



THE UK LEATHER INDUSTRY

# AN OVERVIEW AND FUTURE STRATEGY

# **LEATHER**

Leather is a unique and highly versatile material. It is a renewable resource based on a by-product of the meat, wool and dairy industries and used in a wide range of products as diverse as children's shoes, where it is most important for foot health, luxury bags and cases, car seats, jackets, gloves, saddlery and oil seals in aircraft. Leather makes a contribution to the quality of everyday life and has done so for centuries. Leather has a special attraction and is sought after by consumers - virtually everyone wears or uses one or more leather products on a regular basis. The UK has an important place in the global leather industry because of its specialist producers and its concentration of technical expertise, education and training facilities.











# **2011: THE GLOBAL LEATHER INDUSTRY**

No view of the UK leather industry can be complete without reference to the global leather market, as even the smallest UK players are engaged in a truly global business. A business which begins with the international trade in raw hides and skins worth some \$5.1 billion US annually, and expands into the trade in finished leather worth \$19.7 billion. Specialist chemicals and machinery from around the globe are standard in the conversion process from raw hide to finished leather.

Despite the size of the trade, the leather industry functions entirely as a dependant of the global agriculture industry from which hides and skins are obtained as a by-product of the world's meat, wool and dairy industries. Generally, in 2011 the global industry is in robust health, reflected in demand for product from international luxury brands like Hermès and Louis Vuitton whose heritage is built on leather product, but also from the world's automotive industry, which continues to prize leather above other materials

as the fabric of choice for premium car interiors. Leather is also extending its reach into aviation and other sectors.

Long term projections suggest that international demand for leather will grow at a pace above that of the growth in availability of hides and skins to the year 2020 despite projected growth in both human and farm animal populations. This reinforces the premium nature of leather for the next decade and beyond. To underpin this point the brand of 'leather' already enjoys only positive connotations in the eyes of global consumers and as material would enter the category of 'best' material for any number of applications from military gloves to aviation upholstery.

As global brands and consumers increasingly focus on environmental concerns and sustainability, prospects for the industry - which is fundamentally a recycler of a renewable resource that would otherwise be discarded and contribute to climate change - remain strong.







# **2011: THE UK LEATHER INDUSTRY**



Despite the availability of hides and skins in the UK as a by-product of a robust and subsidised agricultural industry, UK leather production has shrunk in the last decades but steadied at an approximate industry turnover of £200 million annually, employing some 1,100 people. That is approximately 10% of the size, both in terms of numbers employed and value to the economy, of the Italian leather industry which has less raw material domestically available to it. By accident or design however, the UK industry is now characterised by a range of manufacturers, spreading from Scotland to the South West, all with specialisation in particular raw material and product sectors which are, for the most part, non-competing. They number, amongst them, perceived market leaders in their individual sectors, be they upholstery, glove or shoe upper leather. The larger companies, as well as exporting as much as 90% of their UK production, have investments in offshore production facilities in Asia and Africa. The reputation of the UK leather industry in terms of production technique, environmental stewardship and leather chemistry helps to sustain the leadership the country also enjoys in leather education. This comes through the pre-eminent position of the Institute for Creative Leather Technologies (ICLT) at the University of Northampton (UoN).





# STRATEGIC ISSUES FOR THE UK LEATHER INDUSTRY

We have identified six main areas of strategic importance and concern for the UK industry, broadly categorised as follows:

- Research and development
- Environment
- Brand
- Carbon footprint and sustainability
- UK raw material (hides and skins)
- Education and people

These categories will present the major challenges for the UK leather industry for the foreseeable future, and we believe that if there is to be support available to meet the needs of the sector that it should be focussed on these areas. The major issues by category are outlined below and addressing them will allow for further development of a lean and resilient independent UK leather sector.

