German Leather Federation

Social & Environmental Report
of the
German Leather Industry
2010
Foreword

This report has been prepared by the German Leather Federation in the framework of the COTANCE-ETUF:TCL Social Sectoral Dialogue (SSD) project “Social & Environmental Reporting in the European Leather Industry” developed with the support of the European Commission - DG Social Affairs.

The main information sources used were the principal members of the German Leather Federation and data of VDL.

Additional information was obtained from published national statistics and from private association statistical returns.

The German Leather Industry is represented by the Verband der Deutschen Lederindustrie e.V., German Leather Federation (VDL), which has a total membership of 50 companies that represent approximately 95% of German leather production. VDL as an industrial trade association provides professional services to its members and represents the interests of the industry towards government bodies as well as the related supplier and purchaser industries.

The German Leather Federation is a COTANCE Member and subscribes to the Framework Agreements adopted by COTANCE and ETUF:TCL.


It is foreseen that the latter will be progressively implemented at company level on a voluntary basis. The report is based on discussions with member tanneries and association data.
**Introduction**

Our records indicate that there are 50 plants currently producing leather in Germany, employing an estimated 2000 workers. These plants comprise 13 larger ones (with a turnover of more than €25 million and more than 50 employees) 17 medium sized ones (with a turnover of more than €10 million and between 50 and 20 employees) and 20 smaller plants with less than 20 employees.

The biggest companies in the German leather sector are the suppliers of automotive and furniture upholstery leather. Then there are 2 larger companies for shoe upper and bag leather. One company is a contract tannery only that does hides until wet-blue or crust.

About 15 tanneries do the whole process from raw hides or skins until finished leather. Some tanneries do offer contract works for third parties. 35 tanneries start the process from semi finished hides or skins in the wet-blue or crust state and do the retanning, dying and finishing only. All but 3 companies qualify as SMEs; all are limited companies and the large majority is still family owned.

The producers of goat and sheep leathers as well as wool on lamb skins are among the smaller group of companies with less than 20 employees. Of the total production more than 90 % consists of calf skins and bovine hides. The rest is goat, lamb and deer skins for garment, gloves and shoes and some salmon skins for diverse uses.

There is also one fully equipped tannery at the Lederinstitut Gerberschule Reutlingen, the national training, research and testing center for the leather industry in Germany. This tannery facility is used primarily for teaching purposes, but it is also used for a certain amount of commercial activity.

The VDL has a membership representation of about 90% of the total leather industry plus companies from supplying or neighbouring industries such as chemical companies, casing, gelatin or leather fiber board producers.
The larger German Leather Producers
Name of company City (region) Type of production

Bader
Göppingen
Automotive upholstery leather

Seton Lederfabrik
Mülheim
Automotive upholstery Leather

Car Trim
Weida
Automotive and furniture upholstery leather

Heller Leder
Hehlen
Automotive and furniture upholstery leather

Hewa/Wert Leder
Rehau
Automotive and furniture upholstery leather

Gmelich
Großbottwar
Furniture upholstery leather

Heinen Lederfabrik
Wegberg
Shoe upper leather

Hoffmans Lederfabrik
Nettetal
Shoe upper/ bag leather

Südleder
Rehau
contract tannery bovine hides

Rendenbach
Trier
Oak tanned sole leathers

Räuchle
Backnang
Shoe leathers
Kilger
Viechtach
Sole and saddler leathers

Perlinger
Furth im Wald
Calf leathers for shoes and bags

Oehler
Marbach
Suede leathers for shoes and bags
Institutional structures

The forerunner of the Verband der Deutschen Lederindustrie VDL - German Leather Federation - was founded in 1891 in Berlin as Central Verein für die Leder-Industrie Deutschlands and it continued to operate since 1948 in Frankfurt as representation of the West German leather industry until the unification with the East German industry in 1991.

VDL is the representative German body for the German tanning industry and provides information and advice to member companies.

The topics covered include raw material quality and supplies, statistics on production, imports and exports, legislation on environmental issues or else, health and safety requirements, training, research and development, environmental performance, standardization of leather and leather products.

