

//polytype at K2022 in Düsseldorf



K2022
in Düsseldorf / Germany
19.10.-26.10.2022
Booth 4 C 56
VISIT US!

When harnessing change in innovation ...
your new partner for compression molding



K 2022: //polytype –
high performance for your digital future 3



Global innovation: The //polytype HC130 is
revolutionizing the compression molding
process in plastic tube manufacturing 4



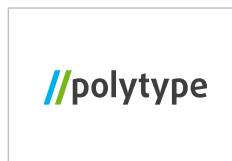
//polytype: Increasing productivity with process
offset printing and the Linearis 6



The RDA24-150-X combines dry offset printing,
labeling and cap application in a single machine 8



Industria Bandeirante, a Brazilian pioneer for
packaging containers goes digital 9



//polytype worldwide 12

IMPRINT:

Polytype SA
26, rte de la Glâne
CH – 1701 Fribourg Switzerland

Contact: Siegfried Joneleit
Phone : +41 26 426 13 30

K 2022: //polytype starts the trade fair with a global innovation

K 2022, the leading trade fair for the plastics industry, gives //polytype a unique opportunity to present the latest developments in the field of tube manufacturing.



At K 2022, //polytype will present a global innovation and milestone in the production of plastic tubes. A tube becomes a tube when a tube shoulder is applied to a sleeve using compression molding before being capped. The new //polytype HC130 combines these two processes in a single machine. At the K 2022, visitors will have the opportunity to see the revolutionary ORBITdrive concept in action live on the HC130.

Digital printing is not the only topic //polytype will be focusing on at K. It will also be demonstrating a business model that uses a cloud-based online shop solution to enable users to expand

their digital tube printing capacities in a cost-effective manner.

Alongside the central topic of digital printing, //polytype will also be displaying its expertise conventional printing that goes hand in hand with plastic tube decoration. These skills will be exhibited at the "Point of Knowledge" section of the stand. //polytype will showcase a new kind of prime offset process, standard offset decoration, and additional decoration processes. Flexo, process offset printing, screen-printing and hot stamping are all used on the Linearis.

In addition, //polytype will also be presenting another technical innovation that rightly bears the "Green Technology" label. LED drying is an eco-friendly and cost-effective alternative to standard UV drying for cup decoration.

Visitors will also have an opportunity to find out more about a significant improvement in dry offset print quality. Danish company Windelev, an expert in the manufacturing of printing plates, will be on site to answer any questions you may have.

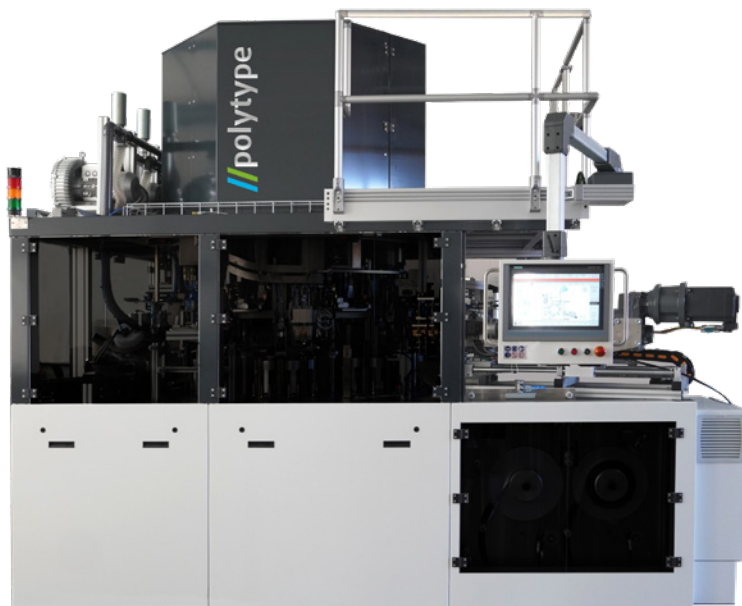
Furthermore, Bulgarian company Mechatronica, will be presenting its latest developments in the field of laminated tube production – developments that are exceptionally cost-effective.

