

Field Trip: Flexdex Factory Tour

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Not many companies are as shrouded in mystery as Flexdex, from their legendary durability to the actual formula responsible for those properties. Much of its past is steeped in legend as the re-evo-lution of this company has taken shape. We were lucky enough to get invited for a tour of their factory along with a straight-from-the-source walkthrough of their deck-making system and how they take shape.

On arriving to the Flexdex shop, the first thing that greeted me was a stack of skateboards resting on a table. Their rails exposed, the dark olive shade appearing as a resting dragon's scales in the hard morning light. This is where I met Justin, a tall kid who had back in the day struck up a relationship with the FlexDex owners as a stoked-out kid just dropping by the shop. Since the company's re-emergence, he finished school and transitioned from stoked-out rider to stoked-out employee. He was razor stripping extra sealer from the decks to make the rails smooth and remove any exposed fiber.

Nate stepped out to greet me. He's a cheery guy resembling shaggy, he's got a killer stoke and as soon as he greeted me he invited me in eager to show me the inner workings of this covert shop. His office is decorated with the full line of decks and some older ad posters from back in the day. Resting on the wall is the bullet riddled deck from the Flexdex shoot out excursion where we first really got to know each other. The typical adornments are in the office as well as a scale at the ready.

Off to the side is the build room a large carpeted table is strewn with tools and bits ready to go together to make a deck. You get the feeling of nostalgia from some of the decks in this room that rest on the wall. Older models that seem ready to ride and share their lifetimes full of stoke still at the ready. All the decks that Flexdex ships come together on this very table, in a sense it's cool to have the venerable editions of the Flexdex standing tribute as the new breed of Flexdex get built up.

We stepped out of the build room as Ebone walked in, he greeted me with a handshake and a smile, you can tell the dudes a thinker. The emergence of the company is in his hands and just by meeting him a few times including a BB session you can tell he has plans for the Flexdex future. Nate shared with him what we were working on and Ebone led us deep into the warehouse to get a firsthand look at the factory. I would like to mention that I was first ductaped into a chair blindfolded and gagged then dragged around what seemed like for hours cause it would be a lie.

Ebone took leave to attend to other things and Nate showed me a display area of the more common items the company puts out. All sorts of office and promotional stands and displays including a killer display of Yoda's light saber and an inspirational quote by Einstein etched into some plexiglass, "The main thing is that you keep the main thing the main thing" true words, I wonder if deal old Albert would have enjoyed the stoked out ride of a Flexdex. A typical collection of items used to present business cards, flyers and pamphlets. Making their production of skateboard decks all the more unique in my opinion.

As we walked around the warehouse Nate showed me a massive fishtank that they had made, sitting high in the racks it was hard to tell how big in it but it must have been hundreds of gallons. He also pointed out a collection of extruded shapes that were made from the same material as the decks. I beams, Tubes and dowels, all maintaining the same properties of the deck, durable and lasting. The warehouse had every type of plastic and other material type represented I honestly don't know about the material I was looking at to give you a good idea of what was there. I was given the impression speaking with Nate that they had everything.

Here and there you could see echoes of the Flexdex of the past, a graffiti scrawl here, old style Flexdex logos there. Nate

showed me where the old build area was and we just took a moment to ponder on the growth of the company and just think about where it may be going in the future. ?Flexdex, The Ride is Frightening? Emblazoned on a wall, is it not this fear that stokes our excitement?

Then we walked into the CNC area where most of the production takes shape, there were massive plates of material that the decks were made from leaning against the wall, extremely heavy. As I stood and watched the CNC operator Chris took a moment to double check all the settings to route out some decks. I passed the time checking out a prototype wine glass rack for an upscale restaurant, it was plexiglass and the seams holding it together were just as clear as the material itself. Ebone dropped by and described the bonding agent that was used and went into a bit of the detail about the type of custom work they usually do, just as the CNC machine started working. Video of the detail etching

Check out more CNC Flexdex videos.

Now I got a really in depth tour because I got to see what the CNC machine is supposed to do as well as what it is NOT supposed to do. On the first run the CNC machine dropped the router bit into the material and as it started cutting the blade just wandered off like a drunken monkey. The killswitch was hit and Chris went back to work securing the settings, Nate seemed a little surprised and I was actually quite happy. The Flexdex we shot up in the desert was a blem and it?s origins were just such an occasion so it was cool to see why or at least how the CNC bit can bind and just wander off.

On the second run everything worked flawlessly and I got to see a deck (actually many) get carved from the single solid plate of material. Watching the CNC machine change out bits and commence cutting the plate held securely in place with a large vacuum (or tape) two decks at a time are worked on as the CNC machine works two bits in unison on the large arm. All of the highly toxic fiber debris were sucked up and away from the work area by a large vacuum and stored in a large tank.