VDL promotes leather via its website and brochures. It supports export activities by co-coordinating German companies’ presentations at trade shows and by providing a sourcing information service to enquirers.

VDL also coordinates activities with its partner association ADL, the German leather industry’s employers’ association - the Arbeitgeberverband der Deutschen Lederindustrie in Wuppertal.

Together with the BG RCI, section leather, the professional body for occupational health and safety, guidelines and check lists have been developed for the further improvement of accident prevention at the work place.

With its affiliate the “Forschungsgemeinschaft Leder”, leather research council, the VDL initiates and coordinates pre market research activities in the leather sector and works closely with leather and other research institutes. In the area of training, environment and leather technology there is a long standing cooperation with the TEGEWA, the association of leather et al. chemical suppliers.
Environmental considerations

There are several key points that should be noted as an introduction to any environmental analysis of the leather industry. The first point is that leather making involves processing a by-product from the meat industry into a useful, durable and valuable material. It is also a renewable material, unlike its synthetic imitators.

Having said this, the tanner faces a significant challenge because, compared with the mass of the raw hide – the tanners’ starting material - the resulting leather weighs only 20%. The remainder needs to be either utilized as a co-product or disposed of as liquid effluent or solid waste. In addition to this, tanneries with full effluent treatment plants – which include all those processing from raw – will also have up to 500 kg of sludge per ton of raw material to dispose of from the effluent treatment plant.

Tanners have for a long time faced the challenges of disposing of their wastes and reducing the level of nuisance that they may cause, by minimising the level of pollution to air, water and the ground.

Raw material

- Hides and skins from local livestock are preferably used. In addition to the savings in transportation energy, this policy makes it possible to dispense largely with the use of preservatives, because the hides can be processed in the fresh/chilled state. As a further advantage, the waste water is not loaded with preservative salts.

- No processing of hides treated with harmful preservatives such as PCP. Any preserved raw material used has been treated exclusively with common salt.

- In order to permit comprehensive and high-quality utilization of the parts of the hide that are not tanned, absolutely hygienic cowhides from slaughterhouses operating under strict veterinary control are processed to leather.

- The concentration on top-quality raw materials ensures optimal yield of good leather ranges free from serious hide defects. This permits the use of minimum amounts of chemical products in finishing.

- For over 10 years, the German leather industry has devoted itself with the aid of its fully owned organization Arbeitsgemeinschaft Deutsche Qualitätshaut (German Quality Hides Syndicate) to the cause of prevention of cruelty to animals in breeding and in transportation to the slaughterhouse. A specially developed information program now belongs to the standard program in agricultural and veterinary training and service. Research projects to promote the use of safe and kind conditions in keeping animals round off the activities in this field.
Leather production

- With the aid of process control systems, improved recipes, and the use of short-liquor processes or liquor recycling, the water consumption for leather production in Germany has been reduced by 60 per cent and more in the last few years.

- Wherever the production process permits, the hides are fleshed in the fresh state. This limits the use of chemical substances still further and increases the amount of secondary raw materials obtained as by-products for other uses.

- In the general efforts to reduce the use of sulphides and ammonium, the German leather industry pioneers in low-sulphide liming processes and in the development of hair-preserving liming methods or ammonium-free deliming processes with carbon dioxide. In order to develop these processes still further, the German Leather Federation supports research projects that promote a commercial utilization of the hairs, for example in agriculture.

- For the tannage, environmentally friendly tanning agents are used exclusively. These include the trivalent chromium salts and vegetable tanning agents based on natural renewable raw materials. To a certain extent, natural animal fats or synthetic tannins are also used.

- For chrome tannage, the standard method is to use high-exhaustion processes or, if the product quality allows, chrome recycling.

- For surface finishing of the leathers, only aqueous solvent-free colouring systems are now applied. In this field, too, German pioneered. In cases where it is not possible for quality reasons to dispense completely of the use of organic solvents, the process is always followed by an air exhaust system.

