



Robert Hein of National Beef Leathers. The new tannery set-up he has designed and implemented at St Joseph, Missouri, is the way forward for the wet end of the industry in any developed economy, he believes.

CREDIT: NATIONAL BEEF

The roots of raw material

National beef's ambition to make its wet blue plant in Missouri an example for the whole industry is well on the way to becoming true.

A wet blue plant in the town of St Joseph, Missouri, is now being run by National Beef Leathers after its parent company, the packer firm of the same name, acquired it from Prime in 2009. First brought on stream in 1970, it grew to become one of the largest wet blue facilities in the US. National Beef Leathers embarked on a redevelopment programme soon after taking over and when it's complete in early 2013, this will be the largest single wet blue facility in the world.

Australian leather industry veteran Robert Hein is the person shaping this project using experience he built up at tanneries in his homeland to make National Beef Leathers an example of how a twenty-first century wet blue plant can operate in a developed economy, using high levels of automation and just-in-time manufacturing principles instead of expensive labour to add value to raw material. In this case, the raw material comes from the abattoirs that National Beef runs in this region, in Missouri and in neighbouring Kansas, in the mid-west, not just the geographical centre of the country, but for so long also the heart of its beef industry.

Starting from scratch, except for the roof and the walls, Mr Hein has set up a new operation next to the original plant, which continues to function for now. The new facility consists of two back-to-back lines of ten drums measuring 4.5 metres by 4.5

metres. The next phase of the project will be to replicate this on the original tannery floor, bringing the total capacity to 40 drums with a target daily output of 12,000 hides a day. The drums are custom-made by Pajusco in Italy, with National Beef even specifying the wood used in their construction. They have five or six speeds compared to the two that older drums have. "The difference with this is that it defines each tanning step and allows you to react at soaking, liming and every other step along the way," Mr Hein says. "You can see the difference when the hides come out. More technology gives us more flexibility and more accuracy. Customers want consistency, nice flat leathers with the right physical attributes to let them achieve their re-tanning and finishing aims. In the next two years, the quality is going to continue to improve as we reach each stage."

