



The team at the main Sepiciler tannery at Torbali in Turkey.
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Sepiciler Torbali, Izmir, Turkey

Much has changed at Sepiciler since founder, Mehmet Sepici, set up the leather manufacturing company in 1930. Its early efforts in producing kidskin leather for footwear and for hats in Izmir, his move from the city centre to, first, the suburb of Yesildere and, later, to the district of Torbali are well documented in the Tannery of the Year report we produced on Sepiciler in 2012. Rather than repeat those details, our aim here is to recount the changes that have taken place at Sepiciler in recent times, not least in 2017, which seems to have been something of an *annus mirabilis*, a year of impressive progress on a number of fronts for the company, which is still run by Mehmet Sepici's family.

The production campus at Torbali is still a busy place. Current capacity is to produce 6,000 square-metres of finished chrome- and vegetable-tanned leather every day, plus 20 tonnes of thick sole leather for discerning footwear brands. Almost all of this material leaves Turkey and Sepiciler has customers in 30 countries.

Until 2017, the Torbali complex was also home to the company's wet-end operation, but, as we shall see, one of the most important changes that took place last year applied to this part of the business.

Pioneering work over its 90-year history and ongoing commitment to environmental and social responsibility helped Turkish tanning group Sepiciler become Tannery of the Year for Europe in 2013. A series of deeply significant developments since then, with more to come, have brought the company to the attention of the Awards programme once again.

At the Torbali site now, five distinct halls house distinct operations: wet blue and wet white storage in one, with chrome retanning and finishing next door. Next to that is the sole leather tannery, with the vegetable tannery beside it. The fifth building contains some



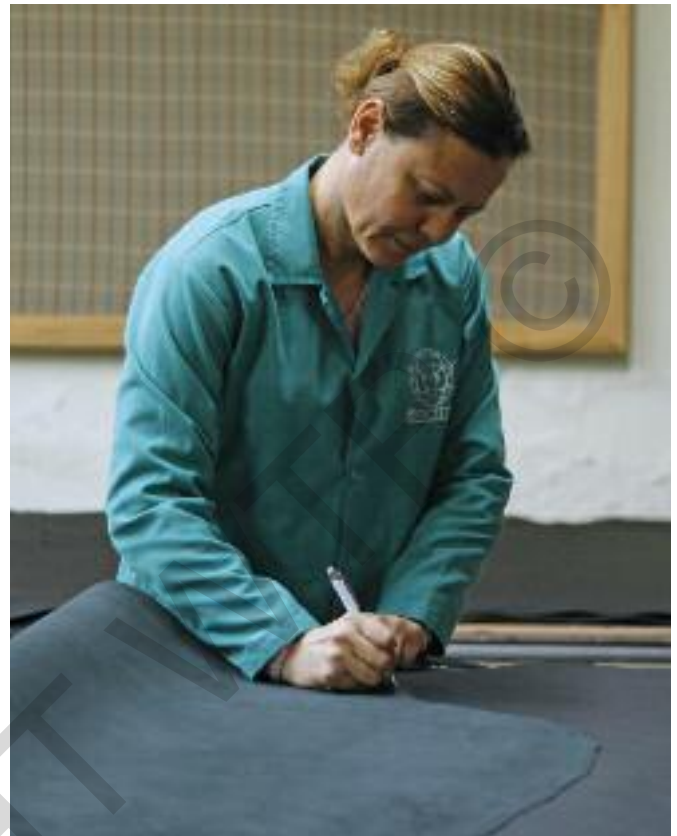
finishing operations, sorting and packaging, as well as the corporate offices. In all, 214 people work at the main plant now, mostly people from the town of Torbali or the surrounding villages. The company provides free meals and a high level of health insurance for workers and their families. It gives them shopping vouchers at new year and at the times of major festivals to help allay extra household expenses. It lays on buses to bring them to work and take them home again, although many employees now have their own cars (official statistics show that the number of private cars on Turkey's roads increased by 24% between 2012 and 2016). Other members of the team commute from Izmir; the city is around 50 kilometres away, but the commute can be slow because of heavy traffic.