Effluent

- No effluent from a German leather factory is discharged into surface waters unless it has been previously freed from all harmful and undesired ingredients either by the factory's own water-treatment plant or with the aid of a municipal or communal water-treatment plant. The legal limiting values are the strictest in the world and they are also subjected to the worldwide strictest controls.

Harmful substances

- Environmentally problematic and harmful substances, such as PCP, formaldehyde, or CFC-containing substances, are not used by the German leather industry.
• The same applies to chromatic pigments containing undesired heavy metals, e.g. chromium or lead.

• Long before the official ban on azo dyes that split off carcinogenic amines, their use was voluntarily dispensed with.

**Wastes and residual materials**

• The German leather industry spares no pains to develop and promote the idea of a systematic recycling economy, i.e. the avoidance of wastes and environmentally friendly reuse of wastes as secondary raw materials.

• Thus, even today, the German leather industry does not produce any wastes that cannot be reused - except for some residues from the waste water treatment.

• The natural or limed subcutaneous connective tissue from the fleshing process is utilized for various purposes including the production of natural glue.

• The hide parts that have been limed with calcium and are not used for tannage provide a valuable natural collagen source for the production of glue and gelatin.

• The re-use of leather shavings and cuttings in the production of hydrolyzates and bonded leather makes these residues valuable raw materials for which there is a high demand. It is also noteworthy that in the production of bonded leather in Germany, only natural rubber is used as binder.

• The German leather industry spares no efforts to reduce the amount of wastes still further by constant development and research activities. The targets are to produce less sewage sludge by developing new and progressive processes for waste water treatment. Parallel to this, the **Verband der Deutschen Lederindustrie** supports numerous research projects and studies for the commercial utilization of the chromium-containing sludge from the waste-water treatment.
The environmental report

As a member country of the EU the German industry has had to adopt, and in a number of cases pre-empt a series of environmental standards and controls consequent to the implementation of the rules of the following EU Regulations or Directives.

- Water Framework Directive
- European Waste Regulation
- Solvent Emissions Directive
- Integrated Pollution Prevention and Control Directive
- Best Available Techniques Reference Document for the tanning of hides and skins (Tanneries BREF)
- Integrated Pollution, Prevention and Control (IPPC) regulation
- Registration, Evaluation, and Authorization of Chemicals Regulation
- Animal by-products Regulation

Tanneries have adapted to these requirements and are implementing them.

Environmental indicators

Background

As indicated, the German leather industry has a relatively small number of processing plants, but there is a very wide variation in their activities and their relative sizes.

This results in quite a wide variation in the environmental factors that the plants have to address – for example plants processing raw cattle hides face a much bigger challenge both to find outlets or disposal routes for solid co-products and wastes, and to treat liquid effluents from the process; conversely, plants engaged in re-tanning and finishing operations face significantly higher energy costs per unit of leather produced, because of the range of processes carried out, especially drying operations.

Because of this, average measures relating to environmental performance may be difficult to interpret, and typical ranges are more relevant.
The Process

The activities of the 30 larger tanneries can be summarized as follows:

- 9 tanneries process cattle hides from raw to finished
- 3 tanneries process sheep skins with the wool on from raw to finished
- 3 tanneries process lamb or deer skins from crust to finished leathers
- 2 tanneries produce finished leather from wet blue bovine splits
- 2 tanneries process deer and sheep skins into parchment
- 1 tannery processes salmon skins from raw to finished
- 3 tanneries offer contract works from raw to wet blue or crust

Raw materials processed

The German tanning industry processes 80,000 tons of cattle hides (including calves) to wet blue or finished leather; these hides originate almost entirely from Germany or neighbouring countries. 80% of hides are processed fresh/chilled without preservatives.

In addition smaller amounts of lamb and goat skins, kangaroo and salmon skins are processed.

Pollution abatement installations

All German tanneries have different forms of effluent treatment to varying degrees. 5 companies discharge directly to surface waters. The others discharge to sewers after pre-treatment. The German Abwasser VO sets stringent limits such as 1 mg/l Chromium or 2 mg/l sulfide for waste water.

Cost of wastewater treatments

The typical cost of wastewater treatment by German tanners is 1 - 2.5% of turnover, and 10 - 15% of environmental costs.

