensures smooth processes in all assembly and production processes - including quality control from A to Z. Short reaction times, efficient automation and sophisticated logistics are the key to this high productivity. Machine components, parts and important small parts are not only stored centrally, but also in auxiliary warehouses near the production lines.



CUSTOMIZING & SERVICE IN GERMANY.

Teams of engineers from Chinese and German specialists are involved in a variety of group-wide R&D projects. In addition to the development of new technologies, this also includes machine-side optimizations that give plastics processors further competitive advantages and a wide range of advantages in everyday production.

The technical support of the worldwide sales and service teams with high-quality machine deliveries and tool tests plays an important role in this. In this way, we generate valuable information in order to remain competitive and to help our customers move forward. The outstanding price/performance ratio of our machines and the flexibly adaptable coordination of the most important purchase decision criteria create the best basis for the highest possible production efficiency and competitive advantages right from the start.



INTERNATIONAL SERVICE POWER.

Our experience over the last years provides us with solid foundation to take care of what our customers really need. We have been sustainably developing our service team and service skills from learning from the past and accumulating practical experience. However, we are never satisfied and always keep on improving and continuously expanding our offer to the customers in terms of service and has therefore established an optimal and complete system for after-sale service with our subsidiaries and around 60 sales and service partners in over 130 countries.



Our Principle
Sincere service;
sustainable pursuit of perfection



Our Promise
Customer oriented service
24/7 service hotline*



Our Standard
Visit on time, finish as soon as possible; settlement at one time



Our Target
Timely and highly efficient service for customer satisfaction

*) Offered by all service center in China



WORLDWIDE NETWORK

There are currently 60 regional sales and service centers for customers in over 130 countries.

In cooperation with the experts and service partners of the Haitian Group, we are not only able to react speedily to new market and sector requirements, but also to implement individual equipment features, certifications, and new applications for our customers on site.

CUSTOMER SUPPORT AROUND THE GLOBE.



1_CHINA
 » Located in Chunxiao, Ningbo
 » Headquarter of Zhafir Plastics Machinery
 » Manufacturing site with 230,000 sqm
 » Application center for mold testing

2_GERMANY
 » Located in Ebermannsdorf
 » Land area about 25,000 sqm
 » Sales and service for German market
 » Training and technical support for customers and distributors in 18 countries

3_MEXICO
 » Located in Mexico City
 » Sales and service organization
 » 2,300 sqm for service and stock control
 » 200 sqm application center for mold testing

4_BRAZIL
 » Located in Sao Paulo
 » Sales and Service organisation
 » Land area about 12,000 sqm

5_INDIA
 » Located in Gujarat
 » Sales and service organization
 » Land area about 51,800 sqm
 » Application center for mold testing

6_INDONESIA
 » Located in North Jakarta
 » Sales and service organization
 » Application center for mold testing
 » 3,000 sqm for service and stock control

7_VIETNAM
 » Located in Binh Duong Province
 » Sales and service organization
 » Land area about 25,000 sqm
 » 80 sqm application center for mold testing

8_TURKEY
 » Located in Istanbul
 » Sales and service organization
 » Land area about 11,000 sqm
 » Application center for mold testing

9_THAILAND
 » Located in Bangkok
 » Sales and service organization
 » 1,400 sqm for service and stock control
 » 200 sqm application center for mold testing

10_JAPAN
 » Located in Odawara Kanagawa, Japan
 » Sales and service organization
 » 300 sqm for service and stock control
 » Application center for mold testing

NINGBO ZHAFIR PLASTICS MACHINERY MANUFACTURING CO., LTD.
NO. 98, GUANHAI ROAD,
CHUNXIAO, BEILUN, NINGBO, ZHEJIANG,
P.R.CHINA 315830

TEL: +86 574 86182985 / 86182986
FAX: +86 574 86182926



www.zhafir.com



GREEN VANTAGE

This brochure is printed on 100% recycling paper,
carbon neutral and with solvent-free inks.