



SUSTAINABLE MANUFACTURING REPORT



CREATING A SUSTAINABLE FUTURE FOR THE NEXT GENERATION

"It has been a privilege to take over the Company's leadership from my late father, since 1995. At the Stucken Group of textile companies, we genuinely care for our staff, and treat our communities and our physical environment with dignity and respect. We intend to take full responsibility for our sustainable manufacturing from beginning to end. We not only address the waste that results from producing our products but we also commit to doing business with the highest ethical standards and provide the safest working environment we can for our staff. These aspects are the core of our success creating a sustainable platform to hand over to the next generation."

Philip Stucken
(Chairman, 1995 – 2016)



THE IDEA AND PHILOSOPHY

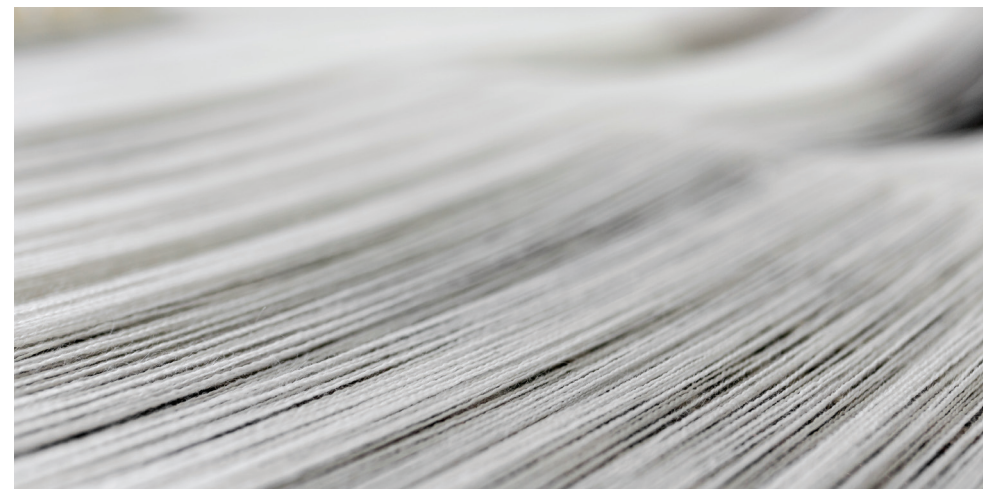
Embarking on the process of establishing this document has encouraged us to reflect on the past, and consider current and future horizons as we head towards a more sustainable approach in the manufacturing of our textiles.

At the Stucken Group, we realise that preserving the environment is not only a concern of ours and our customers, but it is also about embracing a philosophy based on creating sustainable production practices. We believe that in today's world our business approach should be interlinked with our environments.

We understand that as we embark on this journey, many aspects discussed in this document are a culmination and rationalisation of six generations worth of business knowledge, passed down from our fathers, which we intend to compile and pass on to our children. Important elements of our success resulted from listening to our customers, instilling and encouraging a sense of team work, showing professionalism in our relationships with our suppliers, respect for the environment and support towards our local community. These elements are not often highlighted on balance sheets, but are essential in guaranteeing company continuity.

In our report, we will not only outline the Group's orientation towards the future, but we will also strive to define our values and unique identity as a South African/European textile organisation. Our daily planning requires the balancing of economic, environmental (including animal welfare) and social decision-making, each of these working in relation to one another.

Reporting on sustainability is challenging and we will not immediately have all the answers and solutions. From the outset it should be mentioned that we are creating a start for this important subject with the aim of laying a foundation for future generations and best practices. The philosophy and commitment for a changed mindset begins at the top, and our Group's Managing Directors and shareholders understand the need for a strong report as a way of communication for the Stucken Group to all stakeholders in a practical and innovative way.