The detail on the routing was highly accurate and the depth was expertly calibrated by Chris. The decks were routed out for the detail on the belly then the inner vents were cut after another bit change. Then the decks were fully cut out of the plank leaving a bunch of free laying decks on the table of the CNC machine. From there the decks were hand wiped to remove any remaining fibers and to check for any inconsistencies with the decks.

After thanking Chris for the demonstration we wandered back outside and I hung out with Nate and Chris as they continued to razor off the edge sealant from the deck rail that is painted on after the hand cleaning to prevent the rider from getting fiberglass in their hands from handling the decks. As we talked I thought about how many people work with the decks till they are shipped out, and how cool it is that the whole company takes the deck from material to shipping all in one shop. The remaining steps to the process, gripping, build up and shipping as integral as they are, were not something I saw but I am sure you can use your imagination to figure out how it goes.

Below if an official build outline written by nate that goes into a bit more detail on the actual creative process that goes into a deck.

Step One: Skunkworks

The whole process begins with a fresh idea and an innovative new concept. From there the crew at Flexdex brainstorms, invents, creates, tests, has a burrito for lunch, tests, improves, tests and finally produces a high-end product they stand behind 100%.

The creative branch of Flexdex known as the ?Skunkworks Collective? convenes in a room with a table, a pad of paper, crayons and a fridge full of cold beers. This ?think-tank,? being comprised of a handful of individuals with varying specialties in skateboard design and production, pours out ideas and concepts that could potentially gain the right to claim a spot in the Flexdex line-up. During this process lots of crayons and beers are used.

Step 2: Engineering

Concepts from the skunkworks are then taken into the engineering department under cover of darkness and tacked up on the wall. The engineering department sits down at their computers and begins the lengthy process of creating ideal measurements for board length, width, flex-patterns, material thickness, wheels, wheel durometer, wheels base and everything else that could possibly affect the way the board rides.

The hard work of the engineers then comes to life when the plans are sent over to the factory for prototype board production. Once there, a few of each model being tested is cut, cleaned and mounted up for riding. The Flexdex offices close and its off to "the hill" for testing.

Step 3: Testing

Around the corner from the Flexdex offices lies a buttery hill that has seen every innovative new board design Flexdex has created since its beginnings so many years ago. The entire crew takes part in the testing process to make sure everyone's opinion and riding styles are considered. From accounting to Ebone (the creator and CEO of Flexdex), everyone gives the boards a thorough shred session and then throws in their two cents about the ride, board responsiveness, flex and just overall stoke that the board produced.

All the new information is once again taken back to engineering and factored in for new measurements and dimensions for a refined prototype board. The testing and refining process continues until a final board is produced that delivers the perfect Flexdex ride. It can take days, weeks or months to get it right. But in the end, getting it right is the only thing that matters.

Step 4: Production

Once a board design has been approved, meaning both Ebone and Nate have given their stamp of approval, board production begins in full swing.

Large 4'x8' sheets of Flexdex material are manufactured using a combination of 6 different fiberglasses and resins, creating a single, flexible, bulletproof, completely homogenous Flexdex sheet. From a single sheet anywhere between 10 and 24 boards can be made, depending on the model.

The Flexdex sheets are made, using huge machines, in a process that has been a company secret from its beginnings. Those who know what goes into the material have been keen on keeping their mouths shut and its worked in Flexdex's favor. No other company has ever been able to duplicate the material or copy the ride that a Flexdex skateboard delivers.

And while Flexdex continues to improve and develop new versions of their patented material, the original recipe which established Flexdex as a skateboard powerhouse remains a priceless business secret.

What is public information is that it comes in convenient 4'x8' sheets. Once produce, the large 4'x8' sheets are then placed on massive double headed CNC machines, which are programmed to cut each desired Flexdex model. The surface of the CNC table has a vacuum feature which holds the Flexdex sheet down while the CNC machine cuts, routs, engraves, bevels and ultimately produces the one of a kind Flexdex skateboard deck.

Finished decks are then stacked on palletes and taken to the fabrication department. Here the boards are cleaned of any dust still on the surface of the boards from the CNC process. Each board is then gripped by hand with its own specific grip tape design. Risers, trucks and wheels are all put onto the boards and fine tuned by hand. Wheels are spun and the board is inspected for defects before the board is bagged, stuffed with stickers and boxed up cozy-like in its very own Flexdex printed box.

From there the friendly delivery man comes to the factory, delicately loads his truck up with more boxes than Santa Claus' sleigh could hold and delivers them to people all over the world who are serious about the kind of skateboard they ride. A quality one, built to last, that shreds harder than any.

Well there you have it the entirety of the board building process. I hope this gives you an idea of the unique nature of the Flexdex boards and the people behind the company.

[Check out the Full Flexdex lineup](#)

[Take a look at the Flexdex Factory Gallery](#)