"Most of our people are locals though," explains marketing director, Yesim Sepici. "They are bright, hard-working, modest people and I think they value the fact that our company is still family-run. This is a farming area and the parents of many of our employees still work on farms here. Through their hard work, their children are well educated and now have different employment opportunities. So we try to hire people locally, preferably people with university degrees. Some of them still help run farms in their spare time; they sometimes bring eggs or milk or other produce to share. We find that word of mouth is one of the best ways to recruit people; many of our current workers have a parent or an uncle or a brother who used to, or still does, work at Sepiciler and they knew before they arrived that this is a good company to work for."

University challenge

Other elements of the company's recruitment strategy include maintaining its own list of potential candidates from CVs submitted speculatively or in response to previous job advertisements, and "staying close" to the leather engineering department at Izmir's Ege (Aegean) University. Students there follow a four-year course and, upon completing it successfully, gain a bachelor's degree in leather engineering, which is valuable in a world in which institutions offering this level of education and training in the science behind leather manufacturing are increasingly few in number. On a more negative note, not all of the 40 or so students who graduate from the course each year stay in the leather industry; their skills and knowledge are also in demand in other sectors and this has been the case for some time. But, on the other hand, Sepiciler has also been able to recruit talented young people from other academic backgrounds, including chemical engineering, environmental engineering and even fine arts. "When we are recruiting, I try to make sure the person will like the position they are after," Ms Sepici says. "They have to like it."

Sepiciler is a member of Deriteks, the Turkish affiliate of the IndustriALL global trade union group that represents 50 million workers in 140 countries in the mining, energy and manufacturing sectors. Not all its competitors are. It describes the union as a force for solidarity, better working conditions and union rights. Kemal Özkan, assistant general secretary of IndustriALL in Turkey, visited the Sepiciler tannery recently and spoke in positive terms about the relationship between the company and its workforce. The leather manufacturer says this may mean an increase in labour costs of up to 25% compared to companies that keep the union out, pay the minimum wage and offer employees no say in how they run things and no comeback on anything they disagree with. Sepiciler says it recognises that its workforce is "specialised and valuable" and



Sepiciler describes its workforce as "specialist and valuable".

accepts the extra expense.

"There are lots of examples of the company going out of its way to help people and their families," environmental engineer Yigit Kaman says. "This is not a big, fancy place for high fliers, but people are valued and rewarded. They are happy working here."

The company makes an effort to offer casual work on special projects when it can to people in the village of Caybasi, the Torbali plant's closest neighbours. It also makes donations to the village school and has carried out other acts of charity such as handing out firewood from its supplies to local people in times of exceptionally cold weather.

External expertise

One of the major developments that occurred here in 2017 concerns ongoing development and career advancement, not for new recruits but for established employees. In 2017, it became a member of specialist testing and research body SATRA and after extensive and, the company points out, expensive training, eight members of the team gained certification from the external organisation in grading and sorting. It's the first department in the tannery to receive SATRA training; others could follow. For now, the newly certified team-members are sharing their knowledge across the company.

Yigit Kaman explains that, while SATRA's input is new, the company has frequently hosted talks and training sessions from third-party organisations and experts in the past. Machine safety and other aspects of workplace security are an obvious example (some of these courses are mandatory by law, Mr Kaman points out). But



The Torbali tannery is now devoted to retanning and finishing.



Operatives at the samming machine.



The company produces veg-tanned, chrome-tanned and sole leathers.

there have been more unusual inclusions, such as talks on the global economy from well known business strategists.

Turns in the road

Even experienced and well travelled figures such as current company chairman, Mehmet Sepici (grandson of the company's founder) seem to have found this external impetus valuable. His thinking is that the tanning industry and the whole of the manufacturing sector are having to negotiate some "sharp turns" in the road at the moment. "This is why we are seeing, in Turkey and all over the world really, tanners closing their doors and people moving into other sectors," he says. One of Sepiciler's responses to this challenge has been to move its wet-end operations away from Torbali in, arguably, the most significant and most spectacular of all the changes that have taken place recently.

"The way of doing things here has always been to try to do everything in house," Mehmet Sepici continues. "But we made the decision to move the beamhouse out because, even though we have a lot of space in Torbali, we felt limited by the buildings we have in place. We thought about changing things here, but all the changes would have had to be within these walls and we wanted to do something more creative."