As you can see, there are plenty of great reasons to visit the world's largest trade fair for the plastics industry in Düsseldorf. **The K 2022 will be held from the 19th to 26th of October 2022. You may find us in Hall 4 at stand C56.**

...And, if you visit our stand after 4 p.m., there might be a tasty surprise waiting for you. More information will be available in the invitation we will be sending out shortly!

Global innovation: The //polytype HC130 is revolutionizing the compression molding process in plastic tube manufacturing

//polytype, the leading manufacturer of production lines for cosmetics tubes, is expanding its portfolio of plastic tube manufacturing processes.



In addition to its well-known and highly popular existing range of systems, including decoration, transfer lines and tube capping, //polytype now offers the option to create a tube from an extruded sleeve using a compression molding process.

The HC130 uses compression molding to produce tubes, a technique with a long history in the industry. The process consists of applying tube shoulder to one end of a sleeve in order to create a tube before being compressed and molded in place. Optimized temperature regulation and a continuous donut

dispensing system ensure precise and stable shoulder shaping for a consistent shoulder quality.

The capping takes place at a later stage in the process. A seal may be applied to the tube if required. Then a cap is screwed on at a specified torque, or a positioned press-on cap is added. Secure protection for liquid, semiliquid and paste-like products is guaranteed.

The HC130 is powered by a unique OR-BITdrive system. The tube sleeve is loaded onto a mandrel on a continuous rotation where it undergoes shoul-

der forming, cooling, membrane application, where required, press-on or screw-on oriented capping and quality control with each rotation. The tube remains on the same mandrel throughout the entire manufacturing process with no transfer required in between stages. This concept allows for a highly compact design, therefore the HC130 boasts a very small footprint.

//polytype has been known for many years for its innovations in the decoration of plastic tubes and cups, as well as aluminum tubes and cans. Aside from

>>>

being a leader in developing and manufacturing standalone tube packaging machines, //polytype also spearheads in the design, construction and supply of complete production lines. Today with the addition of the HC130 Header and Capper tube production machine, the Swiss solution provider now covers the entire tube manufacturing process. The HC130 may be combined with //polytype storage and decorating systems to create the PolyLine; a turnkey solution making //polytype the only provider of lines in the market that cover the majority of the production steps-from tube creation and capping to decoration.

Customers may choose from an impressively wide range of different decoration processes: dry offset, process offset, flexo printing, screen-printing and hot stamping, as well as digital printing for tubes and sleeves. The //polytype development team has once again brought forth another global revolution that combines innovation, performance, and reliability. After all, it's what they do!



//polytype: Increasing productivity with process offset printing and the Linearis

The process offset option on the Linearis provides a significant increase in productivity and quality on plastic tube printing compared to flexo printing processes.



machine from Polytype S.A. (Fribourg, Switzerland) enables users to integrate process offset printing units that can achieve tonal values of 0% to 100% at full printing speed, alongside more commonplace printing processes.

Swiss innovator, //Polytype, is known for its reliable tube printing machines that primarily use flexo print units for photorealistic tube printing. The choice to use offset quality printing was incorporated into the Linearis some years ago. In process offset printing, each individual ink color in the four-color se-

film of UV-curing ink and then cured before entering the next printing unit. The combination of flexo and screen-printing units together with hot foil embossing and subsequent varnishing enables //polytype customers to create highly attractive plastic packaging.

With the process offset print units, stunningly accurate tonal values of 0% to 100% can be achieved with excellent coverage. Color changes can be carried out quickly and easily with the inking unit. The same can be said of print pressure configuration, which is

