You get in the metal tube.

Zoom up 115 floors at a ridiculous speed to the top of the Ping An skyscraper.

Then you find a window, and marvel at the sublime bigness of Shenzhen.

Forty years ago, all this was farmland and dirt roads,

a minor hub for rural goods trading just across the border from Hong Kong.

Now, it's the hot, steamy, frenetic home to 13 million people

that just about everyone on Earth calls the Silicon Valley of China.

Everything here moves at what's known as Shenzhen speed.

It's a phrase that describes an unyielding pace of change

and I came here to feel it firsthand.

To do that, it's an Instagram pose with the cityscape, a quick scan for government spy drones,

and then a car ride, to see we're just about everything we use gets made.

You hear about factories in China all the time.

Today, I'm lucky enough to actually go visit one that's located about an hour outside of the center of the city.

They're gonna let us see what life is like inside one of these factories.

There are grim factories.

There are decent factories.

And then there's this place, run by Grandsun Electronic.

It's safe to say this is not what I expected.

The plush surroundings are intended to make customers from all parts of the world feel comfortable.

But inside it's more like you'd expect.

Dozens of workers moving at Shenzhen speed,

making fancy headphones for an Australian company called Nura.

How did you guys end up in Shenzhen? I guess that's the thing to do these days.

Yeah.

Shenzhen's known as a place that people come to to make things.

You don't come here to mess around, you come here to get things done.

They have the supply chain here, a supplier that can make any component the headphones you need,

and of course there's the labor cost, which is not cheap as it used to be, but still reasonable.

The production line's been running at basically maximum capacity since we started and yeah, we can do 500 a day normally.

What are the little noises were hear in the background?

You're hearing them make sure they assembled the speaker correctly.

So that's, like, a test noise.

Yeah, that's right.

But what is life like for the people who make these wonderful toys?

To get a taste of the factory experience. I join the mad dash for lunch.

Mmm... cafeteria food.

How are you? Good?

How's the food?

It's good?

How long have you worked here?

It's tough to say anything terribly new about the life of the Chinese factory worker.

Most of these people have come from China's hinterlands,

often leaving their families behind in their rural hometowns.

They'll spend about two years on average in Shenzhen,

busting their butts working overtime to save up as much money as they can.

Is it a step up from hardscrabble subsistence farming?

Probably.

Are there still safety nets?

Yep.

But I can tell you one major lifestyle advantage the Chinese have over us gweilos.

When we first started working here, after lunch, we couldn't really get anyone's attention.

Eventually, we cottoned on - everyone's just sleeping at that time of day.

That said we embraced it very quickly.

What is your preferred sleeping apparatus?

I'm pretty Spartan,

so either on the desk or under the desk with a bit of bubble wrap for a pillow.

Trust me, it's good.

Luke is just one of many entrepreneurs who come to get their gear made in Shenzhen.

There's a flourishing scene here for hardware startups that want to move fast and make things.

Many of them can be found here, at a startup incubator called Hax.

The idea here is simple:

Help startups build a prototype,

then connect them with factories that can start cranking out their products by the thousands.

Take Jamie here, an affable chap who's part of a British startup called Carv.

We make a digital ski coach. So effectively it's like

an insert you put into your ski boot and it teaches you how to ski better.

So you get like real-time feedback through headphones like, that was a bad turn. That was a bad turn.

That was a better turn.

You have one here don't you?

Yeah, let me show you.

So yeah, these are motion sensors, so we have full motion sensing.

Like many startups here, Carv began life as a humble Kickstarter campaign.

Now just a couple of years later, they're pumping out 5,000 units of their product every month.

Do you think you could have brought something like this to life in the UK if you'd have been

accepted by an incubator there? Or now that you've been here, you've seen a new world I guess?

I think it kind of depends a little bit on how much of a shoestring you're on.

Here in Shenzhen, it's so much cheaper. In many different categories it's cheaper.

Like in the product development phase, to get different materials 3D printed or machined,

you get it here for kind of half the cost and twice as fast. And sometimes seven times as fast.

To get a feel for that high-speed energy, I hop across the street with Jamie to the famed Huaqiangbei markets.

Yeah, so this is the biggest electronics market in the world probably.

They're an important resource for the young entrepreneurs here,

and a fantastic place to get your senses overloaded.

Such a hive of activity in here!

Aw man it's great, so this is the energy right?

You just walk through the market and it's like, bang. You know, like, okay.

This is where factories have come to display their wares to potential buyers,

who is me and a lot of the other people here. Kind of a storefront for factories.

Okay, and if I make like smartphones or TVs or anything like that, I kind of come here to see

the latest and greatest stuff?

Exactly. You want to find a manufacturer, you come to Huaqiangbei.

It's also a great place to find that missing part for your prototype,

which is why you run into other crews from Hax roaming the aisles.

Buying some screws?

Have you tried, there's a spring woman out the front as well if you want one. Just on the left as you go out.

The fact that I can get a component in like an hour is like absolutely phenomenal.

That's like, that is Shenzhen speed. That's why we're here.

It's all happening here in Shenzhen, like some kind of crazy 21st-century gold rush.

But to really give Silicon Valley a run for its money, it's going to have to become more than just a factory to the world.

It's going to take invention and original thinking.

And where better to find those things than at the world's most intense robotics competition.

Please welcome Robomaster!

We'll get into it next time on Hello World.

Thanks for watching, and if you want to see more Hello World, click on the link to subscribe.