### RESEARCH AND DEVELOPMENT

Whilst individual companies will continue to invest in innovation for their own product development, which will often involve high level chemical research conducted by their own PhD and graduate chemists or other scientists, there are potentially fundamental projects to be considered that may well revolutionise and benefit the process of conversion of a raw hide to finished leather. In broad terms these might cover the areas of:

- · Unhairing of raw material
- · Alternative tannages
- Dye technologies

Individual companies may find such projects difficult to finance and protect in terms of intellectual property, in order to allow them to be exploited on a national or even global scale that they may warrant if successful. In the past, the sector has enjoyed technology grants for fundamental research but in the last two decades these have been scarce as other sectors were prioritised for investment by UK Plc. It is our firm belief that the resilience the sector has shown, its intrinsic links to the UK agriculture sector and the excellence of quality and facility at UoN are worthy of renewed investment. Such investment will ensure that the UK industry remains a significant contributor to the UK economy as a whole and also to the export performance of the UK manufacturing industry, and in particular in exporting further afield than Europe into the major growth economies of Brazil, Russia, India and China and beyond where the UK businesses are already accustomed to operate. The ICLT typically has four to six postgraduate research students working on leather-related projects at any one time. Of the five current PhD students, two are self-funded, two are University funded and one has a Commonwealth Scholarship, but the lack of grant support for UK leather industry-focussed research means that these projects tend to be driven



by University strategy for the Research Excellence Framework, rather than industry need, or technology transfer from the leather sector into more fundable areas such as healthcare.



# **ENVIRONMENT**

The conversion of raw hides into finished leathers will continue to be an area fraught with environmental concerns. This is as true of the industry in the UK as it is of the industry anywhere else in the world. With much of our available raw material exported from the UK, the pollution risk is exported along with that material unless more effort is directed towards improving existing processes.

Much of the concern in this area could be addressed by projects under the research and development banner but, whilst the industry first and foremost would drive for improvement in economic performance, there are significant environmental considerations in which the UK might take a

leadership role should funding and resource become available. One such item for consideration has been a 'Sustainability Analysis' for leather and the leather industry, perhaps looking at comparisons to other synthetic materials. These projects, by their very nature, embrace more than the remit of an individual company or organisation.

The UoN's Centre for Sustainable Wastes Management and ICLT have collaborated on a number of research projects. However, because of the funding sources, these projects have tended to benefit the wastes management industry or leather industries outside the UK, with lesser challenges than those faced by the UK industry.

# STRATEGIC ISSUES FOR THE UK LEATHER INDUSTRY (continued)

## **BRAND**

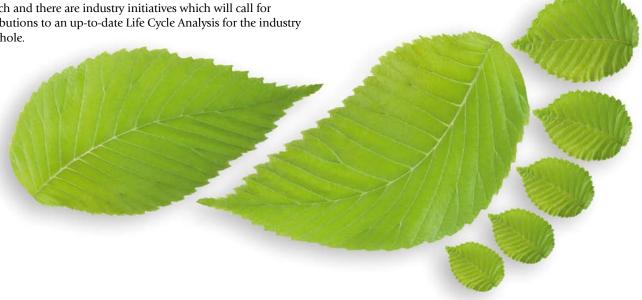
The global leather industry is populated with a number of organisations whose objective is to structure and regulate international trade. Traditional organisations - such as the Council of European Tanners (COTANCE), the International Council of Tanners (ICT) and other newer organisations such as the Leather Working Group (LWG - a body established by major international footwear and furniture brands using leather) - aim to regulate trade and standards within the global industry. The interests of the UK industry are furthered by the UK Leather Federation at such forums and the capability of our trade association is of paramount importance as we seek to defend our own standards in the wider world and ensure best and fair practice for all. In recent years key players in the industry have fought hard to maintain the association which has proved essential to ensure protection of our interests through the BSE and Foot and Mouth crises which have hit the agricultural industry and disrupted raw material supply in the last decade.

In the case of UKLF this has largely been down to the efforts of a single individual with longstanding industry experience. With that individual now approaching retirement age, the industry is faced with the challenge of recruiting a successor of the appropriate calibre, sensibly to work alongside the present incumbent in the 18 month period. Ideally outside funding would be available to ensure smooth transition over this period. The challenges of the role are not to be underestimated if we are to continue to have a credible voice at international meetings, where we stand alongside other, larger national associations and where we need to further the trade association work of UKLF including defending our own leather standards and marks and the image of leather in the UK.

