

Kate Hills: Thank you so much for having me at the iconic Pantherella factory today, Justin. Do you want to tell us a little bit about the history of the Pantherella sock business?

Justin Hall: Pantherella was established in 1937 by a chap called Louis Goldschmidt. He came to Leicester from Europe and had a vision to set up a fine gauge hosiery business. I think from very early on, well, the factory now is still only 50 yards, 20 yards from where it first started. Effectively, it started out in a very small unit over the road, grew onto this site here and slowly grew to fill the whole block, and even once they'd had warehouses elsewhere. It started out supplying fine gauge hosiery in a time when the majority of everybody's socks were all coarse, thick, rough socks. And he came to Leicester, the capital of hosiery in the UK, started working with machine manufacturers to work with finer gauge machinery, finer needles, and finding suppliers for finer yarns as well.

Justin Hall: So in terms of, the quality of the machines had to be improved, the quality of the yarns had to be improved. But very early on I think he found some success in that area, and testament to that is actually that, from some of the earlier records we've got, that we've been supplying Harrods since 1946. So these socks were recognised by the best department stores in the world at the time, still are today, and we've stayed in those stores as a recognised, premium quality hosiery brand ever since.

Kate Hills: So what is the secret then to the fine socks you do? Is it that the machinery was made specially Pantherella? Because there was machinery suppliers in Leicester, wasn't there, back in the day? There aren't anymore.

Justin Hall: No. So I think literally within a mile, or two miles, of the site we're on now was a hosiery machine maker called Bentley. We've still got one or two Bentley machines on site here, we're not running them now. But Bentley made, effectively, at the time, mechanical machines. Originally they'd have run from steam engines that would have run a big, I forget the name of it now, a big rotary bar, or something, all the machines would have been attached to one spinning bar that would have had them running. Effectively, the Bentley machines were some of the best, or the best, earlier on, quality machines in the world in terms of their ingenuity and things they brought to the market, it was fantastic. And actually you'll go to, I've been around factories abroad where I've walked into rooms now that are still running 100, 120 of these machines-

Kate Hills: Really?

Justin Hall: Yeah, and that's in Turkey, and I've seen them in China, and they're running these machines. And that factory shut down, stopped making machines in 1980s, late 1980s.

Kate Hills: And they still work.

Justin Hall: Yeah.

Kate Hills: And they're still running?

Justin Hall: Yeah. Because they're, effectively they made machines that were simpler to run. They knit a good sock, they still knit a good sock. There's mechanical components, you can effectively make new components still to replace them and keep them running. They're just not quite as clever as some of the more modern machines that you can change programmes on more quickly, you can change knitting qualities more quickly. But once they are set up and running, they knit good socks, they're not really any much slower, there's only a little bit more work to be done. And in this modern day and age, you also, they're simple in terms, you don't need compressed air, you don't need central suction, all you need nowadays is an electric motor to spin them around and that's it. So it's quite simple to set up.

Kate Hills: Yeah, so you're very knowledgeable on socks, I believe you're the fifth generation sock maker in your family. Do you want to tell us about the family history of making socks?

Justin Hall: Well, the original family business is HJ Hall, it's still a well known, well respected sock brand in the UK. So fifth generation, so John Hall established the business in 1882 just outside of Hinckley, a small town in Leicestershire, in a place called Stoke Golding. Running a very small set of machines with local employees from the village. And started selling what were traditional, fairly heavyweight socks to the farming community effectively. And just steadily that grew year on year, and then in about, it grew in Stoke Golding to the point it was moved into a bigger premises in Stoke Golding. And then in the 1970s when my father was in the business, and some of his siblings, it moved into Hinckley, into a bigger site there. And through some quite inspired marketing at different stages, coming up with the indestructible socks which are still part of the collection today, based around the introduction of nylon, a brand new fibre of its day, heavily marketed, well marketed by my grandfather.

Justin Hall: And then moving on in the, 30 years ago was the launch of Softop, which was a uniquely patented construction of sock that had a non-elastic top, which meant you didn't get ring marks around the top of your socks, a very comfortable sock, I'm wearing a pair today. They found a new market there and that really, it's a patented sock, it was quite unique to have new technology in socks in those days, took over a significant part of the market in terms of supplying a functional need to a large part of the sock world. Which was fantastic. And all through that time also, working a lot with the Ministry of Defence in the UK and having the military contracts to supply the army, navy and air force and things. So, all through that time, and in its heyday in the 1990s getting up to 250 employees manufacturing socks in the UK.