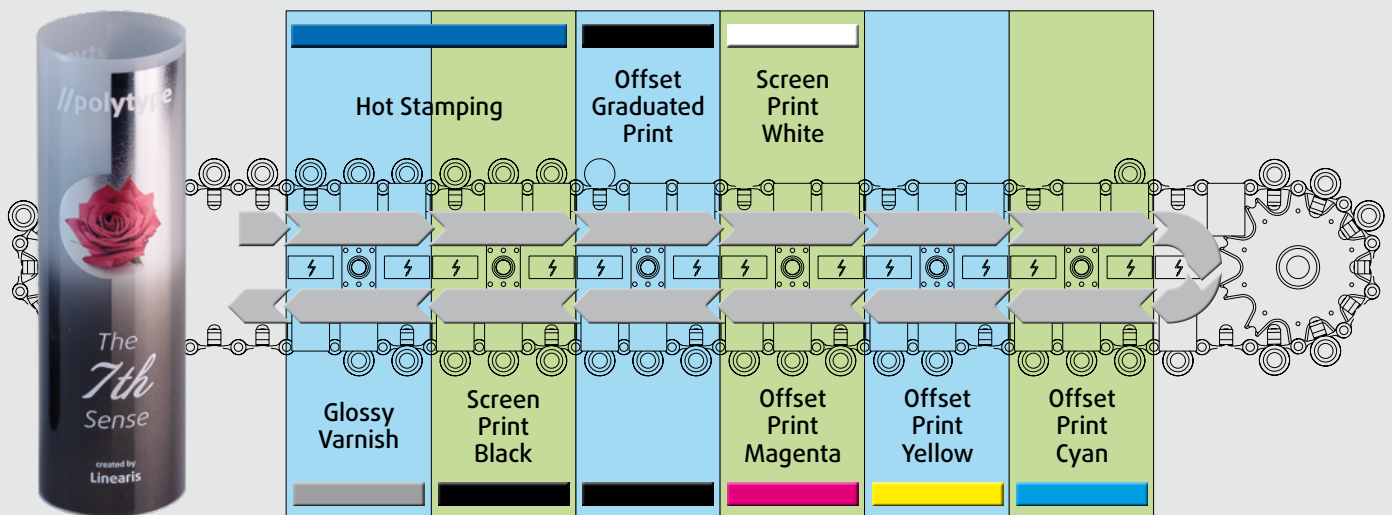
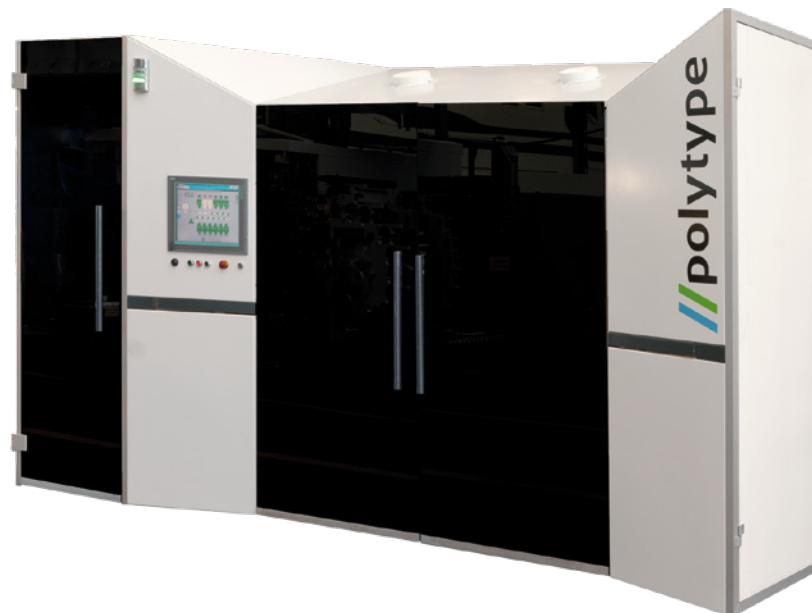
not possible to do the same way with flexo printing.

The offset printing plates are suitable for larger runs with significantly fewer required plate changes, than with flexo printing. In addition to a clear and sharp print image, with resolutions of more than 180 lpi and a print result almost completely free from dots, offset quality also ensures an extremely stable printing process. The introduction of this new printing technology will therefore increase productivity in decoration.

>>>

Some customers have carried out their own objective comparisons between flexo printing and process offset printing processes. Their tests have shown that the process offset printing solution has clear benefits for large batch runs, in terms of both; print image stability and productivity, while the flexo printing process, achieves excellent color intensity.

Since the //polytype Linearis offers both techniques, the user can choose the process that best suits their design and production requirements.