A BRIEF HISTORY – THEN AND NOW

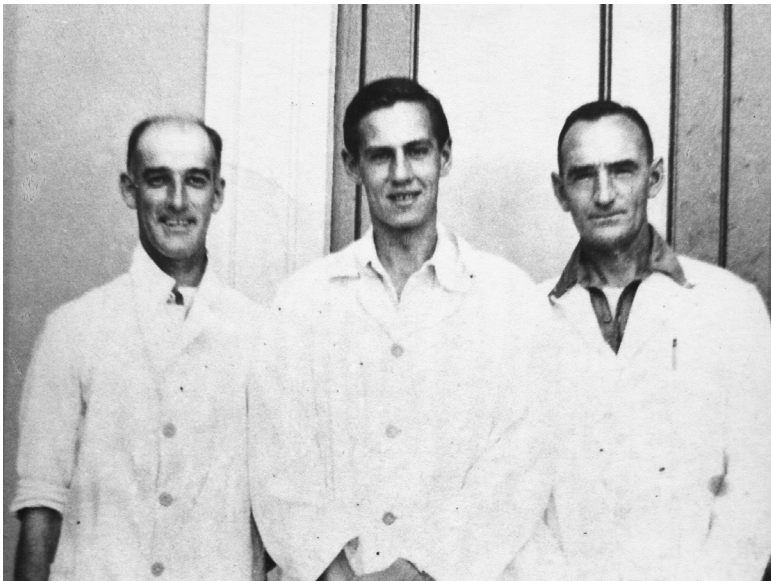
The history of the Group dates back to 1841 when the Stucken family began their transatlantic trading activities, founding the firm, A. Stucken & Company in 1863. In the beginning, the business focus was its strong trading relationship with imperial Russia and in the nineteenth century, the business relocated there, developing into one of the largest Wool traders and processors in the country. The family disenfranchised after the Russian Revolution and soon thereafter continued the Wool trading business in Bremen, Germany. H. Stucken & Co was founded in 1925 and the company is still operational today.



After successfully re-establishing the company in Bremen following the devastating effects of the Second World War, Rudi Stucken immigrated to South Africa in 1950 and launched Stucken & Co. as a greasy Wool trading house. In the 1960's, the South African trading company expanded its activities into Commission Wool, washing and combing. A decade later, the Stucken Group became directly involved in Wool processing with the acquisition of Gubb & Inggs, creating a fully integrated Wool processing and trading organization.

The Stucken Group in South Africa is one of the few family-owned, multi-national fibre businesses in the world, and through the company, Stucken Melchers in Bremen, we have a strong presence in rare and speciality fibres. The Group in South Africa is a vertically integrated niche-focused processor and trader of South African Wool and Mohair, a specialist spinner of Mohair yarns, a dyer of tops and yarns as well as a textile weaver of Wool, Mohair and other natural fibres.

Ideally located at the source of the South African Wool and Mohair clips, the Stucken Group Head Office can be found in Port Elizabeth, with local mills Gubb & Inggs, Mohair Spinners South Africa (MSSA), Speciality Yarn Dyers (SYD) and Hinterveld Weaving Mill situated in Uitenhage, all forming part of Nelson Mandela Bay in the Eastern Cape.



Rudi Stucken (centre) in Port Elizabeth, 1937.

The Stucken family have retained a strong trading relationship in Bremen, Germany through the company Stucken GmbH & Co. KG. That presence continued when the speciality fibre departments of Stucken GmbH & Co. KG and C. Melchers. of Bremen, joined forces to form Stucken Melchers GmbH & Co. KG, trading in rare, natural speciality fibres and Wool from various origins.

During these formative years, the Mohair business developed and expanded, giving the Group an important second trading leg. In keeping with this growth, Gubb & Inggs established a combing operation for Mohair fibre, becoming the first mill to process this fibre at origin.

In the 1980's the Group acquired OS Blenkinsop and Texas International Mohair which still operates today in a trading and Mohair sourcing capacity. These acquisitions further strengthened and consolidated the Group's position as a leading participant in the world's niche Mohair market.

Since the year 2000, we have centred our development and expansion in vertically integrated niche-focused and specialised activities. This was highlighted by the formation of Mohair Spinners South Africa (MSSA) in 1996. We continued using this business tactic with a variety of fibre processing capabilities at Gubb & Inggs and MSSA. In 2010, we acquired a company known as Pure Cape Textiles which was re-branded as Hinterveld, specialising in the weaving of blankets and fashion fabrics made from Mohair, Wool and other natural fibres. Speciality Yarn Dyers (SYD) was established in March 2004 as a business partnership between Tom Gate and Philip Stucken, and in 2014 the Stucken Group took full control of the company and continue to focus on natural fibre dying.



