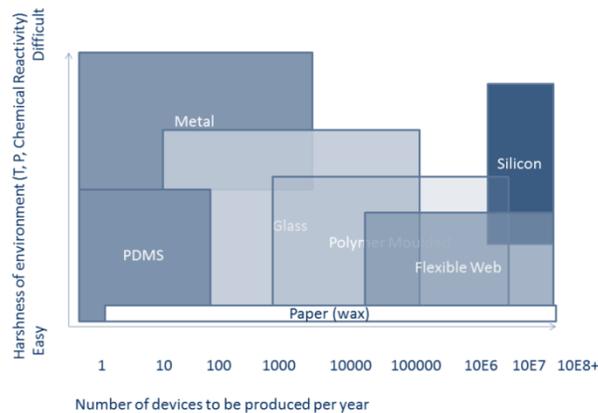


Fikst is pleased to announce that we have added microfluidic device manufacturing capabilities to our suite of engineering services. Using a system developed in-house, we are able to manufacture PDMS devices with high precision and in quantities previously unachievable in the microfluidics industry, at upwards of 100 devices per month.



PDMS MICROFLUIDIC DEVICES have long been preferred among labs and enterprises for their biocompatibility, superior optical characteristics, and low cost. A drawback, however, is that these devices must be produced with a time-intensive, multi-stage soft lithography process, and many institutions struggle to scale their production capabilities beyond prototype quantities. Because it has traditionally been so difficult to mass-produce PDMS devices, they have not been considered commercially viable and are generally relegated to R&D activity. This creates a problem down the road: when looking for replacement materials during transition to mass-production, institutions are often unable to find suitable compounds whose characteristics match critical properties of PDMS.

USING A NEW SYSTEM developed for Enumeral Biomedical Corp., Fikst can help make PDMS devices a feasible long-term solution for your microfluidic needs. With the capability to produce PDMS devices in numbers thus far unattainable, we can bridge the gap between microfluidic prototyping phases and commercially viable products.



ACCORDING TO the *Design for Microfluidic Device Manufacture Guidelines* published by the Microfluidic Consortium in April 2014 (see graph at left), production of PDMS devices is practical in volumes less than 100 devices per year; with Fikst's new manufacturing system, quantities of 100 devices per month are well within reach, positioning PDMS as a new microfluidic contender among materials such as glass, wax, and thermoplastic polymers.

OUR PROCESS is rooted in a strong understanding of the thermal curing behavior of PDMS and a tooling design that helps guarantee superior feature fidelity and excellent dimensional consistency across the PDMS field. Our tooling system is adaptable and can be modified to accommodate any device size. The ability to produce high quality, serialized PDMS devices in quantity has promising implications for applications in diagnostics, genomics, PCR, circulating tumor cell research, flow chemistry and environmental science.

Get in touch to see how Fikst can help you with your microfluidic manufacturing needs!
Contact Jim Biggins, (781) 710-9016, jbiggins@fikst.com

