DigiBottle



The digital printing machine for round bottles

//polytype

Passion · Innovation · Decoration

Always well-rounded





//polytype is a leader in the manufacture of systems for digital printing of bottles.
//polytype machines combine innovative technology with the highest levels of reliability complemented by the most user-friendly operation. Its international customers appreciate the modularity of the design and the expansion opportunities of the machines.

//polytype is part of the Swiss wifag//polytype Group, which operates globally and has branches in Switzerland, Germany, Bulgaria, the USA and Thailand. This alliance gives //polytype access to a broad technology base and guarantees a global and professional partnership for your success.

The new way of decoration

//Efficiency

// Changeover times reduced to near zero
// Printing of single bottle production and long production runs on same machine
// Cost-effective for small or large runs
// Increase of production output
// Significant reduction of startup and running waste

// Cost-effective for small batches

//New workflow

// No printing plates
// Direct from computer to bottle
// A fast and efficient way for decoration

// Time to market

//Print Quality

// Extremely high print quality comparable to Label decorating
// Flexibility in selection of the print design
// White available for clear and colored containers
// Glossy effect

// Photo realistic graphics



//Easy to use

// Reduction of process steps
// Only 5 inks to handle (CMYK and white)
// Quality not dependent on operator skill
// Consistent print quality from beginning to end

// Computer to product



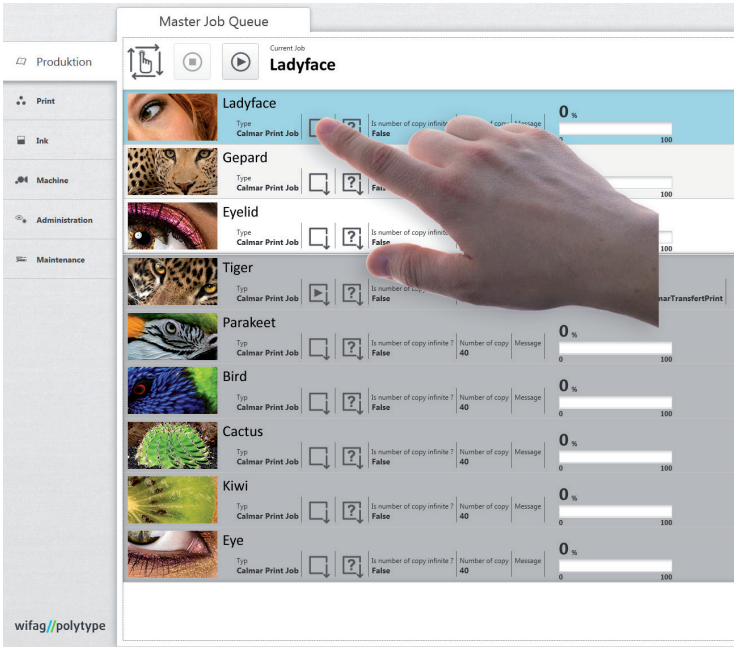
//Variable data

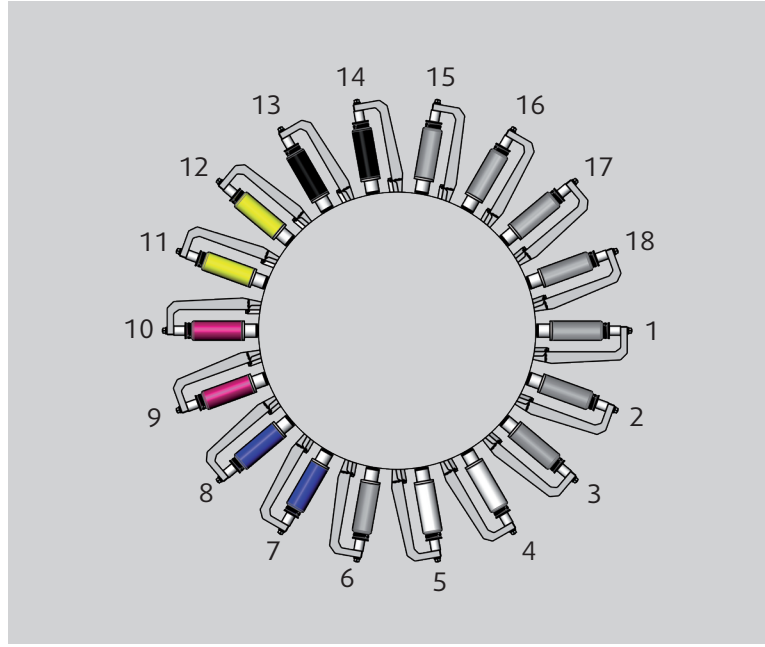
// Printing variable data «each bottle can be different»
// Individualization and personalization for marketing opportunities
// Mass customization at full production speed

