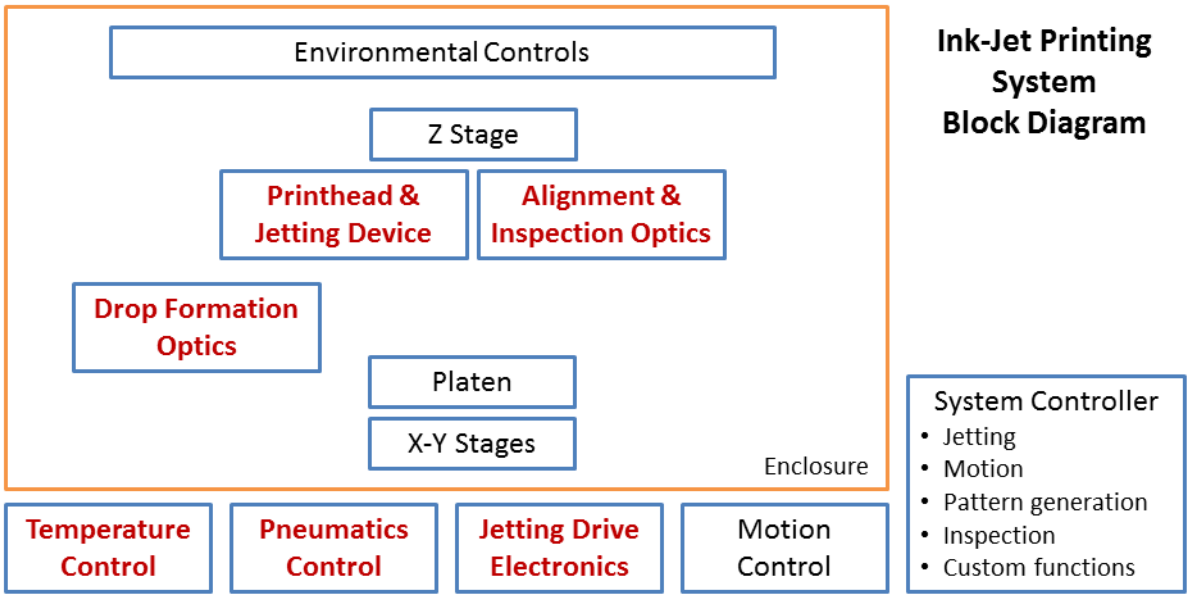
Printer Selection Guide

Printing Systems Functional Elements

The block diagram below indicates the functional blocks for one configuration of an ink-jet based printing system. A jetlab® 4 or jetlab® II Printing System would be configured to have most or all of these functions shown in the block diagram. Equipment and software that are sold as subsystems and components are shown in red. [See Products Overview and Subsystem and Components Selection Guide].



Printing System Selection

MicroFab offers a range of base printing system models, and a large number of configuration options, in order to best fit the performance of the printer to the requirements of a customer's application.