SUMMARY OF KEY TIMELINES

1841	Original founding of ship-owning and transport business	1979 - 1981	Stucken Group becomes majority shareholder of Gubb & Inggs together with UK partner, Illingworth Morris, as trading and processing are consolidated
1863	A. Stucken & Company is founded and international trade begins	1984	Takeover of Mohair competitor, OS Blenkinsop, with combing mills in South Africa and Brady, Texas
1875	Stucken family begins trading in Moscow	1992	Stucken family acquire Gubb & Inggs shares from the Industrial Development Corporation and thereby, control of Gubb & Inggs
1902	Establishment of Volga Spinning Company near Moscow	1996	Mohair Spinners South Africa is established
1917	Russian Revolution takes place and the Stucken family and their business interests are evicted from Russia	2002	Stucken family make an offer to the public for all remaining listed shares in Gubb & Inggs and delist the company
1925	Family Wool business re-established under the name H. Stucken & Co. in Bremen, Germany	2004	Strategy for vertical expansion is consolidated with a shareholding in Speciality Yarn Dyers
1943	Hans Stucken dies and Rudolf Stucken takes over the company	2010	Acquisition of Mohair weaving mill, Pure Cape Textiles, and subsequent rebranding to Hinterveld
1950	Rudi Stucken establishes Stucken & Co. in Port Elizabeth, South Africa	2014	100% acquisition of dye house, Speciality Yarn Dyers
1965	Mohair combing is introduced at Gubb & Inggs	2015	Fire destroys Gubb & Inggs Wool and combing facility
1970 - 1975	Merger of Stucken trading and Gubb & Inggs processing interests	2016	Rebuilding of combing facility and new combing equipment installed at Gubb & Inggs with focus on reduced energy consumption and emissions





THE ANALYSIS

We have identified three key factors that are interconnected within our business environment, with a crossover between our company and stakeholder perspectives:

- 1. Environmental
- 2. Economic
- 3. Social

ENVIRONMENTAL

INDUSTRY PARTNERSHIPS

1. ENVIRONMENTAL

ANIMAL WELFARE

You may have heard that South African farmers love their animals so much that they kiss their goats and sheep goodnight! This sentiment rings true with our Wool and Mohair growers being fully aware of the important role they play in animal welfare, ensuring that appropriate standards are maintained to satisfy not only their own values in terms of animal welfare, but also that of international requirements. South African farms often remain in the same family dynasty for several generations, ensuring an ongoing, personal affinity to their flocks.

In general, animals are well taken care of and no mistreatment takes place during the shearing of sheep or Angora goats. To address on-farm values, both the Wool and Mohair industry have placed intense focus on progressing the standards of animal husbandry, evidenced in their respective flagship documents: the Code of Best Practice in the Wool industry as well as the Mohair industry's Sustainable Guidelines document. Both documents address important on-farm values that include economic, environmental and social principles in addition to animal welfare (Both documents are available on request). Currently a self-assessment checklist is in use by farmers in an attempt to measure the strength of these values.



Photo credit: Amy Hobson from ThornPark Angoras capturing a special moment of her daughter Kylie.

It should be stressed that “mulesing” is not practiced in South Africa and consequently almost all Wool and Mohair produced in the country can be certified “mules-free”.

At the Stucken Group, we take our responsibility towards animal welfare seriously, ensuring that growers are continuously made aware of the fast-changing demands of the end users of their products. To this end, we facilitate international buyers, spinners and weavers to interact with growers on their farms as far as possible.

RAW MATERIAL TRACEABILITY

To obtain a product of specific and consistent quality, bales of similar grade greasy Mohair and Wool from various producers or sources, are processed together. The raw material delivered to each processing lot is recorded, allowing the traceability of each product to be enhanced. With an increasing demand by final consumers to know about the origin of their purchases, we as a Group are constantly finding new ways to improve this aspect of our business.

WATER MANAGEMENT

Wool and Mohair scouring notoriously consumes large amounts of water. Our Group has made huge progress towards reducing water usage by optimising greasy Wool and Mohair opening (of bales) and cleaning, prior to the fibre entering the bowls of wash water. Regular cleaning of the scouring bowls has been optimised by performing blow-backs and using water recycling methods in efforts to reduce water consumption. Our scouring effluent does not go to municipal sewers, but rather into bio-digestion and solar evaporation ponds. Some of the water from the ponds is also recycled and returned to the factory.