// One to one marketing



// Reliable Ink-jet printing machine
// Extensive support at first hand
// High productivity
// Extended lifetime with upgrades





//polytype Calmar System

To convert input data like PDF files to a printed image on the substrate //polytype developed its own ink-jet system and called it Calmar.

Calmar comprises the following elements:
// Intuitive graphical user interface
// Data processing software
// Network technology
// Printhead driving electronics
// Ink supply

Calmar is an all-encompassing ink-jet technology platform that enables Polytype to protect your investment throughout the entire life cycle of the machine. From the development of industrial grade electronics and software all the way to the realization of new features specific to market demand and everything in between. All supported by world class after-sales service and process specialists.

Station set up for the DigiBottle

1 – DigiBottle loading
2 – Pre-treatment by gas
3 – Positioning and shape verification
4 – White
5 – Cyan
6 – Magenta
7 – Yellow
8 – Black
9 –
10 –
11 –
12 –
13 –
14 –
16 – Final curing
18 – Bottle take of

Control panels
With the layout of the two control panels the operator has full control at their fingertips. One screen controls the machine functions while the second provides full access to art files and job preparation.

Feeding bottles
Feeding can be managed from a horizontal or vertical position.

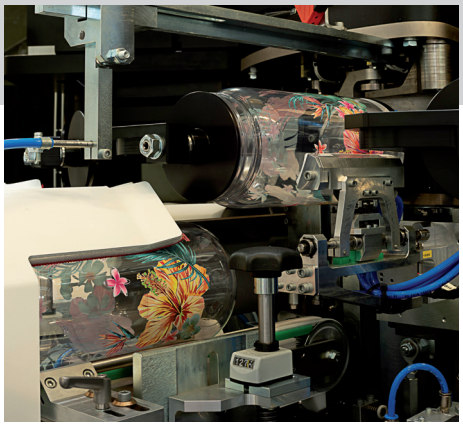
Bottle loading
Bottle feeding station with a transfer system for the bottle placement in the clamping device with an easy access for size part change.



