



The main entrance to Xingye's headquarters at Anhui.
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Xingye Leather Technology, Anhai, Fujian Province, China

Much has changed since Xingye Leather Technology first took part in the Tannery of the Year programme, winning the award for China in 2011. Expansion has been constant and the group now runs four different plants, three in its home province, Fujian, and one just across the border into Jiangsu province. The focus of this report is mainly on the group headquarters in Anhui and on the retanning and finishing plant a few kilometres away at the newly built tanning cluster of Andong. In 2011, the Andong project was just getting off the ground; now Xingye occupies part of a busy, built-up industrial zone that is home to a number of leather manufacturers. The Andong site is also home to an extensive research and development set-up that serves the whole group. In fact, recent approval from the China Leather Industry Association and external government bodies means that the laboratory Xingye runs here has accreditation to carry out third-party testing for other companies in the leather industry too.

There are four separate blocks at Andong: one for retanning, two for finishing shoe upper leather and one for finishing leather for accessories. In 2011, the company's total output was around

Twenty years on from its launch, Xingye Leather Technology has established itself as one of the leading leather manufacturers in China and it is now preparing to make its mark on the international market too.

90 million square-feet of finished leather a year. This has now gone up to 150 million square-feet per year, from around 10,000 hides per day. Of those hides, 90% arrive at the company's facilities as wet salted and the other 10% as wet blue. Around 80% of Xingye's finished leather stays in China, going into shoes and handbags that Chinese brands sell to Chinese consumers. Its growth ambitions are still strong, which means it intends to focus on developing its business in export markets in the years



ahead, taking its international business, in time, to 30% or even 40% of overall revenues. Vice-general manager for the global group that Xingye has set up, Maggie Wu, explains that this extra focus on export markets will require adjustments within Xingye. "Our domestic business is usually with wholesalers, with traders," she says, "whereas our export-focused global business is directly with global brands. It's different."

More to say

General manager of the global group, Edmund Chan, explains that Xingye's initial salvos into the world of global brands will avoid the biggest names in athletic footwear, many of whom appear to be looking for fewer suppliers of leather rather than new, additional ones, but will focus instead on brands of a more outdoor bent. "We will have more to say to them," Mr Chan says, "because around 60% of the leather we are producing here now is waterproof leather. We can help them. We want to try anyway."

One positive aspect of dealing with global brands rather than with domestic wholesalers and brands all the time will be experiencing what Mr Chan refers to as the greater appreciation that he believes exists among brands outside China of the natural qualities of leather. His complaint is that Chinese companies are too quick to complain if there is a lack of uniformity from hide to hide or any natural defect. "When you have contact with brands such as Clarks and access to training from organisations such as BLC Leather Technology Centre and SATRA you learn about this," he says. "Leather is natural, so you have to accept defects, or at least some of them."

One important recent step has been the opening of Xingye's own commercial entity in the US, with an office in New York.

Dyed hides drying in the finishing department at the more recently constructed Andong facility a few kilometres from the company's original plant.

Joey Siu, a designer based in New York but originally from Hong Kong, is the US country manager. In addition to footwear, his hopes extend to securing, in time, orders from accessories brands there, including those supplying some of the big-name department stores. Mr Siu believes Xingye will be in a good position to deliver the consistency those demanding customers want. His background is in product design and he says he enjoys working with leather, explaining: "Leather is about feeling; it's part of enjoying life and, at least in the mid-to-high end of the market, there is still a great appreciation of that. Cheap, synthetic materials just represent junk in the eyes of those consumers. It's mid- to low-end consumers, the ones who want cheap stuff, who are moving to online shopping. Higher-end consumers like going shopping. That's why exclusive shopping areas are successful. Those consumers like going there and shopping around. That's part of enjoying life for them. They like to see and touch the accessories they buy."

Leather deserves respect

Joey Siu has an in-depth understanding of the way the handbag market works in the US, having witnessed close-up the development of brands such as Marc Jacobs, specifically the growth it achieved by running, from 2001 until 2015, the secondary 'Marc by Marc Jacobs' brand. For almost all of this time, Marc Jacobs was the creative director of luxury leathers goods brand Louis Vuitton and his eponymous brand is



Vacuum drying at Andong.



Roller-coating sides for women's fashion shoes. Most of Xingye's leather has gone into finished products for the domestic Chinese market until now, but an international push is under way.



