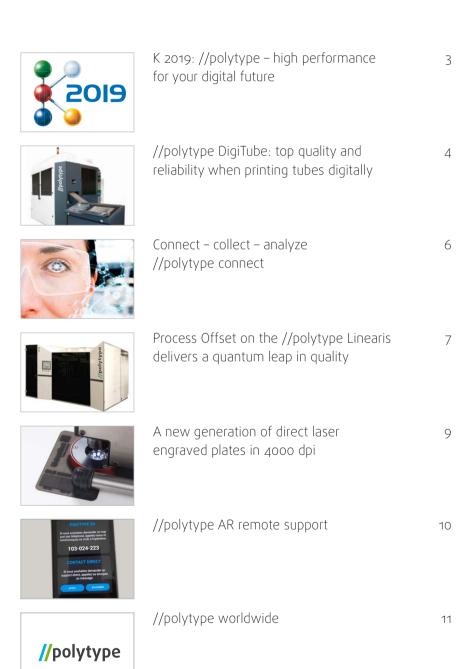
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poly//topics



K 2019: //polytype – high performance for your digital future



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K 2019, the leading trade fair for the plastics industry, is offering //polytype a special opportunity to present the latest developments in the field of tube decoration.

Digital decoration began its success over four decades ago. First in the decoration of flat substrates and then also in the decoration of bodies. Today, digital printing is a main printing method that has not only revolutionized the flatbed printing market, but will also revolutionise the body decoration. //polytype, the leading manufacturer of tube decoration machines, is at the forefront of this revolution. To illustrate this, at the trade fair //polytype will be demonstrating the productionready digital printing machine for tubes and sleeves, the DigiTube, which reliably meets the requirements of today's market.



Beside this, a main topic during the K-fair will be the next technical revolution "Industry 4.0" or "IoT", and as well a new Service tool with the name "AR remote support tool". //polytype explain and show which benefits can be provided with this new digital innovations.

In addition to the main topic of digital printing, the competences of //polytype in the other disciplines of the decoration of plastic tubes will also be presented. Such competences are to be illustrated by means of the "Point of Knowledge". As such, it will be possible to get a unique overview of all decoration types on tubes at //polytype. This is referred to as standard dry offset printing, screen printing, flexo printing

and hot stamping. The process of offset printing, which is implemented on the Linearis machine, is also highlighted. This printing process sets a new milestone in the decoration of plastic tubes, which is why it is really worth visiting us to find out more.

Should requirements call for further solutions in the production of laminate tubes, Mechatronika is the right partner here for a competitive approach.

It is as well possible to learn more about a substantial improvement in print quality. The company Windelev from Denmark, an expert in the production of dry offset printing plates, is at your disposal for any questions you may have.

So, there are plenty of good reasons to drop by and pay us a visit at the world's largest trade fair for the plastics industry in Düsseldorf, Germany.

K 2019 is open from October 16-23, 2019, and you can find us at Stand C56 in Hall 4.

By the way, there will be something special on offer for any hungry quests visiting our stand after 4:00 p.m. You can find out more on the invitation that will be sent out shortly...

//polytype DigiTube: top quality and reliability when printing tubes digitally

At K, the Swiss solution provider will be showing its new development that prints complete plastic tubes digitally.

//polytype is bringing Swiss mechanical engineering precision to printing plastic tubes digitally. With its compact new DigiTube solution, Polytype S.A. (Freiburg/Switzerland) is showing that tube decoration can be both highly flexible and fast. Anyone who wants to experience this live will have the opportunity to do so at K from October 16-23, 2019 in Düsseldorf (Hall 4, Stand C56).



At K 2019, the Swiss innovator //polytype will be showing its in-house DigiTube development for digitally decorating complete plastic tubes. Long known for its RDA precision offset presses, //polytype has also been successfully involved in digital printing since 2008. Complementing its classic tube presses, such as the Linearis and digital printing solutions such as the DigiCup and the DigiLid, it is now launching its new DigiTube development, which sees //polytype apply its combination of precision mechanical engineering and digital printing expertise to tube printing. The DigiTube is making its first appearance at a show in Düsseldorf.

The //polytype DigiTube can decorate plastic sleeves, tubes and even complete tubes including their caps. With a maximum printing width of 210 mm, it is able to decorate up to 120 tubes per minute with diameters of 19 mm up to 50 mm and lengths of 215 mm. The overlapping print heads allow an opaque white pre-print, four color printing and subsequent coating. It can offer resolutions to satisfy the highest demands with a single pass or in multi-pass mode. Numerous practical details make the DigiTube easy to operate and ensure its long-term reliability. These include the ability to slide out the ink tank holder, the pivoting UV curing unit or the recirculating opaque white.



