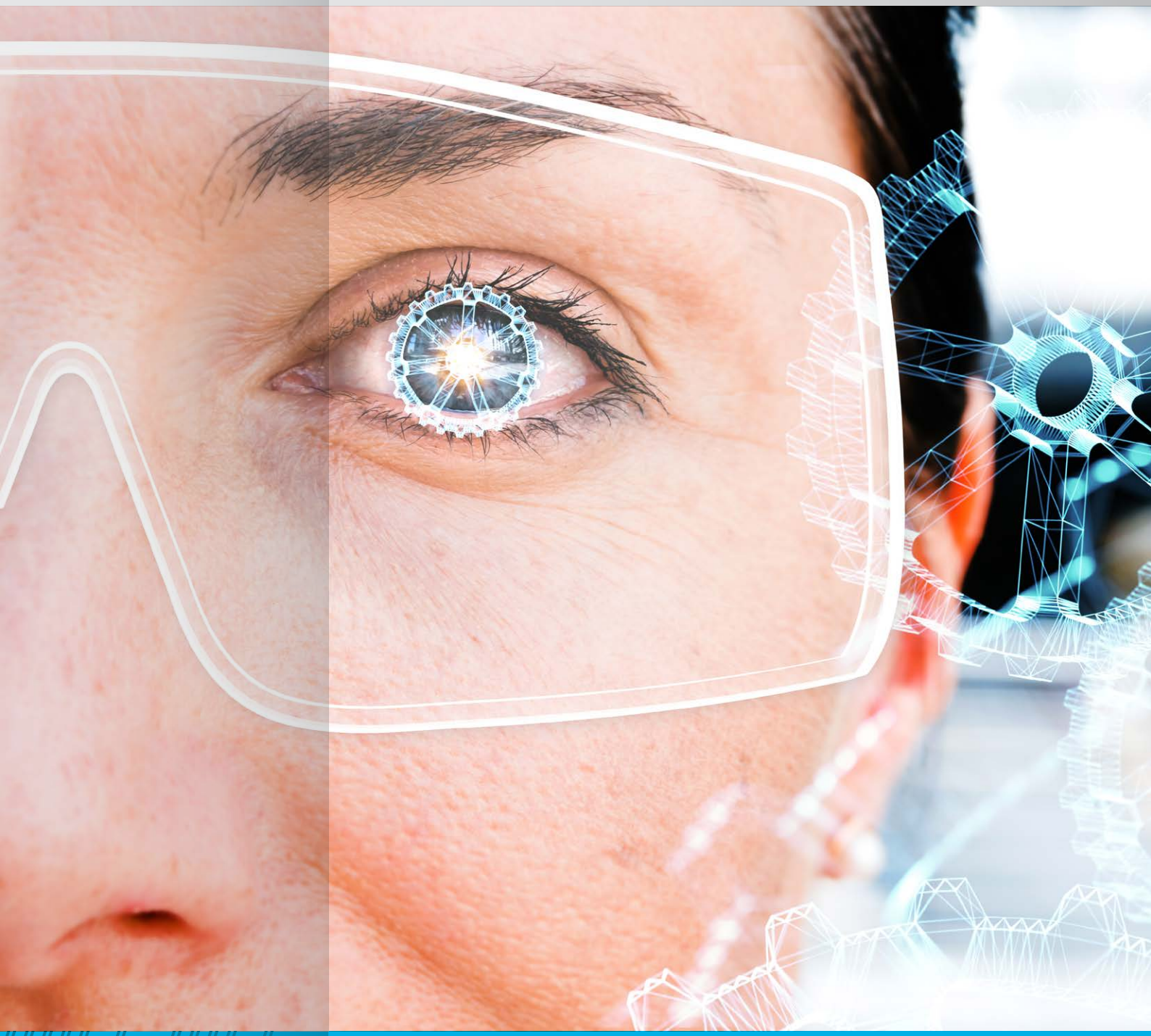
customer magazine 08 / 2019

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 also body decoration. //polytype, the leading manufacturer of cup decoration machines, is at the forefront of this revolution. To illustrate this, //polytype will be presenting solutions for the digital decoration of bodies used in a wide range of packaging applications, in particular, for cups and lids for bottles and tubes.