The result is a new beamhouse, now open for business at the extensive tanning cluster just outside the city of Bursa, which is more than 300 kilometres to the north. This new operation is a 50-50 partnership between Sepiciler and chemicals group Herkim and the joint-venture has a name, Allianz. Mehmet Sepici argues that a principal contributing factor to the closure of some tanneries is that they are no longer running their own beamhouses because they are unable or unwilling to invest in the necessary upgrades in technology or in environmental management. "If tanners no longer want to run their own wet-end production, we can produce for them," he says. "We have even talked about making Sepici-branded wet blue for other tanners in Turkey." Starting with a blank canvas, Mr Sepici says the Allianz partners have been able to bring in a substantial amount of automation, leading to a doubling of the group's wet-end capacity (see panel giving full details of the Allianz operation).



Space saved

Naturally, all of this has altered the look of the main tannery back in Torbali. Soaking and liming drums and fleshing machines that used to be in the chrome tannery are now in operation at Allianz. Six wooden and six stainless steel retanning drums remain in what is now the chrome retanning section at Torbali, so it's still a busy place. In the finishing area next door, the equipment includes two spray-coating and two roller-coating machines. It's a similar story where the production of veg-tanned and sole leather is concerned. Torbali is now focusing on retanning and finishing the wet blue and heavy-substance wet white that is tanned in Bursa. The retanning drums and finishing machinery remain and the specialist processes to make veg-tan leather of up to five millimetres in substance and sole leather of up to six millimetres (in addition to the chrome-tanned leather mentioned above, with a thickness of up to four millimetres) continue, just with a little more breathing space than there was here until 2017. With chemicals for wet-end production also moving to Allianz, this is equally true of the Torbali chemicals storage area.

A product's environmental credentials are Sepiciler's top priority when it comes to choosing the chemicals it uses, Yigit Kaman says. He explains: "We only work with the best, which means suppliers that are compliant with restricted substance lists (RSLs) and have the documentation to prove it. We update our RSLs every year and they are extensive enough for around 80% of our customers. For the rest, we have to be able to provide the necessary documentation, which means we need letters of compliance and samples for testing in third-party laboratories from suppliers. If a supplier fails to respond, we cut ties." He argues that there ought to be a searchable, unified online database giving summaries of the material safety data sheet (MSDS) of all the products leather chemicals manufacturers sell. This would ease the burden on tanners, he says.

At the same time, he makes it clear that Sepiciler wants to work with companies that it can partner with on new research and development projects. It is this commitment to innovation that has made the Turkish group one of the early adopters of Stahl's Neo range of sustainable finishing chemicals. It is also considering trials of the X-Biomer idea that Lanxess has developed for use in tanneries, making retanning agents from the



One of Sepiciler's recent achievements was to have eight members of its team accredited by SATRA in grading and sorting.



Sepiciler's preference is to work with chemical suppliers who are keen to work in partnership on new ideas.



The company works hard to keep its restricted substance list information up to date.



The effluent treatment plant at Torbali.

by-products that accumulate during leather manufacture.

"Our technical team is the best in Turkey," Mr Kaman claims. "They are always in dialogue with technology providers and always on the look out for technology that they think will improve our performance. We can pitch any idea to the people in the company's management team and, if they like the idea, we know they will put together the finance to fund it. If we see a tanning machine that uses less energy and less water, we are not slow to replace our old technology. We know we can sell the old machines to someone else." He says the policy is to try to carry out as much maintenance of the tanning machinery as possible in house, only calling on the technology providers if it is absolutely necessary.

Returning to leather chemicals, Mr Kaman says he would like more manufacturers to follow Ecoltan's lead and play a more active part in developing products with a higher level of exhaustion so that they have a lesser impact on wastewater management than they do now. Plus, he insists it should be easier to reuse in production chemical residues that do crop up in waste. It is common to think of chrome when this subject comes up, but the Sepiciler environmental engineer says the same principle applies to vegetable tanning. He explains: "Veg-tan chemicals come from natural products and make very good, clean leather. We understand that. But the wastewater from those processes contains a lot of tannin. If there were a way to recover the tannin from discharged wastewater and make it reusable it would be good. We are carrying out our own research into this."

On the Torbali site as a whole, there is lots of space, as much as 250,000 square-metres, but most of it is outdoors. It grows cereal crops, wheat in winter and corn in summer, on one of the fields that surround the tannery. Sepiciler ploughs that piece of land, a contractor comes to sow the seeds at the right time, the leather

manufacturer waters the crop, a contractor harvests the crop and the Sepiciler sells the crops at market.