The //polytype Group digital printing development team has been responsible for ensuring that the DigiTube delivers the customary Swiss print quality; and the primary focus of its years of research has been to combine industrial production and precision printing in the best possible way. In-house //polytype developments include, first and foremost, the CALMAR System, which controls the inkjet heads and which in turn integrates further inhouse developments in the form of the software solution and ink supply. The stitching software that makes seamless images of any size possible is another piece of //polytype know-how. Naturally the UV-cured inkjet inks fulfill the demands for low migration.

The DigiTube is also ideally suited to being used in conjunction with analog tube presses in order to exploit the advantages of both processes.



Connect – collect – analyze

Polytype Connect is a new service introduced by Polytype Digital Services. It allows the production of containers to be made smarter by connecting the related machines to the Polytype cloud.



their production and make data-driven decisions to optimize the uptime and productivity of their assets. They can convert real-time data to actionable insights and stay aligned with their production goals. They can also see what is happening across machines, production lines and factories in a visual and intuitive way - from wherever they are, by using their computer, smartphone or tablet and our modern web-based user interface.

Key features:

- Monitor production KPIs and current condition of machines in real time
- Visualize upcoming maintenance operations
- Track scrap and unplanned machine stops
- Record and analyze usage of consumables*
- Production statistics per job*
- Compare metrics across machines, lines or production sites
- Modern cloud-based SaaS solution (pay-per-use)
- Responsive web-based user interface

Our portfolio of innovative digital products and services can help to protect our customer's investment and improve their bottom line.

^{*}currently only available for digital printing machines

Process Offset on the //polytype Linearis delivers a quantum leap in quality

At K, the Swiss solution provider is presenting a solution for its best in class printing machine for plastic tubes with a new type of offset printing unit.



//polytype is opening up the prospect of a quantum leap in the quality of plastic tube decoration. The best in class Linearis press from Polytype S.A. (Freiburg/Switzerland) can now also incorporate Process Offset printing units that are capable, for example, of screen gradations from 0 to 100% at full printing speed. Anyone who would like to learn more about it should visit us in Hall 4, Stand C56, at K (Düsseldorf/October 16-23, 2019).

The Swiss innovator //polytype is well known for its reliable tube presses, which have used flexo units to deliver the photorealistic printing of cups and tubes; and //polytype users have been able to produce highly attractive plastic packaging by combining flexo and screen units together with hot foil stamping and coating units.

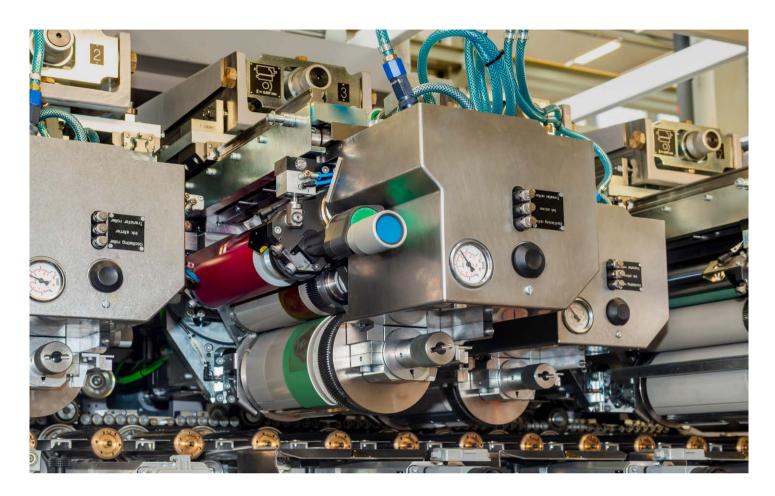
2019 is the year that //polytype brought genuine offset quality to plastic tubes. This brand-new //polytype development is a world first and, although it

too lacks a damping unit, it should in no way be confused with the classic dry offset printing that the Swiss manufacturer has long been known for.

In Process Offset each ink in a four-color sequence is separately applied as a thin film of UV ink and then cured before reaching the next printing unit, whereas in dry offset all the inks are laid down on a single blanket before being transferred to the substrate and subsequently dried. The development team at //polytype has managed to design offset printing units that are as compact as //polytype flexo units, making it possible to deliver really striking packaging, especially when used in combination with screen printing and hot foil stamping.

The Process Offset units are capable of reproducing the finest screen gradations from 0 to 100% with good opacity values. The ink train allows color adjustments to be made simply and rapidly and the same is true for the adjustment of the impression pressure. The offset plates are also capable of long runs and considerably fewer plate changes are required than with flexo printing.

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Besides sharp-edged type, screen rulings of more than 180 lpi and a printed result that exhibits no dot gain, offset quality also means an extremely stable printing process. The addition of this new printing technology can therefore also deliver enhanced productivity in the decorating process.

The first //polytype Linearis featuring Process Offset technology is actually already being used by customers and further presses have already been ordered. //polytype is expecting considerable public interest in its presentation at K and further demand. What you can expect to see is print quality on plastic tubes taken to a completely new level.