Today, the decoration of cups using the dry offset process is the most economical printing solution for medium and large batch sizes. This is why this standard decoration is still important. The presentation of the BDM 482 is intended to illustrate that the economical decoration of cups is still one of the main drivers in the market. So, it would be well worth stopping by and taking a look at our BDM 482.

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.

Should requirements call for further advanced thermoforming solutions, OMV 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 guests visiting our stand after 4:00 p.m. You can find out more on the invitation that will be sent out shortly...

The //polytype DigiCup L takes the digital printing of cups to new dimensions

The Swiss solution provider launched the new version of its proven DigiCup printer, which can now print cups with a capacity of up to ½ gallon.

//polytype's reliable DigiCup digital printing solution has been commercially available for years but at K Polytype S.A. (Freiburg/Switzerland) will be showing that its DigiCup can now decorate even the largest of cups capable of holding ½ gallon (1.89 l) — and at high speed.

The Swiss innovator //polytype is launching its digital printer for decorating XXL plastic cups this year. Long known for its BDM and DDM precision offset presses, //polytype made a successful entry into digital printing in 2008. The DigiCup has an operational track record stret-

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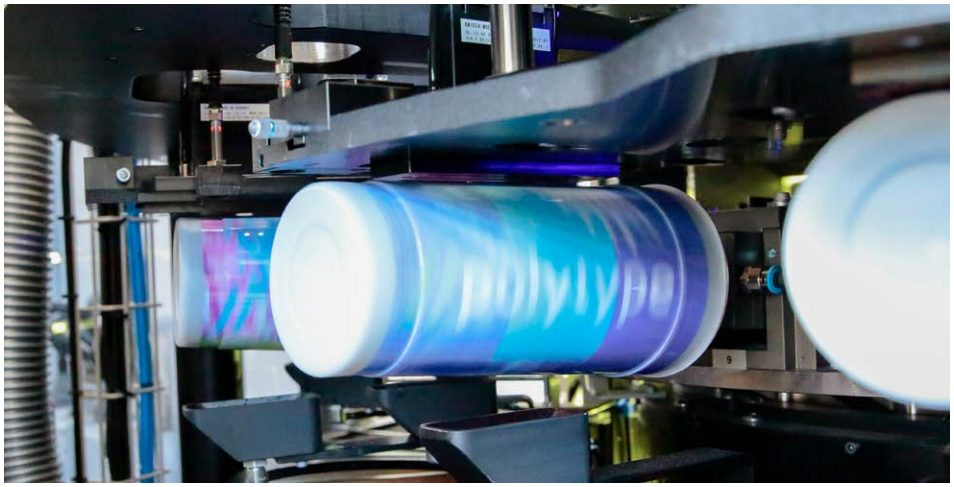
ching back for a decade and now, in a fresh development, //polytype have extended its capabilities so that new sizes of cup can be individually imprinted.

Whilst //polytype has already achieved a strong position in the market for medium-sized cups on the back of the DigiCup's outstanding print quality, many customers in the key sales markets of Europe, America and Asia have been calling out for the ability to decorate larger cups individually. A new version of the DigiCup, the DigiCup L, that can handle cups with an external diameter of 130 mm and a height of 235 mm (corresponding to a capacity of 1.89 liters) is now available.

Of course, it's not just the supports that have had to be adjusted. The use of three print heads means that the printing height is now 210 mm and at this height opaque white can be applied as the carrier layer as well as, subsequently, the four-color image. It's no slouch when it comes to productivity either. At maximum size, 80 cups per minute can be decorated completely individually. For small cups, a production speed of up to 200 per minute is possible.

It is the //polytype Group digital printing development team that has made sure that the customary Swiss printing quality is maintained even at this level of speed, and it has been responsible for a number of //polytype's in-house developments. First and foremost amongst these is the CALMAR system, which controls the inkjet heads and which in turn integrates further in-house 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, as is the adaptation of the motif to the conical shape of the cup. Naturally, the UV-cured inkjet inks fulfill the demands for low migration.