Establishing the new beamhouse has had a negligible effect on the Sepiciler group's relationships with hide suppliers because it's still the central group that sources and buys hides for Allianz. Yigit Kaman explains that a long-standing policy of preferring to work with Turkey's largest meat companies. "Their standards are better," he says. "We don't want heads; we don't want hides caked in dung." He says Sepiciler has had cause to write to the Turkish government about the problem of hide quality, mostly due to the fact that meat companies were bringing in live animals for slaughter from a wide variety of regions with large animal herds, which led to noticeable volumes in the supply chain of low-quality hides.

Hide and seek

One of the company's most important local hide suppliers, Bayindir Ogullari, runs its operation from warehouses close to the city of Balikesir, roughly half way between the Torbali tannery and its new beamhouse in Bursa. It's a trading company that carries out no slaughter of its own, but collects cattle hides and sheepskins from abattoirs around the region, the best in Turkey for livestock, according to one of the owners, Hakan Bayindir. There are seven big abattoirs within 25 kilometres of Balikesir.

At current trading levels, the company trades 3,000 tonnes of cattle hides and 300,000 small skins per year. Mr Bayindir, who runs the company with his brother, Ozkan, says that, in his opinion, domestic cattle breeds supply only 20% of the hides consumed by Turkey's leather industry. Other hides do come from Turkish



abattoirs, but they are from cattle brought into the country at four months old that are finished on farms there. Four years ago, the government launched a programme to boost the breeding numbers of cattle that Turkish livestock farmers regard as native, including Holstein and Simmental, so that 20% share should go up, he says.

Mr Bayindir also says quality is going up, at least in this part of Turkey if not across the whole country. "The quality here is the same as it is in the European Union," he insists. "This is one of the best regions for farms and herds and farms and slaughterhouses here have the latest technology. There is also support from the government for this, including a very good programme for educating farmers about disease. Farmers receive training from experts and there are formal livestock inspectors. The government supports this, mostly because it wants to improve the quality of milk and meat."

As far as improving the quality of hides, the Bayindir Ogullari bosses believe an increase in leather exports from Turkish tanners to customers in the European Union will provide the incentive and the pressure required to move things forward. "It's a more secure market than Russia, which has traditionally dominated our leather exports," Hakan Bayindir says. "European Union customers will drive us to add more value." He thinks, however, that the government could provide better support for the hide and leather sector, in addition to its support for farmers (not instead of). Failing that, he fears tanners may have to spend some of their own money on promoting the need for better treatment of hides and skins on farms and in abattoirs.

Something he is aiming to secure support for, both from tanners and from farmers, is a move away from salt as a means of preserving raw materials. Mr Bayindir explains that each hide in his storage facilities is treated with around 7 kilos of salt. "We are planning to change the process to cold storage, but farmers and tanners need to support that move," he says. "We are already planning this change and could have a cold-storage system in place in three years. We have our own trucks, specially licensed to transport hides and skins, and in three years the trucks will be temperature-controlled. This will minimise bacteria and maximise quality."

Team work

One of the founder's sons, the irrepressible Talip Sepici, is still involved and still spends a lot of his time at the tannery. His formal involvement in the business spans more than 55 years, when his ambitions to study medicine gave way to his father's need to have him travel to Germany to study leather technology instead, at the former tanning school in Reutlingen. He said in 2012 that he well remembers times during which Turkey's economy was closed; now it's possible for manufacturers there to bring in key supplies, such as chemicals, from outside. But if it's easier than in the past to source these materials, selling finished product is harder, he said, making marketing a key activity for any organisation. Talip Sepici still believes that, but he now places emphasis on research, too, saying this is the key to determining if, for example, the chemicals tanners use are safe for the environment and for human health. "Team work is also very important," he says. "It's good for us to work together; different opinions are good, and it's wonderful to know you are not alone."

His daughter, Yesim Sepici, says team work is an important element of the success of the company. She serves with a number



A new solar energy plant on land close to the tannery will deliver back to Turkey's power network six times the amount the tannery uses to make leather.

of her cousins on the current management team and insists that the spirit of working together is something her generation imbibed at an early age. "We love our work and we are happy to come here every day," she says. "We were never spoiled as children and we used to come here, summer and winter, during school holidays to help in any way we could. My father always taught us that. And the tannery was our playground too."