Kate Hills: So was it a given that you would go into the sock business? Or, did you go straight into it?

Justin Hall: No, I didn't. I did my fair share of packing boxes.

Kate Hills: When you were a kid?

Justin Hall: Yeah.

Kate Hills: A teenager?

Justin Hall: Yeah, as a teenager. Yeah, exactly, school holidays, coming in, helping out, learning about a bit here and there. But actually technically knowing anything about socks was way beyond my knowledge at the time. So I did leave, went to university and did a mechanical engineering degree.

Kate Hills: Really? So it's still useful with machines then, the engineering?

Justin Hall: Technically, I've got a technically inquisitive mind, shall we say. So I'd put it here that I'm not, I haven't got the depth of knowledge of our sock mechanics here, but I'd put it that I know enough to be annoying. That's probably how it's easily phrased. So I know enough to ask the right questions, and to be inquisitive, effectively, about it.

Kate Hills: So you studied engineering and then ...

Justin Hall: And then decided I wasn't necessarily keen on a thorough, what's the right wording? Probably, a full-on engineering career. So actually, joined a graduate scheme to train as a management accountant, did that for three or four years, qualified as an accountant, then joined a carbon trading business in London for a couple of years, and then decided that really it was about time I maybe considered what the options were back in Leicestershire. I took the plunge and joined Pantherella in 2009.

Kate Hills: And what changes have you made to the business? What's happened to the brand in the last few years since you've joined?

Justin Hall: I think the brand has been well established in a lot of markets for a very long time. So the family business bought into Pantherella in 2001, from Burberry. So it was Burberry's sock factory for a while.

Kate Hills: Yeah, that's when I worked at Burberry, and I was in the accessory department.

Justin Hall: Okay.

Kate Hills: Yeah.

Justin Hall: Wow, I didn't know that.

Kate Hills: But I never came to visit. I worked with Johnstons on cashmere, someone else must've been covering the socks at the time, because I don't ... So was that because Burberry were making all of the socks? Pantherella were making all the socks for Burberry?

Justin Hall: Yes, and they still had Pantherella as a brand running at the same time. And then Burberry had it as a loss making unit for a while, and that's

when my father stepped in to go, "Actually, I think we can buy this and make something of it, and make it profitable again."

Kate Hills: I see, so your father bought the business-

Justin Hall: From Burberry.

Kate Hills: From Burberry, that makes sense.

Justin Hall: So with his sock manufacturing background and I think he recognised the incredible history and reputation that Pantherella has in the market, and effectively, around the world.

Kate Hills: Yeah, definitely.

Justin Hall: Because I think that's one of the things that in the UK I don't think people appreciate, not many people know about Pantherella.

Kate Hills: I think they do.

Justin Hall: Those in the know, know about Pantherella, that inquire into quality and provenance of products, do. Certainly the reputation on Savile Row and Jermyn Street, people know who Pantherella is. And Harrods, and Selfridges, and Liberty's, you're not going to be in those stores unless you have got a certain level of reputation. But it's around the world as well, so in America, the top department stores there, Bergdorf Goodman, Neimans, Barneys, Nordstrom, and then quite a few hundred premium men's wear stores as well around the US, it's a fantastic business. But we've been doing that since the 1970s or earlier. I've met people at shows and saying, "I remember when my first job was sending the telex back to the UK with the Pantherella orders on." So it's quite humbling sometimes to come across instances of how long Pantherella has been out there in the market supplying socks to premium retailers, basically.

Kate Hills: Yeah, and known for being such great quality. So is the secret, one of the secrets to the quality of the socks, because you hand link the toes still, don't you? Do you want to explain to me? Because I know we're going to go look around the factory and I'm sure I'll see that, but do you want to explain to people what that is and why that makes the socks so special?

Justin Hall: Okay, there is a transition in the technology that comes in here, which I'll explain. Certainly when you're knitting a sock, you're knitting a tube effectively. So at some point you've got to finish the tube and you've got to close the toe off, so it's not got a big hole at the end, effectively. There's different ways of doing that, and certainly one of the ways traditionally was always hand linking. And that's one of the things that Pantherella is renowned for is having a smooth linked toe seam, and hand linking effectively gives the consumer a smooth toe seam so you don't get the potential for blisters, or rubbing, or soreness across the toes where that linking seam is. So the technology has moved on, we still do some hand linking on site here, certain socks are hand linked

still, but actually that technology now when you're buying cutting edge machines from Italy, which is now the main machinery source, high quality machinery source in the world, majority of the machines you can buy from there now do have a hand-linking facility on the machine.

