



Printing equipment for the pharmaceutical sector



We add value to your product !

General

Printing International is specialised in the design and production of printing machines for the pharmaceutical market.

Since 1974 we are using our experience in order to deliver a finished product that complies with the strictest requirements of the sector. These printing machines are sold to the leading players in the pharmaceutical sector worldwide to print blockbusters as well as generics.

Our patented linear print technology offers the following advantages:

- high resolution up to 0,1 mm
- continuous stability of the print process thanks to constant ink viscosity level (no evaporation of the solvents thanks to the closed ink cups => also less waste of ink)
- correct print at the required position on the tablet
- printing with solvent based or water based edible inks
- printing pads with FDA certificate
- all kinds of formats or sizes can be printed (small and vulnerable tablets, freeze-dried tablets, oblong tablets, tablets with break line, etc...)
- very short change-over time and very easy cleaning
- camera system with reject of eventual bad tablets at individual level
- second camera for reject control
- cGMP / GAMP compliant (software compliant to 21 CFR part 11)
- internal validation process available
- ergonomic place-saving design



AGATE LABO: Basic lab scale machine

For the research & development department we have a small printing machine to perform testing during the development of your product. This lab model is also fully FDA compliant. The capacity per hour that can be reached depends on the size and shape of the product itself, but will be about 10 000 - 30 000 pieces/hour.

Tablets/hard gel capsules/soft gel capsules are filled manually by help of the spoons in synthetic, FDA approved material. Also blister tablets (freeze-dried products for example) can be printed with a blister holder.

The machine is a semi-automatic version with a high printing quality: therefore this version can also be used for the launch of pilot projects or clinical batches.





PI/450-CME: 1 side printing machine with camera inspection and individual reject

With the PI/450-CME it is possible to print onto your product belonging to the solid dosage division: tablets, soft gel capsules, hard gel capsules, freeze-dried tablets, etc...

With our technique of indirect transfer printing we can immobilise the product under the printing head and therefore obtain a very high qualitative print.

Our machinery can print a text, logo, authentication label or a combination of these. Thanks to our continuous technical innovation we can print with a better quality, a higher resolution (up to 0,1 mm) and offer more possibilities for choosing print images.

Optionally a camera inspection system with individual rejection can be integrated in this machine.



AGATE DSL: 2 side printing machine with camera inspection and individual reject

The AGATE DSL has the same technique, functions and speed as the PI/450-CME but can print onto 2 sides on tablets, soft gel capsules, hard gel capsules, freeze-dried tablets, etc...

Optionally a camera inspection system with individual rejection can be integrated in this machine.

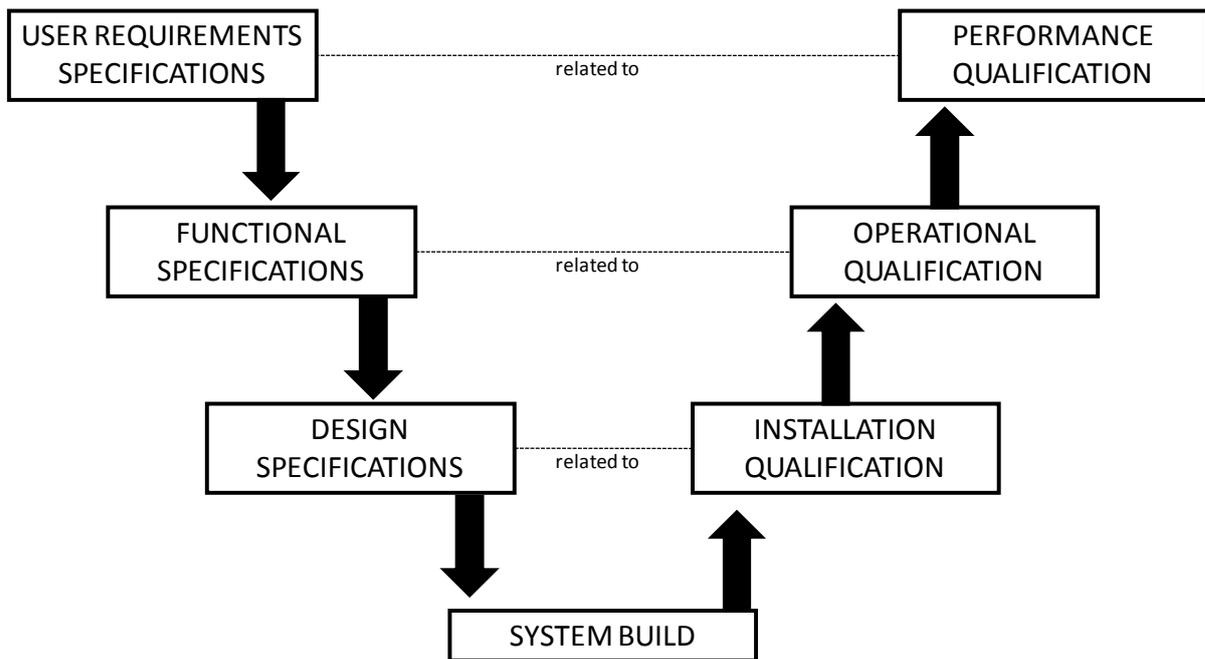




Overview tablet printers

	Agate Labo	PI/450-CME	Agate DSL
Handling	Manual	Automatic	Automatic
Type of products			
-Tablets	Yes	Yes	Yes
-Soft gel capsules	Yes	Option MBP	Option MBP
-Hard gel capsules	Yes	Option MBP	Option MBP
Capacity pcs/h	10 – 30 000	400 000	400 000
Ink cup	1x130	2x130	2x(2x130)
Product holder	2 spoons	8 segments	17 segments
Camera + rejection	No	Option	Option
Side to print	1 or 2	1	1 or 2

Internal Validation Process



The cGMP quality is obtained via our internal validation process. Validation work at the design phase & the production phase is done by our specialists. As a result you obtain a detailed paperwork version of the performed steps that were followed in order to obtain a qualitative product that is responding to the needs of the pharmaceutical sector (see schedule above).

Please contact us to assist in validating the most suitable ink for your products.