Multi-decoration of tubes with 6 segments and 10 modules

Example of 7-color printing plus hot stamping and varnishing on a 10-color machine with 6 segments

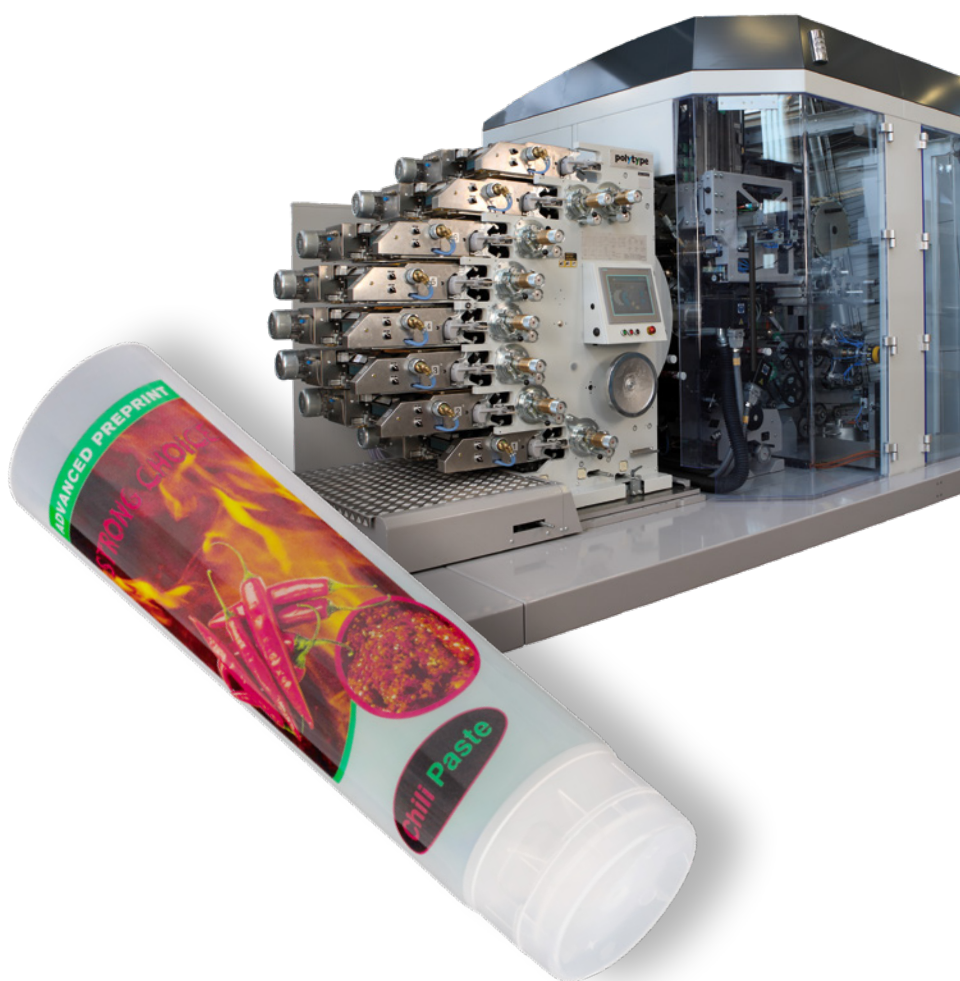
The RDA24-150-X combines dry offset printing, labeling and cap application in a single machine

The RDA24-150-X is a complete and versatile solution for final tube processing and decoration. It provides cost-effective tube decoration by using dry offset printing with the application of high-quality labels, complete with prior capping.

The RDA24-150-X is a truly compact solution designed for a vast range of applications and can be used to decorate a tube and apply the cap. The concept of this machine starts by the application of a membrane seal followed by adding either a screw-on cap or a press-on cap to the tube. The tube is then decorated using a dry offset printing process. The offset printing unit is equipped with eight inks that are applied with impeccable precision that results in high-quality decoration. If needed, the decoration can also be printed onto the tube in the position required. However, if dry offset decoration is not sufficient, there is also the option to put a labeling station in place of the dry offset printing unit on the same machine. This dual station system functions by sliding out the dry offset printing unit and sliding the labeling unit into its place. This allows users the ability to apply a high-quality decorated label onto the tube in the perfect position after capping.