DETERGENT AND DYE STUFFS

As of 2013, all detergents and processing lubricants used by Gubb & Inggs have been replaced with biodegradable “green” alternatives, meaning that the production processes of the Group are, essentially, APEO-free. Similarly, all dyestuffs and auxilliary chemicals used by Speciality Yarn Dyers are REACH* compliant. As a Group, we are aware of the need to stay abreast of international developments in this regard, whilst at the same time ensuring that these standards are practical and deliverable to provide an authentic and transparent supply chain.

**REACH: a European Union regulation based on the Registration, Evaluation, Authorisation and Restriction of Chemicals, addressing production and use of chemical substances and the potential impacts on both human health and the environment.*





CO² EMISSIONS, GREEN ENERGY & SPEKBOOM

A number of green energy alternatives are currently being surveyed and one of our recent improvements to reduce the Group's environmental footprint, includes the commissioning of a state-of-the-art boiler which, according to calculations, will result in an energy efficiency improvement of approximately 20%. Additionally, we see potential in using a solar photovoltaic system which will lessen the Group's reliance on city power, while we will harvest methane gas from our effluent anaerobic biogas digestion ponds.

The waste materials from our scouring processes are being used by organic citrus farmers in the nearby Sundays River Valley, Eastern Cape. We are also working on a special project to compost the sludge from our effluent ponds which will be used as a natural fertilizer in future.

Spekboom, a small-leaved succulent plant indigenous to South Africa, has been shown to sequester comparatively large amounts of carbon for its class. The Stucken Group is investing in small scale projects of planting Spekboom to develop this simple yet effective contribution to environmental sustainability.

It should be acknowledged that projects of this nature require huge financial investment, and while we are building a better future for the next generations, progress may be gradual.



ECONOMIC

2. ECONOMIC

- ▶ The world context and sector economy
- ▶ Our vertical structure
- ▶ Investment technology and machinery
- ▶ Our customers
- ▶ Marketing strategies
- ▶ Design and Development
- ▶ Auction system
- ▶ Our product quality certifications
- ▶ Industry partnerships



THE WORLD CONTEXT AND SECTOR ECONOMY

From our base in Nelson Mandela Bay, South Africa, the Stucken Group operates in a global environment, serving customers across the world with a focus on textiles - specifically niche-focused processing and trading of South African Wool and Mohair, spinning of Mohair yarns, dyeing of tops and yarns as well as textile weaving of Wool, Mohair and other natural fibres.

Our proximity to most global markets from the vantage point at the southern tip of Africa, makes shipping durations reasonable by most accounts. And of course, operating in South Africa gives us supply access to an excellent quality of Merino Wool and Angora Mohair.