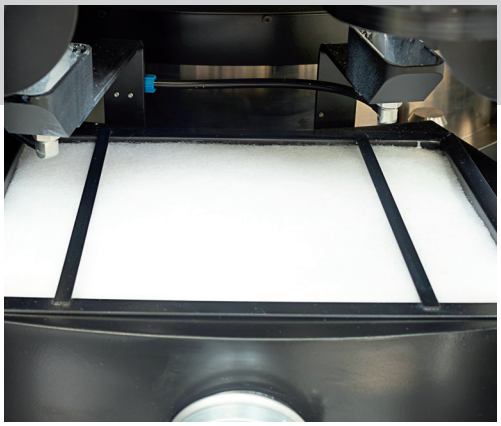












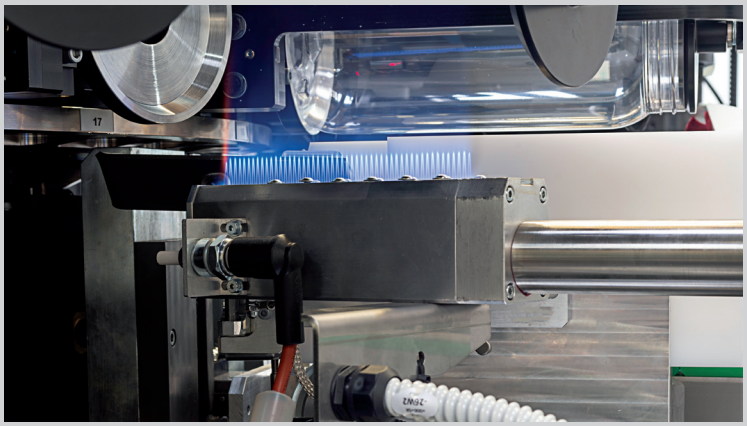
Bottle take-off system
Following the printing and curing the bottles are safely transferred from the holding device to the conveyor belt.

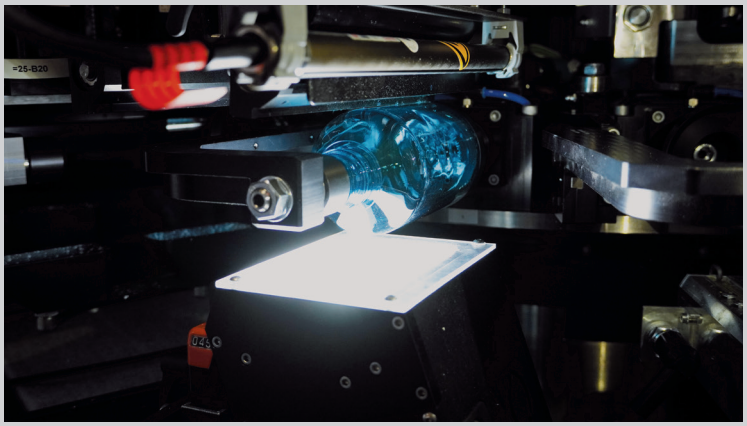
Final curing
The UV ink curing process is equipped with progressive power control. It was developed for quick lamp changes and ease of maintenance.

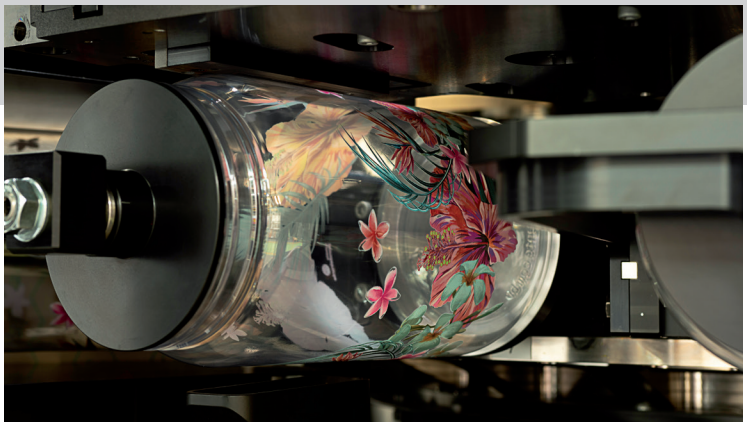
Ink mist exhaust system
The ink mist extraction helps provide higher print quality while offering protection for operators and machine.

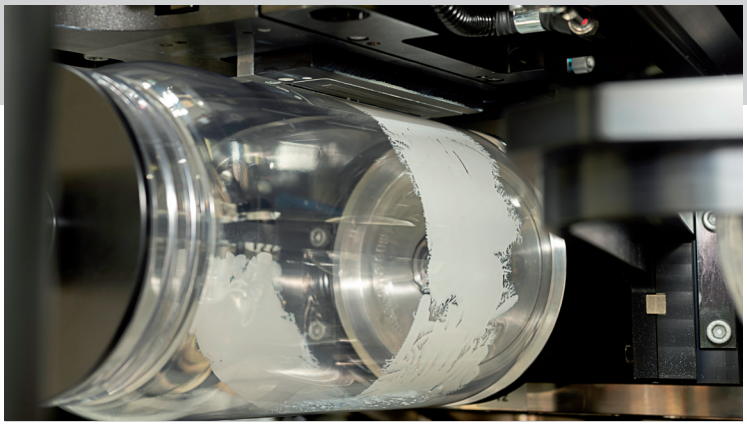
Surface pre-treatment
To ensure reliable ink adhesion, this station is used to pre-treat the surface of the bottle with gas.