She picks up the point about research, saying that the company likes to carry out most stages of the development of a new article itself rather than bring in external developers. "It may take us longer," she says, "but everyone learns from that. Sometimes it might seem that we have too many trials and that people are over-thinking things, but we think it's important to give our engineers the freedom to try out their ideas."

Different market needs

Customer relations have changed in recent years, and not always for the better, according to Yesim Sepici. She says there are footwear and leathersgoods brands the group works with that are reluctant to pay "a fair price" for the leather they want to use. She elaborates: "I think the fashion industry is changing too quickly for the leather industry to keep up, and the textile manufacturers we sometimes have to compete against have a big advantage because they can adapt more quickly. We need more time."

Ten years ago, Sepiciler was selling directly to footwear groups in countries such as Germany, Austria and other places in central Europe that nowadays "just buy everything from China, India or Vietnam", Ms Sepici points out. There are promising signs, too,



New beamhouse operation

A Sepiciler board member, Muammer Yilmaz, spent months in Bursa setting up Allianz and perfecting production there. He is the Allianz general manager, but is a mentor on production for the whole of the group. Summing up what Herkim and Sepiciler have achieved at Allianz, he says the new beamhouse is "simple, efficient, innovative, low-cost, low-energy, high-quality, high-yield and environmentally friendly".

Talks about this idea began between the two partner companies in July 2016. In November of that year, they concluded all the paperwork necessary to set up Allianz as a company in its own right. Production trials began at the end of 2017 and, because only "a few small problems" emerged from those trials, all parties have expressed confidence that Allianz will begin working at 100% during the first quarter of 2018. Full capacity will be wet-end processing of 40,000 hides per month.

Working in partnership with chemicals group Herkim, Sepiciler has built a new beamhouse at Bursa.

Simplicity of the wet end

"When raw hides came into the Torbali tannery in the past," Mr Yilmaz recalls, "soaking, liming, fleshing, splitting, deliming and pickle all happened in different places. A hide could easily travel a distance of 3 kilometres when moving from one process to the next. Allianz is smaller and we have everything under one roof. Everything is set out logically and we have lots of automation. When we finish liming, we only have to move a hide 25 metres for it to reach the fleshing machines and, from there, it moves automatically to trimming and automatically again to lime splitting."

A beautifully simple time-saving idea has come into the Allianz set-up involving the two fleshing machines. These sit back-to-back, but with just enough of a gap in between for the operatives. Half the team fleshes the upper half of each hide in the first fleshing machine before removing it and turning through 180 degrees to

though. The company's performance in 2017 was one of the best in its history, with results up by 25% on the figures for the year before. Its projections are that the 2018 result will be between 10% and 12% better than 2017's. There are high hopes for an increase in demand for the company's veg-tanned leather. This links to a recent boost to the company's efforts to build its presence in the US market; another member of the management team, Mustafa Sepici, has moved there from Turkey with his family, setting up a new home in California and a new company name, Sepici Bros LLC, to grow Sepiciler's business there. "Veg-tanned leather is very popular there," Yesim Sepici observes. "I think the main idea people have of leather in the US is really of veg-tanned leather. I also think finished product companies there are hungry for good quality, that they are fed up with poor quality material and a lack of responsiveness on the part of their suppliers. That's why we're developing the veg side of the business."

Taking everything into account, she explains that sales are fairly evenly distributed across Europe, the US and the Far East. In Europe, the demand is mostly for chrome-tanned leather for footwear and bags for fashion brands. New customers have come forward in the safety shoe segment, especially among manufacturers producing protective footwear for police and military personnel, usually as a result of tendering for the business and winning it. "It's a niche market," Ms Sepici says, "because the leather has to be fire-, dirt- and water-resistant and these customers cannot just go around the corner and find someone else, but the volumes can be big."

Sepiciler's customers in the Far East are mostly buying vegetable-tanned leather to make bags, belts and other accessories, which they produce for brands around the world (including prominent European and North American brands), as well as chrome-tanned finished leather.



hand the hide to the colleagues standing immediately behind them. The operatives in the second group take the hide and, likewise, turn with it through 180 degrees to present it to the other fleshing machine, this time with the lower half going in. There are cranes and conveyors for automated drum-loading and water-dosing too (the system automatically sets water to the correct temperature and the correct flow). "No forklifts are required so we have fewer forklift emissions, and it means we need fewer workers," says Mr Yilmaz. "We have a team of 32 people to make all the wet blue and wet white we need. We would have needed 60 people under the old set-up. Here, we can go from the end of liming all the way to deliming in one hour and 20 minutes maximum. At Torbali, that process used to take five hours."