Xingye increased its output of finished leather by 67% between 2011 and 2016.

one of the 70 different brands that come under the umbrella of parent group, LVMH. Mr Siu, who worked on products such as canvas bags with a leather trim that sold in the brand's outlet stores in Manhattan for between \$19.99 and \$29.99, insists that Marc Jacobs knew what he was doing with this venture and so did Louis Vuitton. "It's all about growth," he explains. "Listed companies look at their sales figures and they need growth. Perhaps it's not always easy to tell where the fastest growth is going to come from, so they want to have everything covered. LVMH doesn't want Louis Vuitton to sell bags for \$19.99, but it clearly decided that it could let Marc Jacobs do that, at least until recently. Luxury groups have bought up a lot of names and they are happy to offer entry-level products under some of those names."

Another way to give consumers who cannot (or simply don't want to) spend thousands of dollars on a handbag a first taste of your brand is to offer small leathergoods for \$40 or \$50; Mr Siu likes that approach. "There's a huge market there," he says. "Brands can make key-fobs and other small leathergoods basically from waste and then, depending on the brand, even a key-fob will sell for \$20 or \$30 and the profit margin is huge. A lot of people will buy them and then, maybe, one day they will buy bigger items from the same brand."

With an increase in finished leather output of 67% between 2011 and 2016, Xingye is unlikely to be able to rely on small leathergoods production to swallow up the extra material. That's why the initial focus for the new global division will be expanding the range of footwear brands that use Xingye leather, with Edmund Chan fronting up that challenge to allow his New York-based colleague to establish the company on US soil and begin to build up the accessories side of the business.

School of thought

Maggie Wu, who is the elder daughter of Xingye's founder, Huachun Wu, has grown up with the company but has been working there full time only since the start of 2017. The company is an important employer in Andong, Anhui and the other places in which it operates. For this reason, the group places emphasis on helping its employees develop their skills and



knowledge. Ms Wu explains that an internal programme is in place to invite experienced Xingye experts as well as technical experts from universities including Sichuan and Harbin (and other outside bodies) to address groups of employees on specific technical subjects. This even includes setting examinations for the group's employees to sit and awarding certificates to those who pass. It also sends particularly good performers who show management potential to attend courses at the universities or, in some cases, facilitates their participation in distance-learning programmes.

Another part of the vision Maggie Wu has inherited is of a leather manufacturer that uses high levels of automation and of tanneries that run as "intelligent factories". She explains: "We have typically brought people to Fujian from northern and western regions of China, but the people from those parts of the country are less willing to move nowadays. The government is encouraging them to stay in their home towns and work there; a lot of factories are setting up in those regions of China now because they are cheaper." An example of automation that Xingye has already put in place is drums that can automate chemical dosage rather than rely on people to calculate the time, the type of chemical to add, the specific amount of each chemical and so on. The dosing system the company now has in place handles liquid and powder chemicals, as well as water mixing. Even the drum doors are automated.

Tax burden

She feels there is still a high level of support for the manufacturing sector in general in China. "That's the route our country has taken," she says, "and I don't think the government is going to give it up. There are policies in place to reduce taxes and other burdens on manufacturing companies. Costs have increased sharply, you see. There may once have been a time when manufacturing was an easy, quick way to make money but now it's totally different. Taxes are super high, maybe higher than anywhere else in the world. We have import taxes on raw materials, sales taxes and so on and the burden is big. Even if it's for material you will export in the end, you have to pay the import taxes for the raw material up front and then claim the money back. I think the government realises how



The common effluent treatment plant at Andong, used by Xingye and a number of other leather manufacturers at this new cluster near Jinjiang. In 2011, there was almost nothing here.



Retanning drums with some level of automated control at the Andong tannery.



The company uses Chinese-made milling drums at the Andong plant, with hang-drying of hides continuing overhead.



tough that can be and is trying to help companies like ours."

Maggie Wu wonders if part of the Chinese government's motivation in offering higher levels of help is a concern that manufacturing jobs will leave China, not just for other parts of Asia where labour costs are lower, such as Vietnam, but for the US. She acknowledges that many footwear manufacturers in particular have begun production in Vietnam, but a glance at other industries tells her setting up in the US has proved an attractive option for some. A company based just 150 kilometres up the Fujian coast, automotive supplier Fuyao Glass Industry Group, for example, has invested \$70 million in the course of 2017 to convert a former wallpaper factory in Plymouth, Michigan, into a new autoglass plant that will employ more than 500 people. "Companies are making moves like this," Ms Wu says, "and the Chinese government is now becoming a little bit sensitive about it and is introducing policies to reduce tax."

Machine integration

The problem of competitor Asian countries such as Vietnam and Indonesia offering considerably lower labour costs continues, though, and this is another of the reasons why Xingye is keen on automation. The Anhai plant, the oldest in the group, is a good testing ground for new automation, Ms Wu feels. Much of what the company hopes to do there was still at the planning stage at the time of this Tannery of the Year visit, but she insists that anyone visiting in two or three years' time will see high levels of machine integration. "Labour costs go up without ceasing," she observes, "but not everything about that is bad. One of the reasons we have to pay more is that our workers are more and more educated, and that's a good thing." A few years ago, most of the workers would have come to the Anhai plant by bicycle or motor scooter but now

Finished leather, almost ready for delivery to customers.

people come by car. Plus, lots of the people who came originally from northern and western provinces, including members of the management team, have settled permanently in the area around Xingye's headquarters, many of them in the nearby city of Jinjiang, bringing their families to live here.