# **CARBON FOOTPRINT / SUSTAINABILITY**

Whilst the significance of environmental impact is understood and growing in importance throughout the leather supply chain, there are still significant gaps in the science behind the understanding of the concepts of sustainability and carbon footprint in relation to leather itself and how as a fabric we compare with other synthetic materials. As ever, scientific research costs money and, whilst individual tanners are investing in their own environmental performance and development through ISO 14001 and other environmental management systems, true global understanding is difficult to achieve without further investment in collaborative research and there are industry initiatives which will call for contributions to an up-to-date Life Cycle Analysis for the industry as a whole.

The Centre for Sustainable Wastes Management (CSWM) undertakes carbon footprinting studies in many sectors. The leather industry, however, presents a unique challenge as its raw material is derived from meat production and there must be a clear, agreed distinction between the two supply chains before a meaningful footprint can be calculated. The CSWM and the ICLT are currently in discussion with COTANCE to develop a European model for this, but it is not yet clear how such development could be funded.



# **UK RAW MATERIAL (HIDES AND SKINS):**

# A WASTED RESOURCE

The UK is blessed with a strong agricultural industry and, as a result, a significant resource in hides and skins. Regrettably much of the raw material that becomes available in the UK leaves the UK with little or no value added to it. There are a myriad of reasons for this, some of which relate to the decline in the UK tanning industry and the subject itself is extremely complex as our industry as a whole believes in free trade and movement of goods. However, looking at the wider picture of the UK economy and natural resources available to it, the 15 million or so UK domestic sheepskin pelts that become available here every year are a prime example of a resource that disappears from the UK now that there is virtually no production of sheepskin leather. The vast majority of UK skins are salted, creating an environmental hazard at inception, and then exported, often by road to Turkey and sea freight beyond to Asia. Environmental legislation is blamed for the prohibitive cost of converting or part-processing such pelts in the UK and so a situation exists whereby any pollution risk is exported whatever the impact on carbon footprint.



A few years ago the UK's Real Sheepskin Association succeeded in raising awareness of this issue and its impact on the few remaining smaller sheepskin processors in the South West of England - to the extent that the South West Regional Development Agency (SWRDA) conducted

some initial studies into the feasibility of assisting the South West industry to process more of its indigenous material. With the disbanding of the RDAs it seems there is little future for this discussion which was regional by nature. However, as part of a long term strategic study of options for the leather industry in the UK, there is undoubtedly merit in understanding the dynamics of raw hide and skin export and whether there is, could or would be value, by whatever means, in the UK industry taking back control of these raw material resources and undertaking initial stage processing.



Sheepskins are just one example of raw material lost to the UK industry. Indeed much of the UK's cattle hide supply is exported unprocessed and therefore without added value. Consideration of these issues from an environmental standpoint would be worthwhile prior to any study of how the situation may be addressed by the industry.

Significant advantages would also accrue for the UK leather industry's customer base through efforts to improve traceability of hides and skins along with a major drive by international brands who want to demonstrate to consumers that their leather has been sourced from ethically-sound farming environments which we certainly have in the UK. In fact, our agricultural industry does have great detail and information on individual animals prior to slaughter but the leather industry does not have the resource to drive sustained traceability through the UK abattoir system where all such information is lost.

### **TIMEFRAMES: FIVE YEAR PLAN**

If we are to look at timing need for the projects above we can rank them accordingly:

1 YEAR: Sustainability/Life-Cycle Analysis1-2 YEARS: Succession planning for UKLF

1-2 YEARS: Training and Education plans to address people needs

1-3 YEARS: Define/implement industry-wide research projects

including environmental

3-5 YEARS: UK raw material analysis



# DUCATION / PEOPLE

THE UNIVERSITY OF

Having been neglected along with many manufacturing industries for over a decade, the leather sector has struggled to attract quality young recruits. Following the global economic downturn in 2008/9 the industry does now seem to be benefitting from a shift in mindset among young graduates from technical disciplines and school leavers whose interest in meaningful creative and productive work has been re-awakened. However, in order for the industry to grow and prosper on an international level there will be a need for more quality people to work within it.