Kate Hills: Great, so it does it all for you?

Justin Hall: Yes, it does it for you. So it cuts out, in terms of improving productivity and things, it removes a few operations. Because hand linking was very expensive on the grounds that you actually had to do a lot of operations, not just the hand linking, which is tremendously slow and requires, you'll see as we go around, an enormous level of skill. But it actually, the machines, the technology, the precision with which these machines are now manufactured to be able to align 100 or 120 stitches on one side of the sock with 120 stitches on the other side, fractions of a millimetre in terms of precision to line these things up, and then, to then sew so through these as well. The technology is a bit mesmerising when you're actually there watching it.

Kate Hills: Yeah, I look forward to that then. Brilliant. I hear you're doing some sort of eco sock?

Justin Hall: I think, as a business we've been endeavouring to try and improve our contribution to environmental standards. It is hard, very hard in the world, in the marketplace, when you consume energy to run machines, you use water to wash socks and things. There are certain initiatives you can do to reduce that. We've done that over the last five years in terms of, we don't always full wet process wash everything now. We've enhanced doing steam tumbling, that's reduced the water usage quite a bit. We've invested in new boarding machines that use probably, only about 25% of the energy of previous ones.

Justin Hall: And one of the other things obviously is then focusing on raw materials, what materials can we use that will help reduce the impact of the socks, or the products we put into the marketplace. So one of them is an eco-like sock that we've just launched that will be going to market in December, January time, for Spring, Summer '20. And that's working with suppliers on a recycled cotton, and recycled polyester as well. So it's being able to find the materials that have those environmental benefits, but also finding them such that they actually align to Pantherella's premium quality levels as well. So it's great we've been able to do that. And the socks stand out and we're really excited that there's, some key accounts such as Selfridges have bought into it and they're doing, are looking to launch that in their store fairly soon.

Kate Hills: Brilliant. So plans for the future for Pantherella then, what's next?

Justin Hall: It's constant evolution within the sock range really. We're well known for launching probably one of the most, one of the broadest collection of socks every season. We tend to market in Pitti in Florence every year, at the big men's wear show over in America as well, every season there's launches there. And the sheer colour and variety we take to market is fantastic. So that's one of the key areas of focus we're still looking to

support, and back, and take new yarns to market, and new ideas, and new concepts.

Justin Hall: The other key area that we're looking at as well at the moment is a little bit of product diversification. As a brand we've been well known for socks for a number of years and one of the key aspects of our socks that make them different to other people's has always been the provenance and the high quality of the yarns we're using. And really, we've looked to build on that and take something else to market that really our consumers will recognise and respect us for as well. So we're actually going to be launching scarves on our internet site, should be happening this week.

Kate Hills: So this podcast will probably go out in January, so they'll already be launched?

Justin Hall: They'll be launched by January.

Kate Hills: With your eco sock, so we can link to that in the show notes.

Justin Hall: Yeah, eco socks will be there online absolutely, and certainly scarves will have been launched by then. So we're launching scarves based on the yarns we're using in our socks.

Kate Hills: So, matching scarves and socks?

Justin Hall: Exactly. Matching your scarves and socks is definitely doable now. So a fine gauge scarf based on some of our fine gauge socks, a leisure weight merino wool scarf, and then thirdly, a cashmere scarf as well because of our well-regarded cashmere socks, effectively. So we're really pleased with how they've come through, and the colour offer we've got in there as well. And we think that they're going to be well received by our consumer base, basically.

Kate Hills: Brilliant. So will I see those being made today when I go around the factory?

Justin Hall: No. We're actually working with a partner factory in Leicester. So we're working with somebody who's very local to us. So we're using our yarns from here, we're selecting the colourways, and we've worked with them to come up with the right construction for those scarves, effectively. So then we've been able to take them to market from there. So they're made the Leicester, down the road, using our yarns, then through onto our website.

Kate Hills: Brilliant. So can we go and have a tour around the factory?

Justin Hall: Absolutely.

Kate Hills: Fantastic, let's go. Lovely parquet floor, look at that.

Justin Hall: Yes, it's from old factories in Hampstead, Right, so we'll just pop down to the yarn store. It's a rabbit warren of a factory, just how it's grown up on the site.