Costs related to emissions to air

The typical cost abating emissions to air represent a barely significant percentage of turnover, and less than 2.5% of total environmental costs. This is mainly because the situation has been addressed primarily by process changes, including a general switch away from the use of solvents for the majority of processes and the use of aqueous based finishes.

Energy costs

The typical cost of energy for German tanners is about 3.5% of turnover, which represents 75 - 80% of environmental costs.

Other costs

The typical cost of other environmental measures is less than 1% of turnover and less than 10% of total environmental costs.
Conclusion
Overall, tanneries in Germany operate in line with regulatory environmental requirements. The German authorities tend to implement legislation promptly and on a pragmatic basis. For example the Abwasser VO was implemented rigorously in 1980, and this was far in advance of most other countries in Europe.

Cost reduction and a responsible approach to environmental issues are additional drivers for the industry to enhance environmental performance, and the German industry is generally active in continuing to improve. Examples of recent significant investments by companies in the industry are as follows:

- Dewatering of effluent sludge
- Specific projects on waste reduction
- Concerted energy efficiency improvements to meet tight Climate Change Agreement targets
- New plant to generate energy from waste
- Reduction of VOC emissions
- Installation of particulate filters
- Change entire plant from coal to gas

Promotion of Environmental Standards
Within the policy of corporate social responsibility more and more companies do inform relevant stakeholders about their social and environmental activities and goals. To communicate their environmental standards which often go beyond legal requirements several companies have been undergoing voluntary quality standards.

One German tannery was the first to receive the “Blue Angel” for Low-Emission Upholstery Leathers. This ensures absence of adverse effects on human health in the living environment/indoor spaces because of low emissions. The same tannery got a gold rating by the “Leather Working Group” that documents sustainable and appropriate environmental stewardship practices. Another tannery won a “Tannery of the year award” for their environmental and social responsible management. This shows clearly that tanneries are more actively promoting their environmental achievements as part of their CSR commitment and policies. These activities will be part of their future social and environmental reporting.
The social report

Leather production fulfils a fundamental role in our society. It recovers the hides and skins that result from the production of meat for human consumption and transform them into a noble durable material that finds applications in a wide range of consumer products. It thus prevents a difficult waste disposal problem in the meat industry and contributes with a useful and appealing material to our modern lifestyle generating added value and employment.

As reported previously there are 50 plants in Germany currently producing leather. All but 2 companies qualify as SMEs; all are limited companies and the large majority is still family owned. About 40% of the workforce is employed in the two non SME companies.

The German leather producing industry is no longer one of the largest internationally, but it is still the 3rd biggest producer in the European Union behind Italy and Spain and before France and UK. It has specialized in the production of high quality leathers for the automotive and the furniture sector. One of its comparative advantages is the proximity to the German premium automotive companies such as Daimler Benz, BMW, AUDI and Porsche.

During the very difficult 2009 year, the value of German leather production shrank by 40% and due to a good understanding with the social partners and the use of regulations for short time compensations a permanent and substantial reduction of the work force could be avoided.

Germany is not just a centre of quality leather production, but as well has a world class concentration of leather expertise - in research, innovation, teaching, training, consulting, trading and design - with organisations such as the Lederinstitut Gerberschule, Reutlingen and the Forschungsinstitut für Leder- und Kunststoffbahnen, Freiberg.

Aside from this some of the worlds leaders of suppliers of chemicals for leather processing are located in Germany which companies such as BASF, LANXESS, TFL just to name the biggest which ensure a tight network for innovation and research in the leather industry.
The Social indicators

Number of workers
Our estimate of the number of workers in the industry is currently 2000. There has been a significant reduction in employment over recent years as a result of plant closures and cut backs in existing plants, due to the intensely competitive world market.
However, part of the reduction has been a result of investment in more modern machinery, in particular in automated handling equipment.

Trade Union presence
The trade union in the sector, the Industriegewerkschaft Bergbau, Chemie, Energie (IGBCE), Hannover, which took over the former Gewerkschaft Leder, is constructively supporting the adjustment process of the industry.