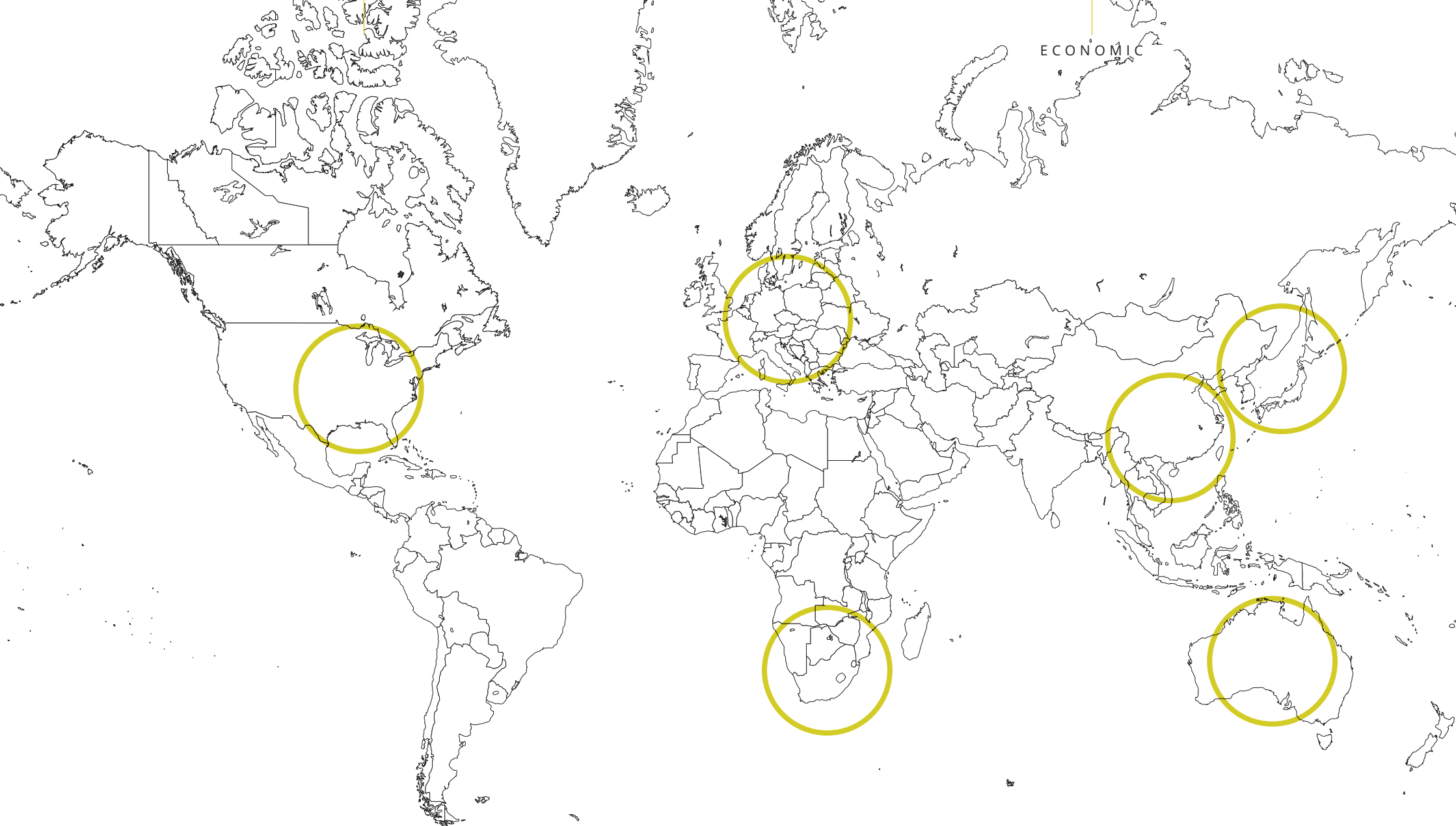
OUR VERTICAL STRUCTURE

Over generations, our business has evolved from a purely trading operation, into a fully integrated vertical textile organisation. The vision for expansion came from our forefather, Rudi Stucken, who sailed to South Africa in the early 1950's and soon took on an existing Wool scouring division. Since then there has been rapid industrial expansion and today the raw material is sold on auctions via brokers in South Africa. After purchasing, the bales are delivered to our primary processing factory for scouring, carbonising and combing and if requiring further processing, moved to our spinning, dyeing and weaving operations.

INVESTMENT, TECHNOLOGY & MACHINERY

Ongoing investment in plant and machinery assets has always been a Group strategy. The fire experienced at Gubb & Inggs in 2015 presented an opportunity to re-invest in new assets on an even larger scale. As difficult as the experience of the fire was, our Group now benefits from a newly built, state-of-the-art combing and spinning facility, with the latest processing machinery and laboratory testing equipment.





OUR CUSTOMERS

Through maintaining our relationship values, we are able to enjoy quality, long-term partnerships with our customers – a foundation on which our business has been built for many generations. By providing product consistency and service reliability, we continuously build on our reputation throughout the world, living up to our family name and the Stucken brand.

OUR MARKETING STRATEGIES

We believe that the best form of marketing is by way of positive word-of-mouth, achieved by having a solid reputation in business. However, as we move higher in the value chain, we realise the importance of advertising in industry journals and magazines, as well as exhibiting at carefully selected trade shows for both yarn and woven products. In fact, it is on these international platforms that our customer feedback has prompted the need for a sustainability report. More and more brands, distributors and retailers are requesting us to share our story transparently, asking similar questions about the authenticity of our business model, with queries pointing to the ways in which we manufacture, how animals are treated, where we acquire our raw materials from and how we treat those who form part of our Group. In summary, we are increasingly requested to share our story transparently.



DESIGN AND DEVELOPMENT

Our scoured and carbonised types of Wool and Mohair have gained popularity over the years as a result of consistency in product delivery. Our team is constantly on the lookout for creative solutions to meet our customers' requirements and flexibility remains an important service. Meeting customer expectations in respect of end-users and price points, continues to be a challenging characteristic of the international Wool and Mohair trade.