Prime segment brand owners are increasingly focusing on customized packaging and //polytype's digital printer for cups gives producers the ability to satisfy this trend and make money at the same time. Both the DigiCup and the DigiCup L reduce changeover times to zero and make it possible to offer the market one-offs, whilst at the same time delivering the very highest quality print with photorealistic CMYK printing.
Visit us in Hall 4, Stand C56, to learn more about it.

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.

From there, data are automatically collected directly from the equipment, without troubling the operator with additional tasks. Based on the collected data, registered users can analyze 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.

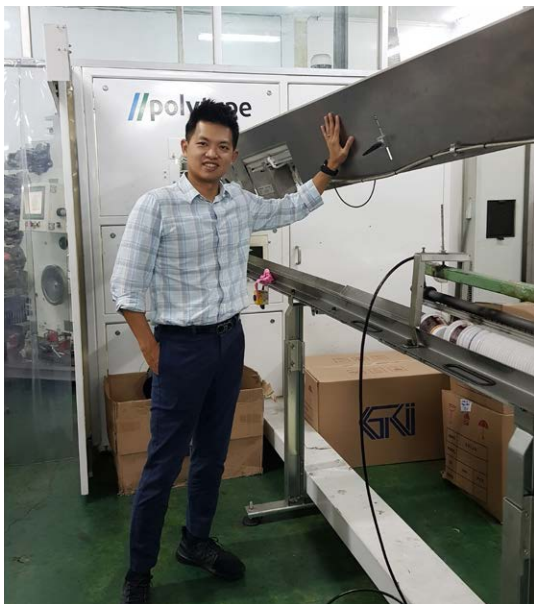
Key features:

- 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

*currently only available for digital printing machines

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

For PT. Guna Kemas Indah, the goal was to have a high-performance cup printing machine with a stable printing quality at an excellent price



The family owned company, PT. Guna Kemas Indah, located in Tangerang Banten/Indonesia was founded in 1989.

The first years were difficult, but they finally overcame these and, today, PT. Guna Kemas is a successful company with over 400 employees. Their specialty is drinking cups, which they sell mostly in Indonesia.

PT. Guna Kemas Indah, one of the leading company in Indonesia for thermoformed and decorated drinking cups, was commissioned by one of their best clients to produce excellent printing quality for huge batch sizes. Quite soon it was realized that only European printing machines could fulfil this task. Besides //polytype, there were two other suppliers, who were also taken into consideration.

Ultimately, it was the BDM 482 cup printing machine from //polytype which was the most convincing solution for PT. Guna Kemas Indah.

Now, after five years of production, PT. Guna Kemas Indah can say that this was the absolutely right decision. The BDM 482 performs the required job reliably, in other words, it delivers top quality printed cups in large quantities with very little downtime. And, following on from this first machine, a second was acquired in 2018.

The following statement from PT. Guna Kemas Indah ultimately rounds this off: *"The first machine meant we had more customers demanding better quality printing cups. The speed of the BDM 482 also enables us to print more cups efficiently."*

Big Data meets Thermoforming – News from OMV's Technology Center

Adding the "shape" element to pure "decoration" was a key factor in //polytype's decision to expand the product range into thermoforming. But as our customers know, shape is not made by the machine: it's made in the mould.

When //polytype took over in 2013, OMV had already plenty of know-how, expertise, and a record of development of many products (especially, but not only, in food packaging) in its 50+ years of history.

Mould design expertise was, and still is, the "cherry in the cake" of OMV's know-how.

While the existing customers knew this well, it was much more difficult to communicate to new prospects.

The solution: Dedicate part of the plant to a permanent pilot line, where any thermoformable object and resin can be tested and optimized in short runs.

Since 2016 a small-size, but fully equipped inline system, capable of both extrusion and thermoforming has been operating in Verona, serving many developments in the industry.

The list of products developed in these years for and in cooperation with our customers is long and includes coffee capsules, special lid fits, rim rolled trays and portion cups in polypropylene, multi-layer and various new bioplastics. OMV also collaborates with material manufacturers for testing and development of new thermoforming grade resins.