Within China, the people that make up the leadership team at Xingye are convinced that Fujian province presents the company with advantages because of the high levels of environmental good practice that tanners here have been forced to live up to. Those leather manufacturers who have continued to thrive as this decade comes to an end have embraced this good practice wholeheartedly. In Maggie Wu's opinion, the presence of advanced leather clusters, such as the one her father helped establish at Andong, are a big help. Tanneries have moved there together, she explains, and process their wastewater together (in keeping with guidelines laid down by the authorities); they share the responsibility for running clean operations.

Shouts of support

It's important to run production responsibly, she believes, because it makes it easier for local authorities to support the presence of tanners in the area, which she says they want to do because leather manufacturers create jobs and generate tax revenues, but they would not be allowed to continue to do so if they were endangering the local environment.

Early in her career, she already feels a degree of pressure to "educate" those outside the industry about the importance and



value of leather. Pleas that Maggie Wu has heard at industry events that more people involved in the leather supply chain should shout about its sustainability, its status as a durable, natural, beautiful, waste-saving by-product from the meat and dairy industries, have made an impression on her. "This is not like the fur industry," she points out. "I worry that some consumers may think that we are in the same industry and form a negative impression of us, but this, leather, is totally different. We are not killing any animals to make leather, just using hides that come from the meat industry. And if we didn't use the hides, they would go to waste." She thinks the longevity of leather is another important plus. "It's not a one-time-use thing," she says. Her strategy for putting across a truer picture to consumers would be to deploy "every channel", using television, magazine articles, advertising, social media and so on to make the leather industry's position clear: that leather is a truly sustainable material, that it saves hides and skins from going to waste, transforms them into a product that is both natural and long-lasting, that it has a unique ability to combine beauty, comfort and usefulness.

Partnerships with packers and other suppliers

Ms Wu explains that, when Xingye started 20 years ago, it used mostly domestic hides. It was an agent who introduced the company to US hides and it has found hides from that part of the world to offer good quality and good value for money. She talks of seeking to be "a strategic partner" of packer firms but feels they lack the time or the energy to pay much attention to the leather manufacturers who put the hides they produce to such good use, although the Chinese tanning group has had a degree of success with some smaller packers. Its hope is to convince them to take steps to keep cattle hides in the best

The well equipped research, development and testing centre at Xingye's plant at Andong.

condition possible. "It would mean more money for them," she observes, "and it would help us too, of course, because at the moment, raw hides are a resource whose quality fluctuates from season to season and year to year and we can't control these changes. To be able to establish strategic partnerships with packers would mean that sometimes they would lose out and, at other times, we would, but it would give all of us a better balance." She explains that her father, at one stage, thought seriously about investing in his own sorting house for fresh hides, the place the hides go to when they leave the slaughterhouse, and about becoming his own hide trader.

On the chemical side, something she says she's been struck by is the similarity of differently branded products. If products have more or less the same ingredients and produce the same result, Xingye's belief is that buying at the lowest price, and in the biggest volume it can, is the best way forward; it has told its technicians to alternate the particular types of product concerned, depending on availability. Despite this, Maggie Wu says the company's relationship with its main chemical suppliers is good [see separate section]. She is impressed by the openness of the dialogue leather chemicals manufacturers maintain with the tanning group. "They clearly carry out a lot of research and development," she says. "Then they come to us with their new ideas, telling us which aspects of the leather-making process they think a new product will improve. Then they let us try out the products to see if there really is an improvement." Particular examples include chemical



Wet blue awaiting retanning at Xingye's Andong tannery. The company was one of a very small number to agree to carry out production trials with water-, chemical-, time- and money-saving additives from Chinese technology provider Biosk.



Part of Xingye's track-record as a pioneer is that it was one of a small group of Chinese tanners to have faith in new ideas that began to come from Biosk Chemicals Company at the start of this decade. Biosk is a producer of liming and tanning auxiliaries that, it insists, can help tanners reduce by up to 70% the volume of chrome sludge, lime sludge and wastewater they produce, and reduce their water usage in pickling and chrome tanning by more than 70%.