Kate Hills: Yeah, it's a bit like, John Smedley's factory is a bit like this, they've got lots of corridors and tunnels. Hi. Right, so where are we now?

Justin Hall: We're in the yarn store. We've gotten two and a half thousand individual bays in here, and each bay is probably about two and a half foot by two foot high. We will store separate [merges 00:18:39] in each one of these bays, to keep them separate. So, like I said, we've got about five different cotton counts, four or five different wool counts. We've got silk, we've got two different cashmeres, and we've got two different nylon counts as well and things. And then you've got nylon lycras and things, It's, there's an awfully huge, big variety of colourways in here and merges as well.

Kate Hills: What's the noise in the background? That woo sound?

Justin Hall: The noise in the background is, it's actually the heating for the room. It's bringing in hot air from the knitting room. So we've got central suction in the knitting room that's sucking air through the machines the whole time. We actually switched the exhaust to come through into here, so it carries warm air through from there into here basically. So we've actually, believe it or not, had a BBC recording crew in here recording that noise for a BBC, I think it was a podcast on the sounds of industry and dying industries, or changing industries, in Leicester. And there was an exhibition in the Curve Theatre in Leicester around it, the sounds of Leicester. And they were focusing on not just this kind of eerie noise but also, as I mentioned earlier, Bentley knitting machines that were, there was thousands of them around Leicester only 20, 30 years ago. It was focusing around the noises of those machines, of how they, the clickety-click noises of them, mechanical sounds. So they came on site and actually recorded some of the noises from here as well, which was quite interesting.

Kate Hills: Really? Brilliant. So it's going to get quite noisy when we get into the knitting room as well, isn't it?

Justin Hall: It will be, yes. A high pitch. So this room here, we weigh in and weigh out every batch of yarn, so we know how much we've got on the shelf by merge and colour. Because even half a kilo of yarn for us, if it's used as a small stripe in something, half a kilo of yarn could mean the difference between making 120 pairs or not. So we've got a very precise tracking of yarn quantities through the business.

Kate Hills: Brilliant, right, okay.

Justin Hall: Thank you.

Kate Hills: Thank you.

Speaker 3: No problem.

Kate Hills: Yeah, it is eerie that noise, isn't it?

Justin Hall: It echoes down the [inaudible 00:20:59]. So, we'll look in here first, so this is the QC room for the knitting plant. Effectively, before we start production, the mechanics will set the machine up, they'll run the first sock off against the pattern and the colourways. Then it gets handed over to the quality assurance team who will come in and inspect, and check that sock against the standards that have all been set by design. So there's a big wall behind us with three or four rows of socks on hangers and there must be, I don't know, about probably 750 different styles and different colours on the wall there for the guys to be able to check against. So some of the checks we're doing are size checks. So this, as you'll see, is a lateral stretch test. So obviously, in order to get socks to fit properly, how loose you knit them, or tight you knit them, will affect the fit. So here we've got a standard machine that will allow us to check the width of the sock.

Kate Hills: That man there is checking the-

Justin Hall: Checking the lateral stretch. So it's about having controlled machinery that will allow them to do that, show the stretch. We also, then also will check the length stretch as well, and that gives us an accurate measure of the actual knitting qualities and the dimension of the sock. We're dealing with natural materials here, we're dealing with machines that have got variable adjustments on them as well. It's quite important to actually check the sizes as you're knitting. It's quite a high tolerance, otherwise you can end up with baggy or loose socks, or overly tight socks through production as well.

Justin Hall: One of the other things we're doing, just because we happen to be walking past it now, is actually we've been doing some monogramming for our direct to consumer business, online business. It's been a tremendous success, it's a really unique opportunity for people to buy special gifts for people that are personalised. So that's something that, certainly this time of year, starts to get busier, and busier, and busier with monogramming cotton socks and merino wool socks or cashmere socks. It's a fantastic gift for people really, personalised gift. So that's done really well for us.

Justin Hall: Just in the machine store where we have a lot of variety of machines that we swap in and out of the plant depending on what style of sock we're trying to make or not. But certainly, in the back here, I just wanted to show you some of the older Bentley machines that I mentioned earlier.

Kate Hills: Yeah, look.

Justin Hall: These are the full mechanical ones. So these are, we're keeping these as museum pieces really rather than using them now, I couldn't bring myself to throw all of them away.