When we move upstream towards our spinning and weaving divisions, this is where design and development really is crucial to remaining relevant in the market, continuously launching new and interesting products. Together with ongoing investment in highly specialised machinery, our spinning arm, Mohair Spinners South Africa, is able to trial and launch a wide range of fancy yarns that are desired by the world's knitters and weavers today. Our weaving and knitting operation, Hinterveld, has a dedicated in-house design department, lead by a head designer and support team. Every year we create new collections in Home Accessories (blankets), Fashion Accessories (scarves and ponchos) and Fashion Fabric sold by the yard to leading global fashion brands. Trend analysis, product development and design are all integral to a fresh presentation. Our fabric label, Cape Tweed, additionally employs independent designers that add important external design input, ensuring a well-researched and exciting annual collection.

SOURCING OUR RAW MATERIAL ON AUCTION

Separate auctions are held for Wool and Mohair, practicing the open-cry auction system as it was a hundred years ago with auction dates scheduled in advance for the entire season. After shearing, Wool and Mohair growers send their bales to the broker of their choice, where their clip is classed and recorded (including objective measurement at the South African Wool Testing Bureau) in the next sale catalogue. In the days preceding the auction, all buyers will make their own independent valuations of all products listed in the catalogue.

On a typical auction, approximately 10 000 to 12 000 bales of Wool are offered. Similarly, about 1000 to 1200 bales of Mohair are offered.



PRODUCT QUALITY CERTIFICATION

At Gubb & Inggs, our primary processing and combing facility, the testing laboratory is accredited with ISO 17025, which is a competence based international standard. We are also licensed by the International Wool Textile Organisation to issue IWTO test certificates. Our production (processing) also takes place in an ISO 9001 certified factory.

Mohair Spinners South Africa, our spinning division, recently invested in state-of-the-art testing equipment, commissioned in a newly built laboratory. Various yarn properties such as yarn strength and elongation, evenness, hairiness, count (mass per unit length), twist and friction are monitored on a regular basis.

Speciality Yarn Dyers, our dye house, has an independent laboratory for monitoring of shade evenness, colour fastness and related properties.

Ultimate customer satisfaction is very important to us and every item manufactured by Hinterveld, our weaving division, undergoes quality inspection by trained personnel. In addition to this, intermittent testing of finished products is done by independent accredited laboratories. These tests include qualitative fibre analysis, colour fastness, dimensional stability and appearance after washing or dry cleaning.



The Group has also invested in obtaining certification to the Oeko-Tex standard, which deals with safety in textiles. Gubb & Inggs has been certified for all products to Oeko-Tex 100 since 2012, and more recently Mohair Spinners South Africa (MSSA) and Speciality Yarn Dyers (SYD) have also been Oeko-Tex 100 certified.

The Wool and Mohair tops produced by Gubb & Inggs are being used by Mohair Spinners South Africa to spin various yarn qualities and these yarns are, in turn, being used by Hinterveld to weave blankets and other products. Most recently Stucken & Co have become registered as a Responsible Wool Standard (RWS) chain of custody supplier, highlighting our commitment to react to client requirements and cementing our reputation as a trusted partner in wool.

INDUSTRY PARTNERSHIPS

Our Group works closely with a number of national industry bodies to facilitate continuous open communication in an effort to ensure that the industry concerned, and by extension, we are able to continuously make the adjustments required to meet our customers' expectations and requirements. In the Wool industry, the International Wool Textile Organization, Cape Wools and the National Wool Growers Association of South Africa are essential partners, whilst in the Mohair trade, Mohair South Africa and the South African Mohair Growers' Association play a similar role. At the same time, the expertise and independence of the Wool Testing Bureau of South Africa plays a critical role in ensuring objectivity in Wool and Mohair test measurement.





3. SOCIAL

- ▶ Company structure & governance
- ▶ Group values
- ▶ Identity
- ▶ Vision
- ▶ Motto
- ▶ Flexibility
- ▶ Experience
- ▶ Human resources
- ▶ Stakeholders
- ▶ Social responsibility
- ▶ Independent social audits and qualifications

COMPANY STRUCTURE AND GOVERNANCE MODEL

Our Group is family owned and managed. The Chairman, Philip Stucken, took over control from his father in 1995 and is supported today by his two sons, Daniel and Nico Stucken, as well as his nephew, Anthony Kirsten.