With assistance from the City Livery Companies, and most notably the Leathersellers' Company, many of whom have historic links with the leather trade, the industry has piloted apprenticeship schemes in Scotland to attract new employees and offer vocational training to existing ones. UKLF is also working with Skillset, the Sector Skills Council for the sector, to extend this system of vocational qualifications and apprenticeships in England. With targeted funding, certain schools and colleges in key locations, might be persuaded to promote the industry again as a career

At degree level however, entry from UK nationals to leather technology courses is low and it is increasingly the case that graduate technology entrants introduced into the industry need supplementary skills in production management techniques. In both these graduate areas and in the area of apprenticeships, the industry believes it will continue to need assistance to ensure relevant courses and personnel are identified.

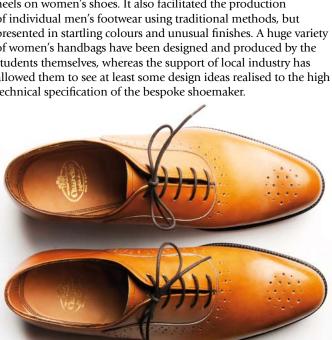
The ICLT has initiated a programme of visits and presentations to local schools to promote leather technology as a route to a rewarding international career and, supported by the Leathersellers' Company, is working with a number of UK university fashion and design departments to promote the use of leather as a creative material, whilst developing the UoN's own USP in leather and design for leather.

Working with materials as a stimulus for ideas is central to creative arts practice and the development of sound design processes. Testing the qualities and practical properties of leather against creative ideas and practical limitations stimulates innovation in its use. Footwear (boots and shoes); bags (handbags and luggage); vehicle interiors (luxury cars and boats) and a number of other applications such as gift-wear, jewellery and sports items - all emerge as the result of this testing.

The School of the Arts



Existing strong links with businesses within the leather industry have resulted in award-winning design. Innovative use of laser technology allowed a student to explore the shaping of 3D forms into sheepskin, the application of textured design to goatskin, the development of sculptural platform soles and extraordinary heels on women's shoes. It also facilitated the production of individual men's footwear using traditional methods, but presented in startling colours and unusual finishes. A huge variety of women's handbags have been designed and produced by the students themselves, whereas the support of local industry has allowed them to see at least some design ideas realised to the high technical specification of the bespoke shoemaker.





This post graduate development will offer students the opportunity to work across the disciplines, with, for example, the technologies of the product designer, and design ideas from fashion or textiles. Dialogue with other design specialists, such as in interior design and photography will encourage further challenges. Traditional or cutting-edge technologies approached by a questioning and curious mind will open up new approaches to the design and manufacture of leather goods.

For the academic year 2011/12, the University is offering the following taught programmes:

### Leathersellers' Certificate in Leather Technology – 1 Year

The Leathersellers' Certificate is a one year full-time course. Upon completion of the course, students can progress to the Leathersellers' Diploma. The course is designed to enable students to develop their interest in leather technology. The course has an emphasis on practical work and students have access to a well equipped model tannery and chemical and physical testing laboratories.

The Certificate will benefit students from all backgrounds, especially those who would like to enter the leather industry and

those established within the industry who would like to develop their technical knowledge.

### Creative Leather Applications – 1 week

Leather has a significant presence across the fashion sector, including clothing, footwear and accessories and, more recently, interiors, including home accessories, wall and floor coverings.

Working with the ICLT, this module will provide students with an in-depth knowledge and understanding of leather and its performance in use. Students will undertake both theory and practical sessions (in the University's on-site tannery) enabling them to exercise their creative skills and produce their own leathers suitable for inclusion in final portfolios.

The leather knowledge offered within this module will enable individuals to make more informed decisions when dealing with leather and leather products in the commercial sector, ultimately providing a positive contribution to the success of the final product.