Kate Hills: No, you can't.

Justin Hall: But you can see the technology on there, a drum of camshafts, a chain that rotates around, and actually really, in old school terms, or in modern terms, the programming of the machine is on that chain. Every link on that chain references one rotation of the machine cylinder, and as that chain moves around, you can attach different teeth to the chain to turn the cams to change the parts, or change the actual knitting process, of that sock and things. So that's really old school visible programming you can see down that chain. And that's, even today, on the plants people describe about the sock construction, there is part of the programme that's called the chain which defines the actual structure of the sock. And it's referencing back to the original machinery where the programming was on the chain.

Justin Hall: This next generation along of actually Italian machinery and these are where you could make a sock, but essentially the sock would come off the machine, but I'm never sure how to get these off. It would come up from machine, that's not one, inside out, with an open toe, ready to be hand-linked. And you'll start to see on the plant now, when I walk you around actually how this generation of machine has moved on again and we're now able to fully link the toes on the machines.

Justin Hall: On the machine at the moment you can see that this machine has finished knitting a sock. It's now just lifting the sock off the 200 needles, when we knit fine gauge 200 needle socks, it's transferred those stitches across to the linking head, taken the sock out of the cylinder, it will now close the cylinder back over, drop the cylinder head down slightly, before it starts knitting the next sock. In the meantime, it's started to link the toe together on the sock that it's just finished knitting, so that's moved to the secondary part of the machine. It's going to fold 100 stitches over on to the other 100 stitches and then it will start sewing it together.

Kate Hills: So how long does it take each machine to knit a sock? Because it's longer than you think, watching it all going around.

Justin Hall: Each leg, it can depend on, heavier gauge machines, it's a shorter period of time because you've got less courses to do, less rotations. But it's anything from three and a half minutes for a heavy gauge machine, up to five, or even six, seven minutes if you've got a very complicated sock where it has to knit slowly.

Justin Hall: So this is an area, moving into the hand linking area now. So a lot of hand linking is now done on the machines, as I talked through earlier, but there are certain machines that aren't able to knit certain varieties of socks, that do still need hand linking to maintain that premium quality and that smooth toe seam. We still do have to hand link them here. And actually, some of those are the eco-like socks that we can look at now.

Justin Hall: Good morning.

Kate Hills: Hello.

Justin Hall: So here you can see, so the eco-like socks, very bright colours, variety and some marl-type sock, which does make it one of the hardest socks to hand link.

Kate Hills: I was going to say, yeah.

Justin Hall: Because you're trying to spot those colours as you're feeding them onto the stitches of the needles. But you can see here how you've got that smooth toe seam now, where stitch by stitch they're joined together.

Kate Hills: So someone like this lady here, how long would she have trained to do hand linking socks?

Justin Hall: Well, I think typically in the past when we've trained hand linkers, it's been well over six months to get somebody up to a proficient speed and skill level. It's very hard, hand-eye coordination, concentration against the needles. And again, there's differences within the technique here as well. That somebody may be able to work on cotton socks and get quite proficient, but on wool it's a different skill again, slightly different tensions and things. And worked on 96 needle, versus 200 needle, versus 240 needle, very complicated to make the switch between different needle gauges and fibre types.

Kate Hills: Brilliant. Lovely to meet you.

Speaker 4: Thank you.

Justin Hall: Thank you very much.

Kate Hills: What's this? Yeah, is this dying, finishing, steaming?

Justin Hall: Finishing, yeah. So we've come through at break time. Essentially here, this is where we will wet process the socks and finish them. So they're, effectively, ironed and ready to go to the shops. So one of the key things is, after knitting is, relaxing the stitches back to their more natural, comfortable, longterm state. So there's a variety of different ways of doing that. All the work comes down here in bags, we have to separate that into like colours and like fibres so they can all get processed in batches, and equally, like sizes if we can as well.

Justin Hall: So there's two choices here, depending on the sock fibre, will depend which route we take it through. So for instance, cashmere, we will do a full wet process, and we'll be tumbling also to give it, it's soft hand-feel as well. So milling the sock slightly to loosen up the fibres, give it the soft hand-feel. So we've got a wet processing machine that we'll do small batches in here, it's like a full washing process effectively. And then we also have a steam tumbler for certain other socks where the socks themselves don't need to be fully wet through, we use the steam tumbler. It injects moisture and steam, relaxes the socks back and also adds a bit of softener at the same time. But that, in effect, uses less energy, less water, slightly more environmentally friendly in energy use and things than a full wet process. So where we can, we use that

process, otherwise we use a wet process to ensure high quality finish of our product.