Most, but not all, sites – and especially the bigger ones - have a trade union presence and a worker’s council. Membership of the trade unions is voluntary and membership is estimated at about 70% of the workforce.

The sector’s Employers’ Association, the Arbeitgeberverband der Deutschen Lederindustrie enters into regular negotiations on wage rates and employment conditions with the trade union to reach a national agreement.

Average age
The average age of tannery workers is 45.

Average number of years of workers in the company
The average number of years that workers have been in the company is 15.

Nationalities of workforce
The clear majority of the workforce is from Germany. Tanneries report that other nationalities present are Europe, Poland, Greek and Turkish. This reflects some difficulty in recruiting suitable staff in certain areas, and especially temporary staff to cope with fluctuations in demand.

Contractual categories and worker turnover
95% of the workforce is full time and 5% part time. Worker turnover averaged 4.5%.

20% of female employees of the total workforce
The workforce is comprised of 80% males and 20% females. The heavier working environments tend to be mainly male dominated, while females are more commonly found in the offices and the cleaner, drier work places such as in the finishing and packaging sections, where the work requires less physical strength.

Apprenticeship possibilities
Especially the major companies offer regular apprenticeship training positions in the fields of leather technology, wholesale merchant or export salesman. In particular in industrialized regions it is more and more difficult to attract qualified personal for a shrinking industry.
Training activities

All of the companies in the sector, and especially the larger tanneries understand the importance of permanent training of the workforce. Because the German industry – along with the rest of Europe – is a high cost producer by international standards, companies are aware that they need to compete on quality, consistency, performance, fashion and service to customers. This requires the workers to understand and accept their roles in ensuring that these requirements are met.

VDL and the industry are collaborating in the process of re-energising the system of externally accredited Vocational Qualifications and Apprenticeships in the industry, and individual companies are already carrying out a significant amount of less formalized training.

There are a number of highly respected training and education organisations and facilities in Germany. Apart from local colleges and generic training establishments, specifically related to training on leather there is the Lederinstitut Gerberschule Reutlingen.

The LGR offers the following courses:

- professional vocational training for tanners (part of dual vocational training)
- 2 years study for the degree of a “state certified leather technical engineer”
- Bachelor of Science - Materials Technology (Leather) together with the University of Northampton
- 5 months compact course in leather technology
- Short time seminars on different subjects of leather technology

The Forschungsinstitut für Leder und Kunststoffbahnen, Freiberg,

- offers specialized seminars on topics of leather technology

Over the last two years companies have organized in-house and external training courses on

- Environmental Management Systems
- Environmental Awareness for company employees
- Factory wide Environmental briefings on actions, costs etc
- Environmental Auditor training
- Awareness of Environmental impact in relation to company authorisations
- LGR courses on different aspects of leather technology
- courses for security managers and environmental safety managers

Hours lost due to sickness or accident
This varies, depending on the work environment. Typically the figure is below 5%.

Survey of worker satisfaction
In general the level of worker satisfaction is good and higher among skilled workers.

Work conflicts
No work conflicts were reported.

Conclusions on Social Reporting
There is an understanding in the German leather sector that, as a high cost producer, the industry needs a well trained, well motivated workforce in order to remain competitive by delivering the required quality of product, with the correct characteristics and performance in a consistent and timely fashion.

The reduction in the industry and the competitive pressures that it continues to face means that the workforce takes a realistic and practical approach to labour relations, which generally remain very good. The fact that the number of tanneries has been getting so small makes it difficult for companies to attract qualified personal.

General conclusions
This is a summary of the first preliminary unfinished reports produced by companies in the current format. It should be considered as a start. The industry is constantly improving its environmental performance and is also working hard on developing formal staff training qualifications as a basis for enhancing the industry awareness of workers. The first report will act as a benchmark, and the intention, going forward is to build on the process and aim to demonstrate continuing improvement in performance.

One aspect that stands out is the need for a closer cooperation and linking of training facilities in Europe to widen the scope of potential students and make better use of synergy effects of our outstanding training institutes in Europe.

VDL/RS, Frankfurt, October 2010