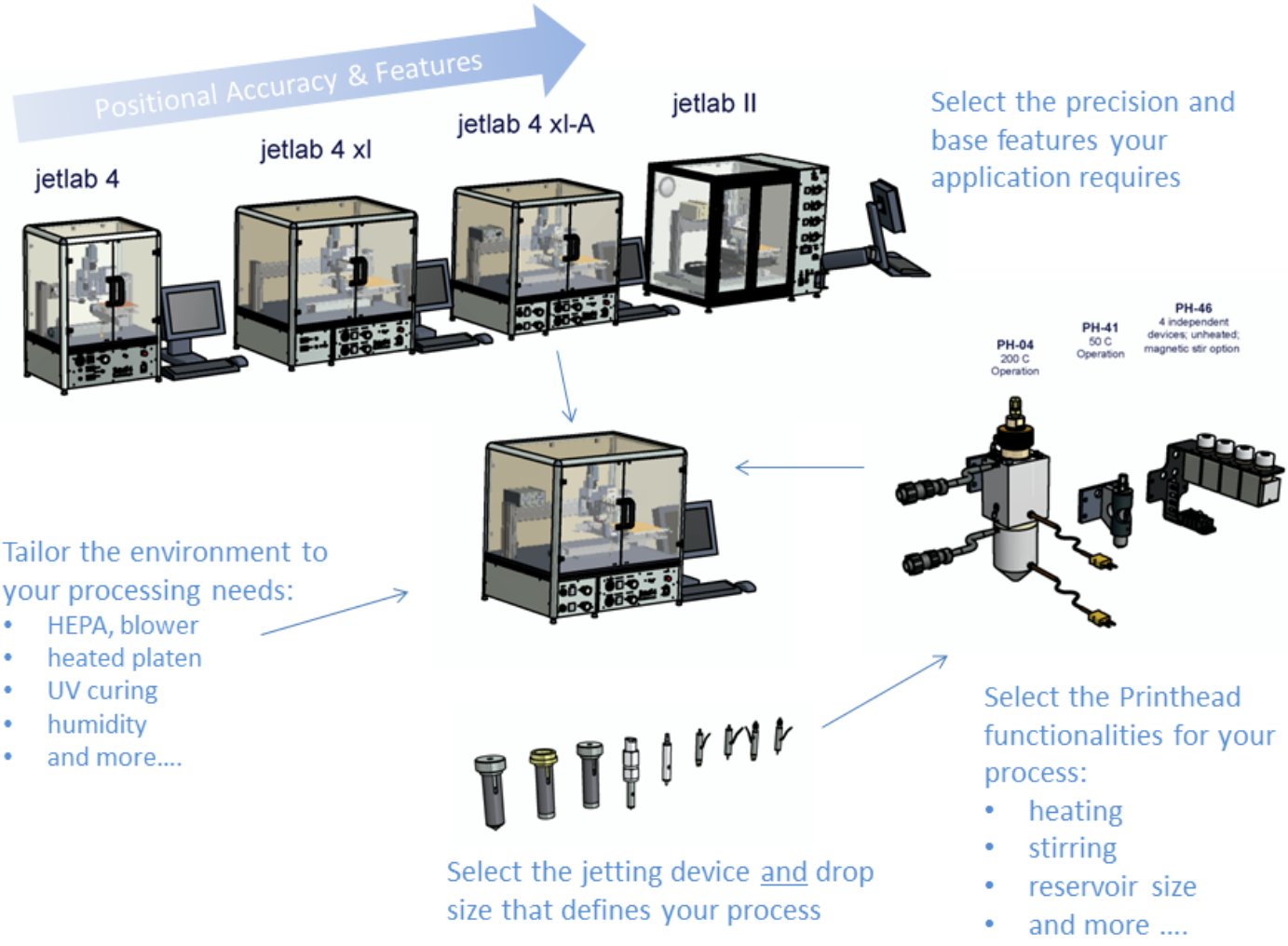
Selection of the base printer model is guided by the accuracy requirements of the positioning system, the optional features available for each system, and the printing area size. The figure below illustrates the jetlab® 4 family and the jetlab® II in increasing order of motion system accuracy and features.

After selecting the base model, a customer can select software, environmental control, and post-printing process options, including air filtration, solvent venting, humidity control, workpiece temperature, UV curing, image analysis routines and more.

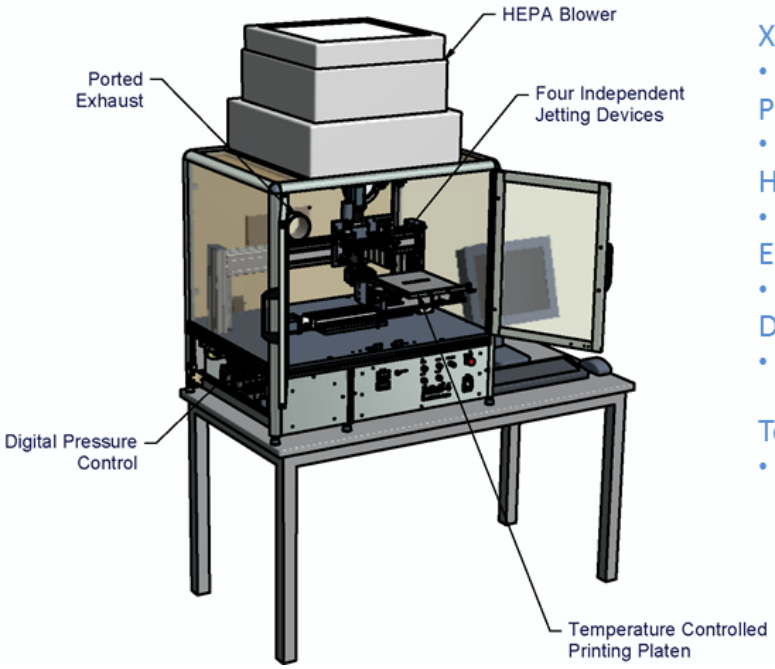
Selection of a Printhead Configuration and its electronic & pneumatics controls represent a large number of configuration possibilities, driven by the requirements of the working fluid: operating temperature; multiple fluids; stirring; load and run volumes; and more.

MicroFab's experienced Applications Development Engineers can assist in the selection

of Printing System configuration that best suites the requirements of your application.



Example Machine Configuration



XLA Model
- Selected for positioning repeatability

Printhead
- Selected for multi-fluid deposition

HEPA Blower
- Selected for contamination reduction

Exhaust Port
- Selected for fume control

Digital Pressure Control
- Selected for improved process repeatability

Temperature Controlled Platen
- Selected to cure the deposited material