The RDA24-150-X is designed for speeds of up to 150/min when processing standard tube sizes.

The RDA24-150-X is a compact and cost-efficient solution for the decoration and final processing of tubes. This machine can be used in both in-line and off-line configurations.



Industria Bandeirante, a Brazilian pioneer for packaging containers goes digital

The long-established, family-owned company, Industria Bandeirante, founded in 1945 in São Paulo, Brazil, has been a pioneer in the processing of PET for many decades. At a later stage, the production of packaging was added.

With the purchase of the //polytype DigiBottle, Industria Bandeirante was once again able to position itself in the market as a trailblazer in packaging technology.

Industria Bandeirante has been producing high-quality plastic packaging solutions made from PET, PET G, PS and PP for many decades; mainly for the household goods market, but also for the food, chemical, pharmaceutical, and cosmetics industries. With a workforce of 250 employees, the company mainly serves its domestic market, although a certain percentage of its production is also exported abroad.

For many years, Industria Bandeirante has been using the screen-printing process to decorate the containers at their site. Screen-printing is a common process primarily known for its vivid and opaque colors, but it also has its drawbacks. For example, it lacks the ability to create photorealistic designs and it is limited to a certain number of colors. These limitations and the need to decorate small print batches at low-cost led Industria Bandeirante to think about a digital decoration solution. The question then became: Does a high-

>>>



ly efficient digital decorating machine that could meet Industria Bandeirante's needs already exist?

Their search for the right machine came to a happy end after their visit to //polytype's stand at the NPE trade fair in Orlando, FL, USA. Polytype had the right solution for Industria Bandeirante's needs.

The decision to opt for the //Polytype DigiBottle was made quickly. The machine opened up new possibilities for the decoration of bottles: Higher-quality photorealistic images as well as the possibility to print different designs in a single printing run for their customers. This acquisition significantly expanded Industria Bandeirante's range of products offered to their customers.

The pandemic also had an impact on this project. Although the DigiBottle is a highly sophisticated printing machine,

Industria Bandeirante was able to successfully install it in Brazil on its own, thanks to the highly-skilled technicians at Industria Bandeirante and the outstanding remote assistance from Polytype.

Now, after more than two years in production, we can draw a positive conclusion that the DigiBottle completely meets the expectations placed on this machine. Its versatility allows the operator to produce a large number of variable print designs in small batches with the ability to change the images in just a few seconds.

Industria Bandeirante has maintained an innovative spirit since the outset, and when asked how they see the future, they reply: "The investment in the DigiBottle allows us to have a unique selling proposition with which we can face the future with confidence."





DigiTube / DigiCan



DigiCup / DigiBottle



DigiLid



Cans



Closures



Tubes



Bottles and Jars



Cups



Lids and Boxes

K2022
in Düsseldorf / Germany
19.10.-26.10.2022
Booth 4 C 56
VISIT US!

//polytype, the Swiss expert for digital printing is a decoration machine provider for different packaging solutions such as cosmetic tubes, jars, cups, lids, bottles and closures.

The key to your success

- // 360° service from a single supplier
- // Highly reliable printing machines with high level productivity
- // Solution for fast design changes and photorealistic decoration

//polytype – your partner for digital decoration
For further information visit:
www.polytype.com or info@polytype.com

Polytype AG
26, route de la Glâne
CH-1701 Fribourg/Schweiz

Telefon +41 26 426 11 11

info@polytype.com
www.polytype.com

SCHWEIZ

WIFAG-Polytype Holding AG
Fribourg/Schweiz

Polytype AG
Fribourg/Schweiz

BULGARIEN

Mechatronica AG
Gabrovo/Bulgarien

ASIEN

**Wifag-Polytype India
Marketing Private Ltd.**
New Delhi/Indien

Polytype Asia Pacific Co., Ltd.
Chachoengsao/Thailand

AMERIKA

Polytype America Corp.
Lincoln Park, NY/USA