The technology has undergone in-depth production trials at Xingye and is now an established part of the group's leather production. The trials involved reusing concentrated floats from liming and unhairing in the wet processing, as well as chrome tanning, of about 12,000 wet-salted bovine hides per week. A key factor in the reduced consumption of water is that the hides are discharged from the recovered floats without any washing. They are filtered to allow for the removal of hair before they go back into the drums, but they are not diluted. As well as the water saving, this saves on chemical consumption and processing time too and, to highlight a further important benefit, the floats from liming and unhairing remain in the tannery and continue to be of service rather than adding to Xingye's effluent treatment burden. Each batch of limed hides is then transported for fleshing in secure containers, from which any remaining float is collected and the liquid goes by dedicated pipe into a holding tank, with the capacity to store more than a day's worth of float, waiting to be added, after temperature adjustment, to a new load of hides. The reason for the separate pipe network is to avoid adding liquid from any float not enhanced with the Biosk additives.

World Leather's eye-witness observation of how this process is working at Xingye is that after lime splitting the hides show a good level of relaxation and a clean grain. With the use of Biosk additives in chrome tanning (for which the process works

in a similar way to the liming process described above, with the chrome tanning float being collected and reused), the hides make consistently smooth wet blue material, also with a fine grain.

Xingye and the small number of other pioneering tanneries that have taken part in the trial have found the Biosk technology to be easy to put in place. Mixing in the right additives at the right time is relatively uncomplicated, although comments from the tannery floor suggest it can take a few cycles to find the best way to top up the floats to keep them balanced. The processing drums in use are standard-issue 4.2 metres by 4.5 metres in size, fitted with deep shelves. Well designed layouts help, allowing for the dedicated pipes to go in easily.

It's results that count, and Xingye has found that, as well as saving water and time during the wet-end process, the Biosk additives are allowing it to save up to 50% of the levels of sodium sulfide and sodium hydrosulfide it was using previously, as much as 40% of the lime it was consuming, up to 70% of the common salt and almost 30% of the chrome salts it used to need. All these savings have a clear monetary value.

There is still a need for effluent treatment at Xingye because it is unable to reuse the discharges from pre-soaking, soaking, deliming and bating. But because there is no discharge into the wastewater of float from liming and unhairing, the need for sulfide for oxidation has gone, as have the heavy load of suspended solids and nitrogen from hair burn. Chemical oxygen demand and biological oxygen demand are reduced.

As a Chinese technology provider, Biosk faces something of a challenge in putting its thinking across and offering its products to the global leather industry. The real-life experience of forward-looking and well respected partners such as Xingye is certain to be a big help.



formulations that can help Xingye make lighter-weight leathers without compromising on performance and help it advance the waterproofing of its leathers.

Her senior colleagues think there are still plenty of ideas to try. Edmund Chan has a sample of leather produced in Italy and impregnated with a perfume that reminds him of Chanel No.5. "I've had it for two years and the perfume is still there," he says. "This is a good idea. I would like us to try something like this." Joey Siu agrees. Applying perfume to the lining of a leather wallet appeals to him. He adds: "And particularly for the Chinese market, something I think would work well would be a leather phone case that smells of tea – leather with the smell of Chinese tea. I'm sure our technicians could make that happen. That's how you promote innovation: we come up with our visions, our castles in the air, and rely on our technicians to make them real. We stimulate each other and as a result innovation can come out."

With machinery, Xingye has found it necessary to move equipment around the different facilities the group runs. The production profile has changed, but machines have not lain idle for long. A group of this size has simply been able to relocate the machine to another part of the group where it can still be used. "We want to build strategic partnerships with some suppliers, just a small percentage of them. And the difference this will make is that we will have long-term contracts with those companies," Ms Wu explains. "And as far as customers are concerned, not now, but I think in future we will have some strategic partnerships there too. We will work together on research and development projects and figure out with them how to do things in a more environmentally friendly way."

The main Xingye company showroom at Anhui.

Family pride

The environmental expertise that Xingye has built up is one of the reasons Maggie Wu is proud of the company her father launched. "We invest a lot of money to improve waste management processes in ways that small tanneries won't do," she says. "They can't, because it's costly. But it isn't only about cost. Our family's Buddhist background means we know we must use our conscience when deciding to do things and this is a characteristic of the enterprise. I think the culture of any company depends on the personalities of the people leading it and, in our case, my father is very passionate about this, about working with conscience, in good faith."

This same commitment drives humanitarian and charity work that Xingye carries out: the company provides financial support for the upkeep of homes for older people and continues to fund school projects too.

These initiatives involving local schools, something Huachun Wu is particularly devoted to, his daughter explains, adding: "He simply wants to encourage everyone to be educated; he thinks this is good for society." She talks also of a separate fund specifically for providing help to people inside the company when a sudden need arises. "One recent instance was when an employee had a family member who was diagnosed with cancer and the fund was there to help them," she explains. "My father likes to help when people are in difficulty. He sets a very good example." 🌟