A new generation of direct laser engraved plates in 4000 dpi

Once again, a new standard is set by hl dryoffset with its state-of-the-art direct laser engraved elastomer plates in 4000 dpi.

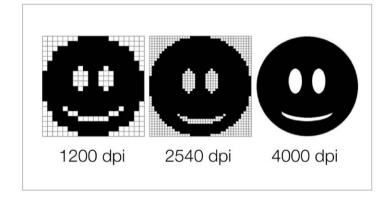
The unique combination of the new generation of elastomer plates, the latest engraving technology in 4000 dpi and our exceptional color separation technology creates yet another level in detail and sharpness in the final printed product.

The benefits of the new generation of elastomer plates in short:

- Only suitable plate for new 4000 dpi laser beam technology
- · Screens up to #54 dpi / 140 lpi
- Suitable for water, solvent and UV-curing ink systems
- Excellent overall dimensional stability
- · Less plate swelling
- Improved ink laydown
- Extremely durable and particularly resistant to UV inks
- Longer plate lifetime, up to +35%

Customer benefits:

- Enhanced printing sharpness
- More detail due to the 4000 dpi laser engraving
- Cost savings due to less ink waste
- Cost savings due to extended plate lifetime, up to +35%
- New benchmark in high-end tube, cups and can applications





For more information or trial plates, please contact http://hl-dryoffset.com





//polytype augmented reality (AR) remote support

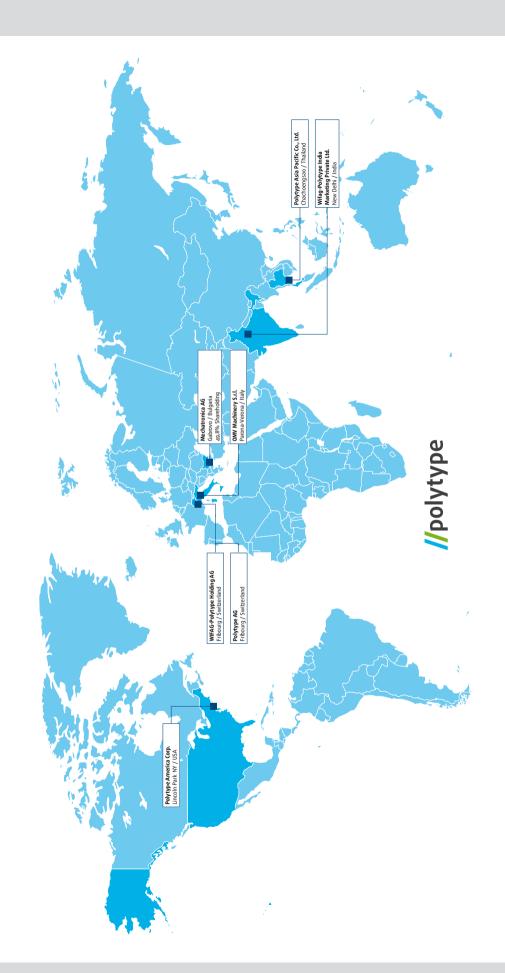
Thanks to the newly introduced //polytype AR remote support application, //polytype customers equipped with this technology can now communicate in real time and with unique convenience and efficiency with //polytype technical experts located at our three technical service hubs in Europe, Asia and the Americas for fast technical assistance.

//polytype AR remote support allows our customers not only to exchange videos and images but also to call //polytype experts and even chat with them in 60 different languages, while it permits //polytype experts to communicate graphic instructions in real time to its customers.

The benefits are many, with at the top of the list: fast and efficient support, high equipment productivity as well as a significant reduction in intervention cost in most cases. //polytype AR remote support can be set up in seconds and at zero cost using smartphones, tablets and smart glasses.

For a demonstration or additional information, please contact your usual //polytype support technician or the //polytype sales manager serving your company. //polytype AR remote support is one of the several new services introduced by //polytype digital services.





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High performance for your digital future



//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 supplyer
- // Highly reliable printing machines with high level productivity
- // Solution for fast design changes and photorealistic decoration

//polytype - your partner for digital decorationFor further information visit:
www.polytype.com or info@polytype.com





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

Telefon +41 26 426 11 17 Telefax +41 26 426 11 13

info@polytype.com www.polytype.com

SWITZERLAND

WIFAG-Polytype Holding AG Fribourg/Switzerland

Polytype AG Fribourg/Switzerland

ITALY

OMV MACHINERY S.R.L Parona-Verona/Italy

BULGARIA

Mechatronica AG Gabrovo/Bulgaria

ASIA

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

Polytype Asia Pacific Co., Ltd. Chachoengsao/Thailand

AMERICA

Polytype America Corp. Lincoln Park, NY/USA