More with less

There are other factors. Sepiciler had nine hot-water tanks heated by boilers at the Torbali facility to supply hot water for each of the production units there. The pipeline required to supply water to all these boilers is long and the system consumes high volumes of natural gas. At Allianz, a short pipeline supplies two tanks and that's enough, plus the system there uses heating oil instead of steam with the result, according to Mr Yilmaz, of a 50% saving in the energy costs associated with generating hot water. Before, he says he would have calculated consuming 24 litres of water per kilo of hides being processed at the wet end. The figure for Allianz is 17 litres. This will improve further when a rainwater collection and pumping system comes into use. He contends that everything is happening in less time, using less energy and fewer workers, but that Allianz will generate twice the volume of semi-processed hides that Sepiciler produced previously. He says that during trials the Allianz team quickly reached the point of completing the process with lime splitting by three o'clock in the afternoon, allowing plenty of time for cleaning and keeping the tanning area tidy. His calculation is that Sepiciler and Herkim will achieve a full return on their investment in the new facility in a short period of time.

Tried and tested

He feels that the main factor preventing tanners and leather chemicals manufacturers more widely from embarking on joint-

ventures of this kind is a lack of trust. "It helps that this is the wet end," Muammer Yilmaz admits, "because it's straightforward and there is a standard way of doing things, but we have no worries about trust."

A project with Turkish provider of chrome salts Ecoltan provides a good example of this. With a 50% funding grant from the Turkish government for new equipment (part of a programme to reward and encourage manufacturers with a good track record in export markets), Allianz bought lab equipment and testing drums and hired young graduates to develop ways of improving chrome exhaustion. It invited a number of chemical suppliers to take part in small-scale trials and ten responded. Four of those tests went forward for trials in full-scale drums and the idea put forward by Ecoltan proved to be the most efficient. Working on splits, they have now achieved 95% fixation to the hide and will expand the project to other articles in the near future. "Now this is open for everyone to try," Mr Yilmaz says. "It uses a standard chrome tanning agent that anyone can find. The important thing is the process and the recipe, which are the result of all our trials."

An example to others

The 60 tanners at the Bursa cluster, including Allianz, have access to a common effluent treatment plant (CETP), but Muammer Yilmaz makes it clear that he and his colleagues have set out from the start to place as small a burden as possible on this common resource. The channels built into the new facility to convey wastewater to the CETP are designed to filter out as much solid material as possible to allow the effluent to flow as freely as possible. Metal grills are in place to act as filters in these channels. These grills have gone in at various points along the channel system, but they sit at a slight angle to sift out as much solid as possible and the grills go in in pairs, one just behind the other, so that when you take one out to clean it, the other remains in place to catch solids as they float through. "It seems simple," the production director explains, "but people are used to letting the CETP deal with everything. We are trying to ease the load and now the team that manages the CETP is holding Allianz up as an example to others." 🌐

What leather really means

For the US, additional products include insoles cut on site in Torbali to go into shoes for prominent men's footwear brand Allen Edmonds. Sepiciler has a footwear components production company in Istanbul called Kaya Taban and among the components it sources locally are the cut leather soles and insoles from Sepiciler. But the main products for the US market, as mentioned, are natural and coloured veg leather. "This leather is thicker, so it's more durable," Yesim Sepici says. "It's also easy to handle and, if you oil it, it gives it a lovely vintage look. It's popular. Some customers buy one hide because they like horse-riding and have decided to make a saddle in their garage as a hobby. There should be more of this. Art departments in schools should encourage children to use leather in their arts and crafts classes, not just paper. They can buy scraps from a tanner and get the children to make keyrings, bookmarks and so on. It would be good because the children would get to

know and love leather."

Ms Sepici believes that leather's innate ability to become more beautiful over time is one of the most important factors in setting the material apart from synthetic alternatives. "Leather is for ever," she insists, "and it grows more beautiful as it ages. Our customers know this and they prefer leather for precisely this reason. They also know it's the most eco-friendly material you can use, as long as you use the right processes, because it's recycling waste. Synthetic materials are usually a by-product of the petroleum industry and that resource will run out one day."

