

Buyer's View: Jane Saunders & Manning

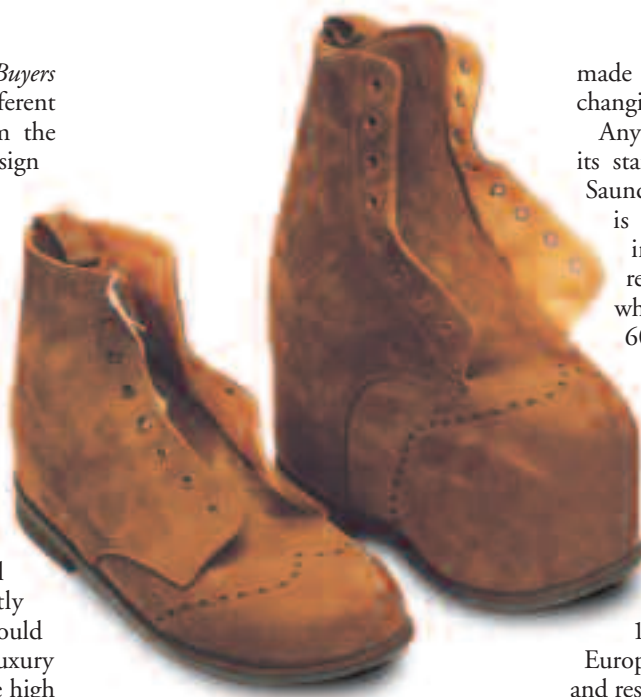
Purpose made to fit the purpose

Since its inception, the series *Buyers View* has covered many different users of leather running from the highly technical through fine design to super luxury. Many of the companies featured are proud to express their total commitment to marketing in its true definition i.e. giving the customers exactly what they want in a product which exactly fits their requirements. This is the aim of all of the companies so far visited and the vast majority seem able to fulfil this pledge without too much difficulty.

World Leather recently visited a company with an extra special requirement for supplying exactly what its customers really need. It would probably not place itself in the luxury category and maybe not even in the high tech field but the products it supplies have an enormous impact on the lives of its customers. The company is Jane Saunders and Manning Ltd who manufactures a wide range of orthopaedic footwear and appliances at its factory in Thornton Heath South London.

A custom-made approach

The company was founded in 1973 via the merging of the various partners, R. Manning, J. Jane and M. Jane who were previously involved in orthopaedic shoe making. Managing director Roger Manning detailed the early days of the company and the importance of the description "shoe making" rather than "shoe manufacturing" became all too clear when the processes were described and observed during our visit. The system of tendering for the annual contract to supply the National Health Service (NHS) with some 3-400 various items was described. Initially the company tendered for a limited number of items but in the late 1980's additional products were added leading to the extensive range now being produced. At one time trained orthotists



and limited function fitters would measure patients and be involved with making the products but in the early 1990's the NHS took their orthotists back in-house.

The company has two units, a footwear department producing a wide range of orthopaedic shoes and boots and an orthotics section making appliances, supports and splints. Mr R. Manning was at pains to point out that all products were custom-made to very exacting individual requirements. The type of work the company now undertakes has become more involved than when it first started. This is due partly to advances in patient care plus better understanding of the right to their requirements and partly to advances in materials and production techniques.

The chain of supply to customers starts with their visit to a general practitioner who refers them to a consultant who will prescribe the corrective or supportive measures. It was clear during our visit that it is the patient who is seen as the most important member of the customer base, indeed, some patients have been customers for more than 20 years, receiving custom

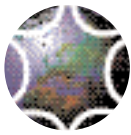
made products which evolve with their changing requirements.

Any business is only ever as good as its staff but in a business such as Jane Saunders and Manning where everything is custom made to very exacting individual fit and performance requirements, the staff are key to whole operation. It employs about 60 people and is always on the lookout for new members to undergo the training necessary to become adept at the numerous skills required in producing bespoke products mostly by hand. The workforce is gradually ageing and there no longer seems to be the ready source of skilled workers that was available in the 1960's and 70's mainly from Eastern Europe. Training is very much on-the-job and results in a very flexible workforce able to undertake many of the special tasks involved in the production departments.

Orthotics

This is clearly demonstrated in the orthotics department where we were shown the remarkable skills required in making the various splints, supports and calipers. Leather is very much in evidence and most of it is in the form of oak tanned shoulders which have been found to offer the best properties for exact moulding to the intricate shapes required. The key process involved is "boning" the soaked leather with a tool originally made from bone. This process involves soaking the leather in plain water for 48 hours and then wrapping the soaked leather around a cast of the relevant limb or joint. Then follows the pressing and moulding of the oak tanned leather into the exact shape of the cast. This process takes up to four days with two boning operations each day as the leather is gradually eased into the intricate shapes and slowly dries, taking on the permanent shape required.

The skill of the operators is also evident in making the accurate castings from the



Boning

moulds received from the orthotists. These are usually poured in plaster and possibly used for various vacuum forming using techniques on equipment developed in-house. The orthotics manager also demonstrated some of the complex engineering skills required when forming the exact shapes and support functions of the various metal calipers and braces. These too use leather in the form of straps and also padded supports to cushion the wearer from the metal structures. The leather used in the linings and supports is selected for softness and is usually chamois or an undyed combination tanned side leather. The straps are made from traditional harness leather.

The orthotics department is a fascinating combination of engineering, craftsmanship and improvisation to supply the individual requirements of each piece of equipment ordered.

The shoemaking department of Jane Saunders and Manning is a similar blend of the traditional and high tech skills needed to produce highly individual footwear.

The orthopaedic shoemaker faces a major problem from the outset. No two customers are alike. It is not just a case of different sizes between the right foot and the left, as one may be normal and the other not. Alternatively, they may both be of a totally different shape.