Justin Hall: So from here they then get separated into their relevant sizes, which then move on to the boarding machines where the socks are loaded onto metal legs, they would've been pre-heated by the machine, they're pretty much too hot to touch, the socks will go on damp onto those legs, they'll move around, then on into a steam chamber where they'll then be steamed at up to three bar, which effectively sets the sock and irons it flat onto those sock legs. But I'll show you a new machine we've got next door, it may be running, to show you one of the recent investments we've made trying to improve that process.

Justin Hall: So here, this is one of the recent investments for the business, this is a new boarding machine. It's the first one we've had in about 15 to 20 years actually. Largely, because the technology hasn't moved on that much, but more recently it has. One of the key things about this machine is it's the only one in the world, we worked with the machine manufacturers to help produce this for ourselves. Key components, it's got two steam chambers rather than just one, and that allows us to control the steam pressure around the socks a lot more closely. It means that we actually, it also gives us a greater dwell time on the machine per sock set so that we actually get the rib setting we need as well. So presentation in shops is enhanced.

Justin Hall: And the key difference between this machine and the older machines is that the actual, because we've got individual sock chambers, it actually uses an awful lot less steam than the older machines, by a fraction. So it's well under 50% of the steam.

Kate Hills: So that saves loads of energy then?

Justin Hall: Yes, we're working to quantify that, it's still a new machine, but in broader terms we know it does that, but to see in a manufacturing environment and actually track it over a period of time, that's what we're doing at the moment.

Kate Hills: Brilliant. So that starts making your socks have less of a carbon footprint? Excusing the pun.

Justin Hall: Absolutely, it does. It reduces the amount of energy drastically. We've got a very big boiler at the moment and we should be able to be reduce the energy we use for that boiler an awful lot by using this machine.

Kate Hills: Plus, of course, your socks, if we're talking environmental footprint, last a lot longer. So it's better to buy a Pantherella sock which lasts much longer-

Justin Hall: It is indeed.

Kate Hills: Because you've done all the testing.

Justin Hall: And I think that's one of the key things, that everybody's got favourite socks in their drawer. There's the socks that are at the bottom of the sock drawer, and they're at the bottom of the sock drawer for a reason. And it's the ones at the top, and I'd like to think that Pantherella socks should be the ones at the top, and that's because the quality of fibres we're using and the colour that we're using on the socks mean that actually they maintain, they look like new socks for longer. Okay, everyone's got old socks that haven't quite worn out yet, that's why they're in the bottom of the sock drawer. You've not thrown them away because they've got a hole in them, but they look tired and they look old, therefore you don't wear them. Pantherella socks look newer and look fresher and brighter for longer. So it's not just the wearing out, it's the look as well.

Kate Hills: Brilliant, sold. So, most of the people that work in the factory live local, very local to here?

Justin Hall: Yes. The majority of people. You've arrived here, you've seen that this traditional old factory has been here for decades now. There isn't on-site parking, and actually the majority of people working on the shop floor, majority are walking to work. It's just far easier for them, they live in the vicinity.

Kate Hills: Because you're in a residential street, almost, aren't you?

Justin Hall: Yeah, we're surrounded by houses, on every side there's houses. So it is, we have to be mindful of our neighbours and things. But certainly, there's a lot of houses around here, a lot of employees do walk to work.

Justin Hall: So at this point here through production, we get to the point where we know where the socks are going, whether they're going to the Pantherella brand, or maybe it could be some other Jermyn Street or Savile Row brands. We know where they should be going, so effectively here, we start printing the tickets and applying the packaging, whether it be a foot transfer with a heat stamp, or whether it be just printing the actual tickets out. We'll just see around here how we apply them. So we've got the tickets here, and we're sewing on the individual tickets to the socks, using just a single thread and a single stitch. It doesn't damage the actual sock threads underneath, and that's pretty important when it comes to silk socks where they've got very fine threads and if you're not careful, you can actually break the threads in the sock and obviously leave yourself with a hole. So selection of machinery here and selection of how it's done is quite important.

Kate Hills: Great, what a fantastic place you've got here Justin, truly amazing. Thank you very much for showing me around.

Justin Hall: That's all right.

Kate Hills: Thank you.