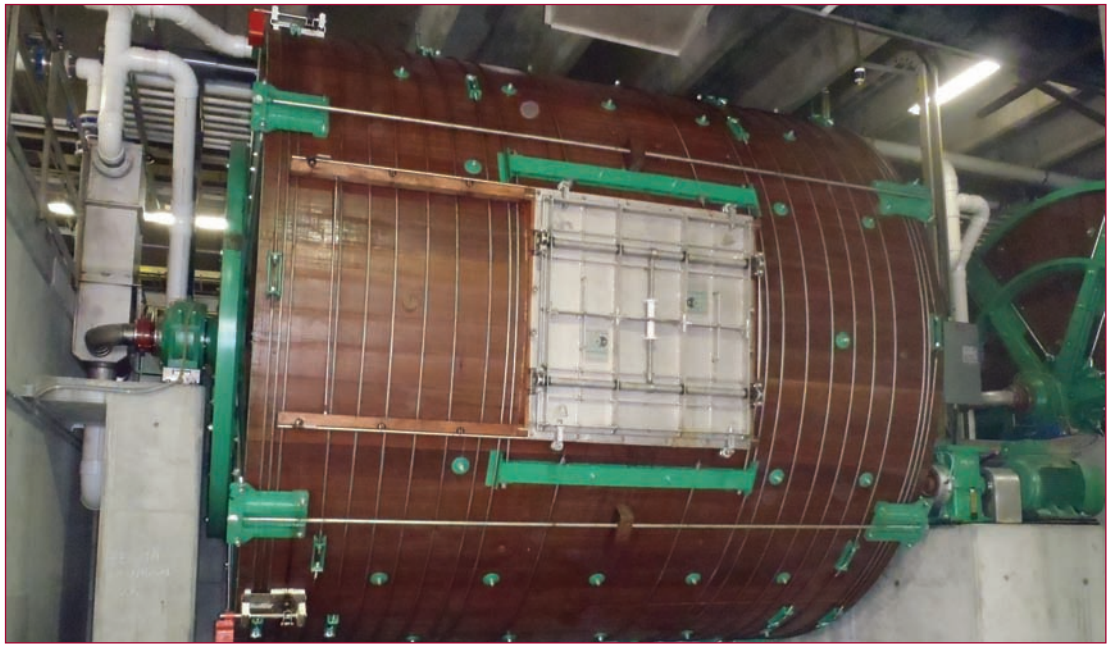
Technical innovation

Automation and conveyors will transport material around the entire tannery and are already in place in the remarkably quiet and clean new section of the plant. Chrome-recovery is also part of the plan; National Beef will recover all the chrome from its sammying machines and re-use 100% of it, Mr Hein says. In an ultra-modern control room, all necessary information regarding loads, average hide weights, recipes and so on is stored and



Special drums were developed specifically for the project by Pajusco.

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displayed. It works so well, Robert Hein insists, that if required, a technician can access remotely every detail about what is happening in every drum and have a view of which of the thousands of valves in the plant are open, closed or half-closed.

There is a new warehouse to store inventory, with space for 80 container-loads. An outside storage area has space for a further 220. This operation is computerised, with trucks directed straight to the correct load so that they waste no time in transporting them the 100 kilometres by road to Kansas City, an important rail hub. From there, the containers go by freight train to ocean ports on the east or west coast for shipment to customers all over the world. Up-to-date logistics systems mean each container can go straight to the right ship when the train reaches the port and continue onwards to the tanneries that will finish the hides.

Advanced technology is at the heart of every aspect of this project. It is Robert Hein's view that tanning operations in any developed economy have to use technology to compete, in his company's case to deliver wet blue of a consistent quality to customers. "If we get it right, we can make our customer's job a lot easier," he says. "We want to show the way, to lead. We're already halfway there and when we get there, people will realise that we have done the right thing in making an old industry that hates change so mechanised. We'll be efficient and consistent, and what people pay for is what we'll deliver."

Outside storage of wet blue is no accident. As much material as possible is going to be stored in the grounds beyond the walls of the tannery, for the simple reason that Robert Hein wants to use "all of the real estate" to make leather.

Resistance to change

His description of the mainstream tanning industry's reaction to change may or may not ring true, but what is undeniable is that change is taking place. The main reasons are familiar: globally, beef consumption is growing very slowly at best and herd sizes and slaughter numbers in many of the traditionally big markets for the raw material for leather production are diminishing. Farmers are finding faster fortunes and far less hassle in alternatives such as soya, crops for biodiesel.

Brazil and Argentina are experiencing exactly this

phenomenon at the moment. Official reports from the United Nations Food and Agriculture Organization in Rome suggest a herd size of 30 million head for Mr Hein's native Australia and slaughter numbers of 10 million head for Australia and New Zealand combined. He believes these numbers are plausible. But the figures for Asia? A cattle inventory for the continent of 431.6 million and slaughter total in 2009 of 100.6 million? Mr Hein wonders if herd sizes in India and China are really that big.

He has no concerns about demand for leather decreasing in the immediate future. Twenty years ago, by his calculation, only 5% of cars in China had leather seats, but that the figure today is 23%. There may be less leather per seat, he points out, but a lot more seats as car sales increase in the fastest growing economy in the world. Leather matters there; even drivers of small vehicles can feel they are driving a rich person's car if the upholstery is right. He feels, however, that rising raw material prices will inevitably have an impact in the months ahead. "Tanners are very good at efficiencies, but the price of finished leather will need to go up; we can't control it," he says. "The hide price is high, but who can control a commodity? The price isn't coming down because the hides aren't available."

Push for just-in-time

Putting the same point another way, he says that the value of inventory all along the leather value chain is changing, with the value moving higher. These higher values of raw material, semi-finished and finished inventory will push companies at all stages towards just-in-time. Things often only change because of necessity, he points out, and nothing is more necessary in business than money. Inventory is money. "We are going to change the perception of wet blue from a commodity to a valuable product," he continues. "Our customers will value us. We're not looking for new customers, but for stronger relationships with our existing customers. We develop a recipe for each customer and the system we have built delivers it; that's how we achieve consistency. But it also means that we can handle 12,000 hides a day from National Beef slaughter facilities, five days a week, with hardly any people and hardly any bags of chemicals in sight. It's all clean and it's all green. This is the future and we're not going to stop."●