### **Leather Technology – 1 week**

Practical and theoretical aspects of leather technology are presented in a blended experience in the tannery and classrooms at the ICLT. Subject areas include the manufacture of tanned, crust and finished leathers and also involve the use of onsite laboratory facilities.

This course is suitable for applicants who have tannery experience and would like to strengthen their theoretical underpinning in the subject area as well as those that would like to establish experience in practical leather-making operations.

### **Leather Design and Colour – 4 weeks**

Offered by the Division of Fashion and Textiles in collaboration with the ICLT.

Topics studied will include:

- Supply chain
- Types of leather and end use
- Dyeing
- Surface coatings/finishes/embossing/laser cutting
- Role of the tannery
- Leather within contemporary fashion
- Colour trends in leather

Students will have access to the University's tannery (the only tannery in a UK University), design studios and state-of-the-art production facilities.

The course is delivered through short intensive programmes of study supported by on-line learning materials. It will allow those already working within the industry to study for a postgraduate qualification in an expanding and exciting creative industry.

### **Diploma in Leather Technology – 1 year**

The Diploma in Leather Technology is a one-year full time course. Upon completion of the course students are qualified to progress to the 'top up' Year Three of the BSc (Hons) programme.

The course is designed to attract students from a wide variety of backgrounds. It will benefit those with substantial experience in

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# **EDUCATION / PEOPLE** (continued)

leather manufacture who require a technical background and those with other expertise who require technical knowledge of leather manufacture and related principles.

The course is suitable for applicants with a qualification at an appropriate level, such as the SENAI 2 year Tecnico em Curtimento or the Leathersellers' Certificate.

### BSc (Hons) Leather Technology 'top up' - 1 Year

The BSc Leather Technology (Hons) 'top up' programme is a oneyear full-time course. Upon completion of the course, students can enter the industry or progress to the MSc or PhD programmes.

The course is designed for dedicated students who wish to develop their full potential. The BSc (Hons) 'top up' will benefit students from all backgrounds, especially those looking to develop a successful international career within an exciting, historic and dynamic industry.

Suitable for applicants with a qualification at an appropriate level, such as the Diploma in Leather Technology or the LGR Reutlingen two-year State Certified Leather Technical Engineer.

### **MSc Leather Technology – 1 year**

With optional pathways in International Environmental Management and International Marketing.

This course aims to provide the opportunity to acquire and enhance technical skills related to both self-learning and research, enabling students to make a critical appraisal of the technical basis and needs of the leather and associated industries.



It will develop the skills and flexibility necessary to differentiate between technical and entrepreneurial issues related to the successful management of commercial operations within the leather industry.

Students will study within an environment which encourages the development of intellectual creativity as well as ability in researching other advanced technologies and relating these to the needs of the leather industry.



### **BA (Hons) Fashion (Footwear and Accessories)**

The course aims to provide training to aspiring designers in the field of footwear and accessories, with an emphasis on the creative development of ideas through the use of, predominantly, leather.

It is intended to encourage the integration of creative, technical and professional skills, and to develop communicative, selfmotivated individuals with specific design strengths. It will produce graduates who



possess an individual vision and design philosophy reflecting the wider ethical, environmental and social consequences of design.

### **BSc Product Design**

The course aims to offer the student the opportunity to develop a design capability, including the creative application of ideas to specific problem solving in relation to products and items with a practical application.

Students will be supported in the development of individual creativity and effective communication of those ideas.

A graduate will be able to function effectively in professional practices with a proficiency in the industrial, managerial and entrepreneurial aspects of product design and an awareness of the effects and contribution of historical, cultural, social, legal and economic forces on design.

### **MA Design**

The course offers a cross-disciplinary approach to the technical, practical and creative aspects of a range of design applications. The student will select a named pathway at the PG Diploma stage - these include Fashion and Textiles, Footwear and Product and Spatial Design, along with Graphic Communication and Photographic Communication.

Students may also select a broad design pathway, offering the opportunity to work across disciplines. Leather is expected to be a significant feature of the Footwear pathway, but may also be utilised in the Product and Spatial Design, and Fashion pathways, building on the experiences of staff and students at undergraduate level.

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