The Tech Center has been also used for Industry 4.0 applications: OMV manufactured and tested Near-Field Communication (NFC) capability on thermoformed objects.

Most of such developments are obviously guarded by strictly observed Non-Disclosure Agreements.

Here are a few pictures of those we are allowed to show.

We hope you will find it stimulating, come and see us at the K Show to discuss how we can help you make your product idea come to life!

Portion cups thermoformed with in-built chips, readable & writeable via NFC devices.
NFC technology is in built in every smartphone and will be further enhanced in new ones, such as the iPhone XI®

The technology enables an array of applications, such as:

- Consumer services: providing more detailed information to consumers
- Big data: building up large databases to analyze consumer behavior
- Circular economy: sorting of waste by resin grade & type

Party cups with various inserts, in-mould Lip rolled

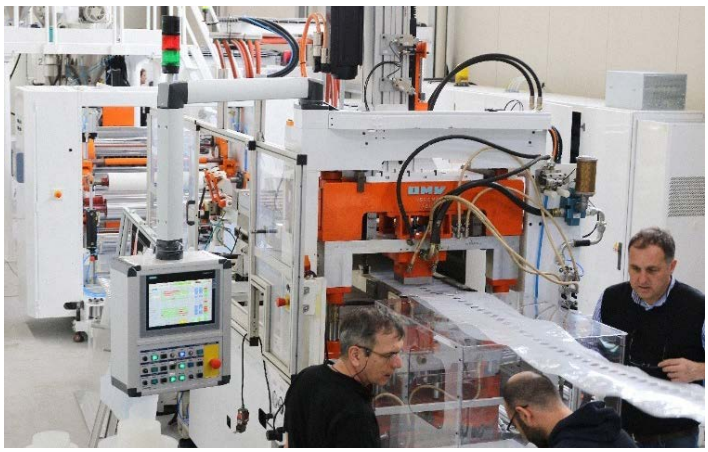
T-IML tubs and lids

Compatible Coffee Pods

Lip-rolled Polypropylene insulated cup.
Two cups of slightly different diameter, bound together by coining, all in the same machine.
No additional equipment required.

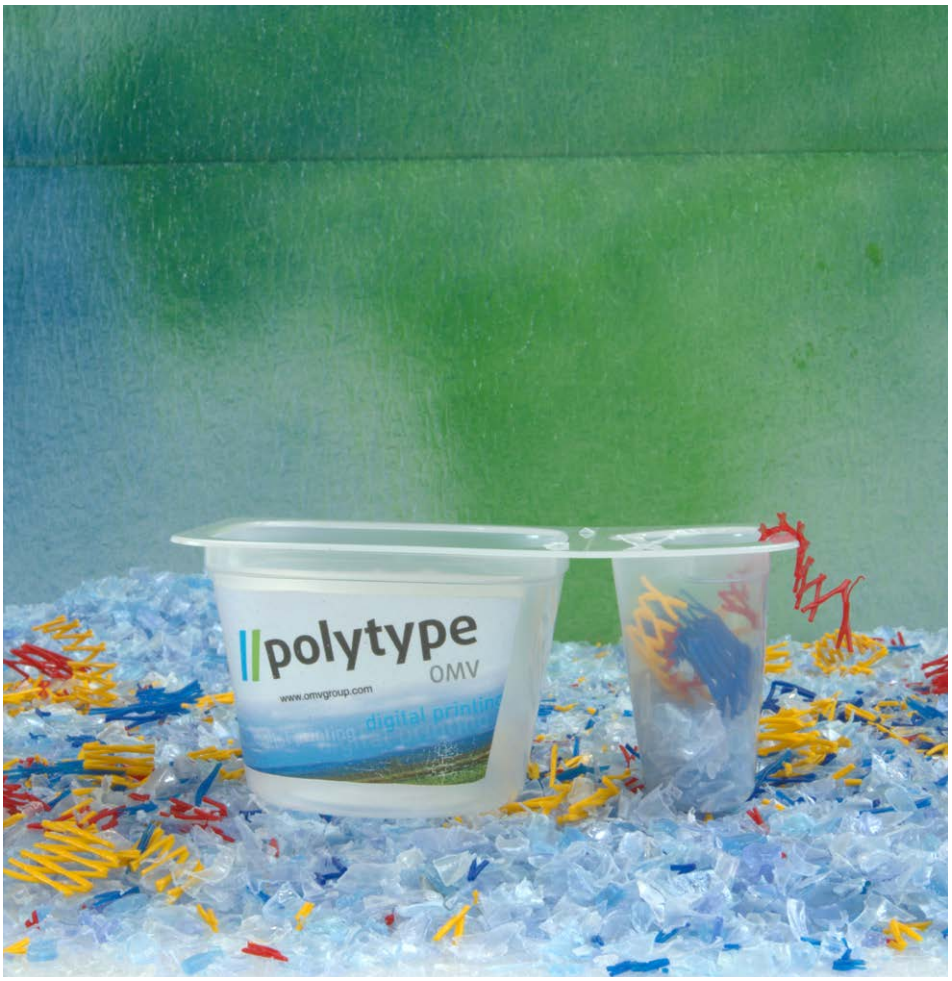
Square-round portion cups, lip rolled
OMV has successfully tested its proprietary lip rolling system on various square cups and trays