Energy supply evolution

Just outside the village of Atalan, less than ten kilometres from the tannery, Sepiciler has installed a new solar energy plant on land the family owns there. Some of these hectares have long been devoted to producing olives to make high-quality oil, but some



were uncultivated and for years appeared to have little potential. Now it's home to more than 50,000 solar panels and, when it's operating at full capacity, will contribute to Turkey's national energy supply six times the amount that Sepiciler consumes in making leather, from raw to finished. Creating 600% of its own energy consumption through this renewable resource will cut Sepiciler's carbon footprint by almost 11,500 tonnes of CO₂ equivalent per year, the company has calculated. Each of the panels can generate 270 watts of power and has a lifespan of 30 years. Sepiciler has calculated payback of six or seven years on its investment in the technology. External consultants working on the project have said the location is perfect because the sun will shine on it for at least nine months of the year.

Inside the Torbali tannery, efforts to make excellence in waste management and environmental responsibility resonate with everyone have borne fruit. For Yigit Kaman, the key to this success was making all members of staff aware of what care for the environment and managing waste are, and why they are important. "I'm an environmental engineer and I know what they are," he says, "but you have to pass that knowledge on, so we organise in-house training every year on environmental management and we have posters giving all details of our environmental policy, in English as well as in Turkish, on display across the whole plant. I have been working on this at Sepiciler for eight years now and in that time, I calculate that the awareness has increased incredibly."

Between 70% and 80% of all the waste the tannery generates (everything from sludge and shavings to plastic and cardboard packaging) is recycled or reused. Eight years ago, Mr Kaman says, the figure was 30%. He says the quality of the operation at Sepiciler's wastewater treatment plant in general has also gone up. There are no other leather manufacturers in the area around Torbali, so the company's own waste management encompasses physical treatment, aeration, chemical sedimentation, biological activated sludge and secondary gravitational sedimentation units with a belt-press sludge dewatering system in addition to a sludge decanter, also developed in house. There is no shortage of new ideas. A project to use the dewatered sludge from the tannery to make compost has been running for more than five years. Yigit Kaman wants to develop it further to turn it into worm compost, which, he points out, is three times more valuable. If a small test is successful, he will conduct a larger-scale trial and, if that works, apply for a licence to commercialise it. He also wants to calculate the carbon footprint of every article in the Sepiciler range. "I want us to be as professional in our management of the environment as we are in every other part of the company," he says.

The pull of school

Amidst all the changes of 2017, possibly the most unusual (for a leather manufacturer) development for Sepiciler happened in downtown Izmir. Like many long-standing Turkish trading families, the Sepici clan has its own mansion, a handsome early-twentieth-century townhouse with surrounding gardens in the centre of this bustling port city. It is some time since any members of the family lived there and most have moved to flats in an attractive apartment block nearby. Last year, however, the Sepici mansion received a new lease of life: it became a school. It's a joint initiative with Aziz Üstel, one of Turkey's most famous television presenters, but also an actor and a translator: his translation into Turkish of 'A



A science lesson at the new school Sepiciler has helped set up in Izmir.

Clockwork Orange' by Anthony Burgess has won awards. He has now set up an education foundation with his wife, Filiz Üstel. Their foundation had already established pre-schools in Izmir and now, in co-operation with Sepiciler, they have been able to start a wider project called UKEB Schools, which encompasses a primary school as well as pre-school.

Important aspects of the foundation's outlook on children's education include an emphasis on science, technology, music, art and even manners (teaching the boys and girls how to behave politely towards one another) and the over-arching principle is to try to foment educational development in Turkey along the lines envisaged by the founder (in 1923) of the new Republic of Turkey, Mustafa Kemal Atatürk.

Ironically, Yigit Kaman says he often thinks of the Sepiciler tannery as being like a school itself. "It's just that sometimes we're the student and at other times we are the teacher," he explains. "We learn new things every day from the global leather industry, but then we do our best to pass them on, to teach them to the rest of the industry in Turkey. Also, we are able to give the rest of the world a better understanding of the leather industry here, to help the world see Turkey's enthusiasm for doing new things and for embracing high-quality, environmentally friendly, ethical and caring initiatives."

For Yesim Sepici, this willingness to help the leather industry, in Turkey and globally, tell its story is something the group will never give up on. "Maybe leather will come to be more of a niche material," she says, "but maybe then people will learn to appreciate its authenticity too; hides often come with scratches and this, also, is beautiful." ●