Boning



Lasts

Some of the problems occur with the measuring and forming of the inserts, which have to be exactly right if they are to be effective. While the actual shoes may be uniform in size and shape, the inserts must be tailored for each customer. In this case, some degree of standardisation and mechanisation becomes possible. Variations in size, between the left and the right foot, can usually be covered quite easily, as a degree of flexibility is built into the system. This procedure is frequently time-consuming and therefore becomes expensive, whatever method is employed. Having said this, however, such problems become insignificant when compared with those associated with extreme medical conditions.

The lasts illustrated *above* show an example where there are multiple problems.

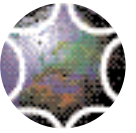
- Both feet are different in both size and shape.
- Both have weak ankles needing some support.
- Both heels have been pushed over on the outside.
- Bone problems necessitate deep and roomy toes.

How do you mass-produce shoes on lasts like this? The answer is simple. You do not.

Firstly, the patient must be measured by a qualified orthotist with full reference to medical conditions, etc. These measurements must then be turned into lasts and depending on the complexity of the footwear shape the orthotist may decide to take a cast. The modeller or last maker will be highly skilled and able to work quickly although it is unlikely that he would take less than one and a half hours to produce a pair of lasts/casts and possibly more, if they were particularly complex. The process of making last/casts from scratch or converting an existing last is usually done by hand using wood and epoxy resins. Technology is used where possible and general manager Steve Fisher described the company's use of the CAD/CAM system to scan the foot's outline into a PC, fit available last shapes onto the outline and then adjust on-screen



Clicking



to get a perfect fit. The shape is then digitally calibrated and the exact co-ordinates are used on the milling machine, which produces the last.

Pattern cutting poses similar problems to last making and there are growing demands for up-to-date shoe styles, which the pattern cutter must somehow, transpose on to frequently very difficult last shapes. Here the company also employs CAD/CAM technology for pattern making together with a relatively small use of traditional hand methods and paper patterns.

Leather cutting is carried out by hand as the sheer diversity of patterns prohibits the use of press knives. The cutter or 'clicker' as he is traditionally referred to, must be skilled enough to work directly with paper patterns and be able to use his own judgement to maximise the performance of each piece he cuts, but also avoid any unnecessary waste of a valuable raw material.

Fashionable materials

Steve Fisher was at pains to point out that the wearers of orthopaedic footwear are still entitled to wear shoes in fashionable materials and he has found that tanneries are unable or unwilling to supply these in just a few skins or sides. The company therefore sources its range of upper leather from agents and has found that this gives it the necessary flexibility in the quantities required. The maximum order is for specialist lining leather and this is rarely for more than 1,000 sq.ft. The company holds a stock of upper leather, linings, insole and soling material at Thornton Heath and finds that its suppliers are readily able to re-supply within 1-2 weeks.

The type of upper leather used in the footwear is largely defined by the prescription from the orthopaedic consultant, i.e. firm leathers are required where there is posture correction through a particular induced way of walking or there is a need for support as in a polio case. There has been a noticeable change over the years with the defeat of polio and the increase in cases of diabetes which call for a much softer more mellow construction to give protection against skin pressure and ulceration.

The leather is pre-selected at the agent's premises against the agreed specification for substance, grain and grade and then rechecked on delivery. The main properties now in demand are a mellow handle, fault free grain and an even substance and the



prime reason for most of the rejections seems to be colour variation from skin to skin and batch to batch. Jane Saunders & Manning is able to offer the customer a wide range of choice with its upper leather swatch of some 35 colours, grains, suedes and nubuck. Even the definition of "the customer" is complicated when considering an orthopaedic shoemaker as the direct customer is the orthotist but the footwear is for the patient customer.

The prime demand from both types of customers is fit and comfort but fashion is still a requirement for the patient customer.

Upper assembly and stitching also require multi-skilled operators, able to perform all the operations necessary to complete an entire upper. This again involves the use of basic techniques and much hand trimming of linings and other pieces. Lasting must also be done by hand,

as the extreme shapes involved require multi-directional and often quite substantial lasting strains to pull the upper down tightly to the last. This is essential as, in most instances, the shoe forms a support for the foot and, if not truly accurate to the last, wastes all the effort previously taken in the accurate measuring and last making.

After lasting, the footwear is usually fitted to the patient to ensure it is as perfect a fit as possible. If any changes are noted, the last will be altered and the upper re-lasting. This again all calls for a high degree of manual skills, as well as being very time consuming.

No substitute for leather

This is also one of the reasons why oak bark leather is still favoured by the orthopaedic shoemaker for insoles, counters and toepuffs. Not only is it easily mouldable, it is strong, breathable and can also survive the stripping of the upper from the last if modifications are required. It is also possible to start out with a thick counter and skive it down by hand to provide thinner, more flexible areas where required, and also to produce a knife edge that will not show through the thinnest of upper materials. No synthetic material can do this to quite the same degree.

The variety of bottom shapes also means that soles and heels have to be prepared individually for each shoe. These days, orthopaedic footwear is generally flat lasted, with a stuck-on sole and heel attached in layered pieces to be trimmed to shape afterwards. The process is therefore quite complicated and whether using leather or synthetic materials, requires a high degree of skill on the part of the operator to ensure an accurate fit as well as a good bond.

All the shoes are carefully prepared before transport, those in finished leather are waxed and polished and those in suede and nubuck are given a fluorocarbon repellency treatment.

The pride in product and service is very obvious when visiting Jane Saunders & Manning and in a world which is becoming ever more hurried and standardised with less individuality, it comes as a refreshing revelation to find that a real bespoke service is the primary goal of a business. The impact of its products on the lives of its customers is immeasurable but the care and dedication in their manufacture is evident in large measure. ●



Hand Lasting