Insulated Cappuccino cup



The test equipment, located in the same building where design and tool manufacturing takes place, delivers great value: It allows quick feedback and correction, so that most changes in an insert can be made and tested within 24 hours. This makes it possible for customers to fully develop their product and "walk out" with samples ready for qualification runs within days from testing the initial version, as opposed to weeks.

On top of that, in its pilot line OMV can track and simulate the conditions of industrial production in its larger machines, so to ensure that parts out of the production OMV inline system will be the same as those produced in the test runs.



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.

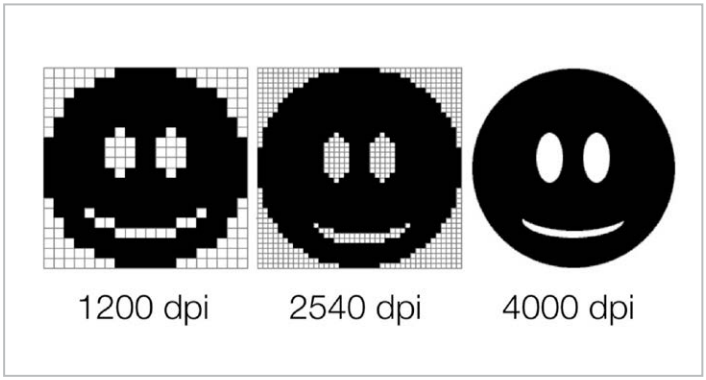
The unique combination of the new generation of elastomer plates, the latest engraving technology in 4000 dpi and our exceptional color separation technology creates yet another level in detail and sharpness in the final printed product.

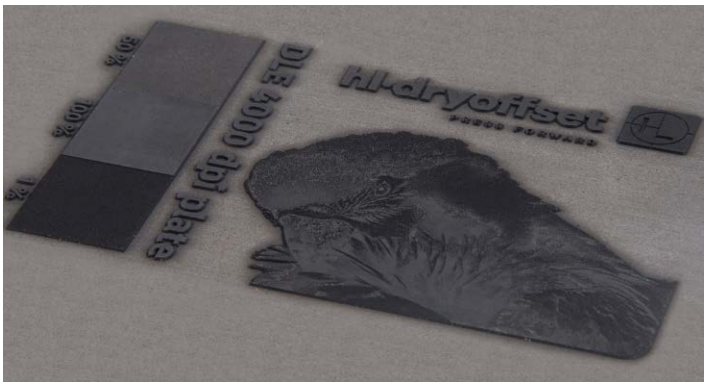
The benefits of the new generation of elastomer plates in short:

- 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

hl·dryoffset
PRESS FORWARD

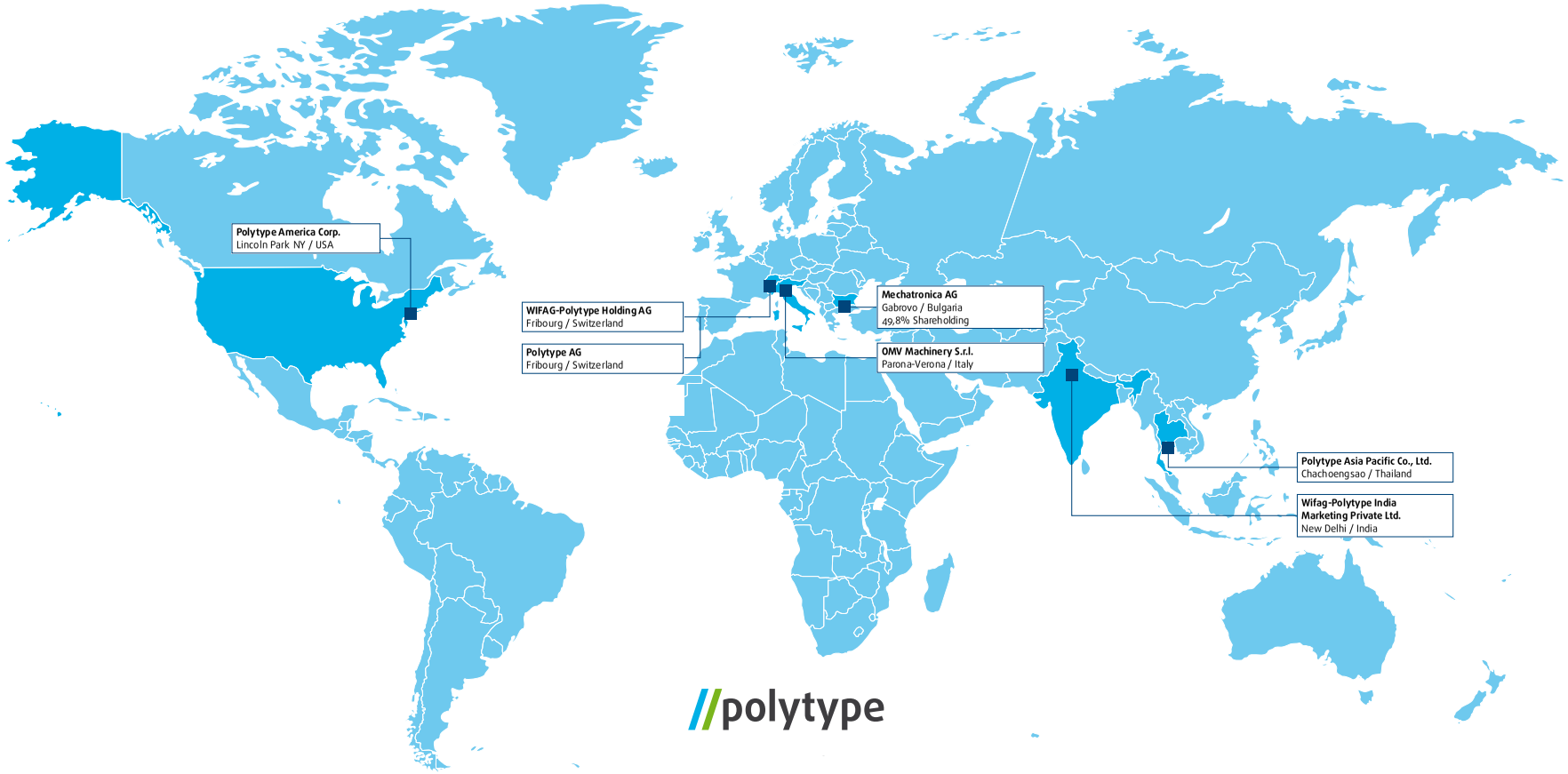
//polytype augmented reality (AR) remote support

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

DigiTube


DigiCup / DigiBottle


DigiLid

Closures

Tubes

Bottles and Jars

Cups

Lids and Boxes

Visit us at K'2019
Hall 4 / Booth C56

//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 decoration
For further information visit:
www.polytype.com or info@polytype.com

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