Positioning System
Print can be oriented with a high level of precision by a visual detection system using marks, threads or features.





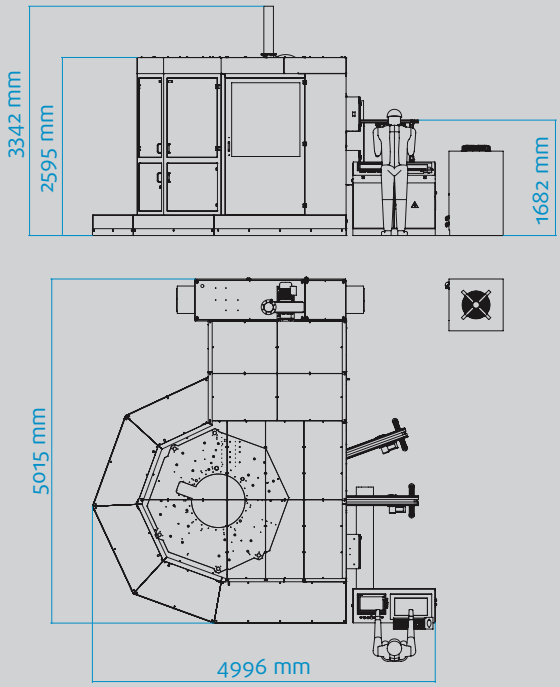


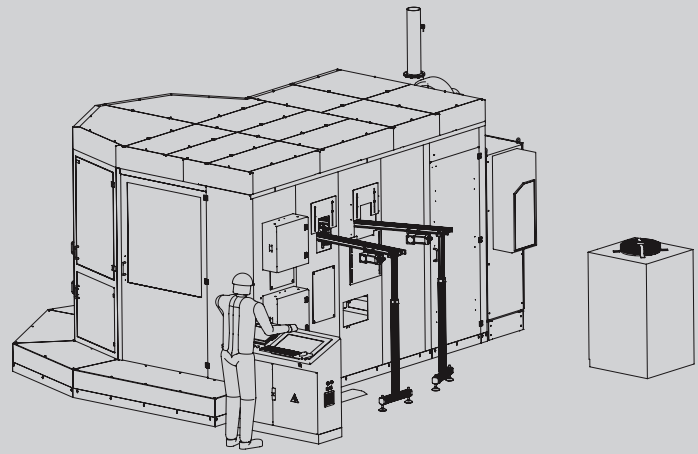


4-color process printing stations
To make is fast, each of the CMYK colours will be printed separately in one turn. The colour to colour registration is maintained with high precision ensuring a fantastic end result.

White pre-print
When producing transparent or coloured bottles a white base coat may be applied in either a spot method under certain images or overall to the entire surface giving you the flexibility to highlight specific areas of the graphics or the entire container

// polytype the expert for digital printing machines for containers
// Over a decade of experience in digital printing
// Over a century of experience in printing technology





Technical data	Bottle
Min./max. bottle height:	50 - 270 mm
Min./max. bottle diameter:	50 - 130 mm
Printing height (depends on configuration) up to:	210 mm
Colours:	W + CMYK
Resolution, up to*:	720 / 900 / 1200 dpi
Holding devices:	18
Printing speed up to:	100 bottles/min
Weight of main machine:	~ 10000 kg

* depends on bottle geometric and configuration

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