

## **ENGEL at Interplastica 2022**

# **Leverage the full potential of ENGEL injection moulding machines**

Schwertberg, Austria – December 2021

**Interplastica 2022 is ready. From 25 to 28 January, the OOO ENGEL team is delighted to personally welcome its customers and partners to its stand in Moscow again. The injection moulding machine manufacturer and system solution provider headquartered in Austria is making the huge potential of innovative digital solutions tangible by producing technical parts live on a tie-bar-less victory injection moulding machine.**

Parts with strict requirements are being produced on a tie-bar-less ENGEL victory 80 injection moulding machine during the four days of the fair. Three smart assistance systems from ENGEL's inject 4.0 program ensure very high production efficiency accompanied by consistently high product quality: iQ weight control, iQ clamp control and iQ melt control.

### **Compensating for fluctuations in the raw material in real-time**

In each individual cycle, iQ weight control analyses the pressure and speed profile during the injection phase and compares the measured values with a reference profile. The injection profile, the switchover point and the holding pressure are automatically adjusted to the current conditions. This means that fluctuations in the raw material and ambient conditions are automatically detected and rejects are proactively prevented.

iQ clamp control determines the optimum clamping force for the injection moulding process in question on the basis of mould breathing. In many cases, overmoulding and flash can therefore be reliably ruled out. On top of this, mould venting is improved and the mechanical load on the mould is reduced.

**ENGEL**  
be the first

ENGEL AUSTRIA GmbH | A-4311 Schwertberg | tel: +43 (0)50 620 0 | fax: +43 (0)50 620 3009  
sales@engel.at | www.engelglobal.com

The third smart assistance system in this team is iQ melt control, which optimises the plasticising process. The software determines the optimum plasticising time for the application in question. Instead of plasticising at the maximum possible speed, the system fully leverages the part's in-mould cooling time for the plasticising movement. This leads to improved melt homogeneity and is gentle on both the screw and the material, which in turn improves product quality.

Intelligent assistance is an essential characteristic of a smart factory. "The smart assistance systems help to leverage the full potential of the injection moulding machine," says Walde-mar Birkle, the Managing Director of OOO ENGEL in Moscow. The modular approach of ENGEL's inject 4.0 program makes it very easy for plastics processors to grasp the opportunities which digitalisation presents. "Even individual solutions such as the iQ products promise considerable benefits," says Birkle. "And it is thanks to these same solutions that the first steps towards the smart factory are being taken on many shop floors."

### **Compact machines for superior cost efficiency**

In terms of design, too, the victory injection moulding machine presented at Interplastica 2022 pulls out all the stops for impressive process consistency. The tie-bar-less clamping unit maintains the outstanding parallelism of the mould mounting platens during clamping force build-up and injection. At the same time, the force dividers distribute the clamping force evenly over the mould mounting platens.

Because there are no tie bars in the way, the mould mounting platens can be fully used up to their very edges. This means that very large moulds, such as multi-cavity moulds or moulds with core-pulls, fit on relatively small injection moulding machines. This keeps both capital expenditure and operating costs low while enabling compact production cells. Further benefits of tie-bar-less technology include fast mould setup processes and efficient automation solutions.

In the field of technical moulding, the tie-bar-less victory injection moulding machines by ENGEL are the preferred machine type. Well over 1000 tie-bar-less ENGEL victory machines are currently in use in Russia and Belarus.

**Live on site and virtual at the same time**

Personal contacts and face-to-face events always have been and always will be important – as was confirmed by the first face-to-face events after more than a year of the Corona pandemic. Even though the pandemic has shown in the past few months that digital formats work very well, and even offer advantages in certain areas. "The future is hybrid," Waldemar Birkle is convinced. He invites all customers, partners and interested parties to additionally visit ENGEL's virtual world. More than 20 machine exhibits with many challenging applications are waiting to be explored in the virtual showroom. Beyond this, there are technical presentations, business talks and virtual tours of ENGEL's Austrian production plants. All content on the platform is available at all times, unaffected by travel restrictions and time zones.

**ENGEL at Interplastica 2022: Hall 2.1, Stand B23**

**ENGEL's virtual world: [www.engelglobal.com/virtual-world](http://www.engelglobal.com/virtual-world)**



With their tie-bar-less clamping units, ENGEL victory injection moulding machines combine high production efficiency with consistently high component quality.



Without iQ weight control on the left, and with iQ weight control on the right: the software automatically detects changes in the raw material and automatically compensates for them within the same cycle.



More than 20 machine exhibits and many challenging applications are available in the showroom to visitors of ENGEL's virtual world.

Pictures: ENGEL

## ENGEL AUSTRIA GmbH

ENGEL is one of the global leaders in the manufacture of plastics processing machines. Today, the ENGEL Group offers a full range of technology modules for plastics processing as a single source supplier: injection moulding machines for thermoplastics and elastomers together with automation, with individual components also being competitive and successful in the market. With nine production plants in Europe, North America and Asia (China and Korea), and subsidiaries and representatives in more than 85 countries, ENGEL offers its customers the excellent global support they need to compete and succeed with new technologies and leading-edge production systems.

**ENGEL**  
be the first

ENGEL AUSTRIA GmbH | A-4311 Schwertberg | tel: +43 (0)50 620 0 | fax: +43 (0)50 620 3009  
sales@engel.at | www.engelglobal.com

Contact for journalists:

Ute Panzer, Vice President Marketing and Communications, ENGEL AUSTRIA GmbH,  
Ludwig-Engel-Straße 1, A-4311 Schwertberg/Austria,  
Tel.: +43 (0)50/620-3800, Fax: -3009, E-mail: ute.panzer@engel.at

Susanne Zinckgraf, Manager Public Relations, ENGEL AUSTRIA GmbH,  
Ludwig-Engel-Strasse 1, A-4311 Schwertberg, Austria  
PR Office: Theodor-Heuss-Strasse 85, D-67435 Neustadt, Germany,  
tel.: +49 (0)6327 976 9902, fax: -03, e-mail: susanne.zinckgraf@engel.at

Contact for readers:

ENGEL AUSTRIA GmbH, Ludwig-Engel-Strasse 1, A-4311 Schwertberg, Austria,  
Tel.: +43 (0)50 6200, fax: -3009, e-mail: sales@engel.at

Legal notice:

The common names, trade names, product names and similar cited in this press release are protected by copyright. They may also include trademarks and be protected as such without being specifically highlighted.

[www.engelglobal.com](http://www.engelglobal.com)