The business is largely governed by a board of directors consisting of executive and non-executive members who meet bi-annually. The company shareholders are all family members, represented by members on the board. The day-to-day operations are directed by the above-mentioned Managing Directors and key technical leadership at the mills - mostly experienced natural fibre individuals who are non-family employees.

VALUES

Our values are the building blocks of our past and the compass for our future, based on trust, reliability, integrity and friendship. These elements define us from the perspective of our customers and differentiate us from competitors. We believe that integrity is key and our relationships form the foundation of our business, always with a long term view, based on trust, reliability, and respect.

IDENTITY

The Stucken Group started trading in 1863 and is a family-owned and managed vertical textile operation in South Africa. The company has its original roots in Europe and today, still has its trading division in Bremen, Germany through Stucken-Melchers. The South African mills process approximately 4mil kgs of Wool and 2.2mil kgs of Mohair annually.

VISION

To be a world leader in sustainable manufacturing and value-adding of Wool and Mohair through an ongoing culture of relationship-building and trust.

MOTTO

Big enough to compete, small enough to care.

FLEXIBILITY IN TERMS OF QUALITY

As a relatively small international player, we strive to be flexible while continually developing our product groups through innovative thinking. With a focus on quality, we are able to ensure that with each development, our products become more sustainable and environmentally conscious.

EXPERIENCE

Six generations worth of experience and knowledge allows us a leadership position in the market. With a deeply rooted passion for natural fibres and our responsibility for generational continuity, we continue to learn from our past and embrace a modern world for the future.



HUMAN RESOURCES

Our people are our biggest asset – we are convinced about this and believe that our Group is dedicated to the wellness and personal development of all individuals employed by us.

There are certain fundamental structures in place which allow for a fair and harmonious working climate within our group of companies, including both the rules of employment as well as a fair and transparent dispute resolution mechanism.

The various companies (divisions) in our Group are all part of the textile industry and fall under the ambit of the National Textile Bargaining Council (NTBC).

Workplace training and development is governed by the relevant legislation and is overseen by industry specific Sector Education and Training Authorities (SETA's). Within each company, an annual Workplace Skills Plan (for the following year), and Training Report (for the prior year), are compiled by a training committee consisting of management and employee representatives. The purpose of this inclusive process is to ensure that the identification of staff development needs and training interventions carries the buy-in of the relevant stakeholders.

Social benefits, such as healthcare and retirement funding, are provided by the Group in the form of a medical aid scheme and pension fund membership, on the basis of equal contributions from employer and employee. The Group provides access to competitive open medical schemes and a Group retirement fund administered by retirement industry professionals.



WHO ARE OUR STAKEHOLDERS?

Customers

- ▶ Buyers of raw product
- ▶ Buyers of scoured product
- ▶ Buyers of combed product
- ▶ Customers of yarn product
- ▶ Customers of the dye house
- ▶ Customers of weaving product
- ▶ Customers of knitting product

Suppliers

- ▶ Suppliers of raw materials
- ▶ Machinery suppliers
- ▶ Auxiliary material suppliers
- ▶ Dye suppliers
- ▶ Service suppliers
- ▶ Outsourcing

Collaborators

- ▶ Employees
- ▶ Agents
- ▶ Bankers
- ▶ Service Providers (includes below)
 - ▶ South African employees
 - ▶ German employees
 - ▶ Agents and consultants
 - ▶ Labour union representatives
 - ▶ Credit institutions
 - ▶ Media

Ownership

- ▶ Shareholders

Control Agencies

- ▶ Labour legislation
- ▶ Fiscal legislation
- ▶ Environmental legislation
- ▶ Government support institutions



SOCIAL AUDITS

The Stucken Group recognises that increased consumer awareness and globalisation puts more responsibility on the company to ensure that the products sold, are manufactured in safe working conditions, at fair rates of pay, respecting the basic human rights and dignity of those involved in production. As evidence of compliance with these social responsibilities, voluntary independent Social Compliance Auditing is being implemented throughout the Group and is a further confirmation of our continued commitment towards ethical accountability.

SOCIAL RESPONSIBILITY

The Group has always supported a wide range of socially targeted projects for the less fortunate and recently, we established a dedicated social responsibility fund intended to make a meaningful contribution to the upliftment of the communities in which we operate. As a Group, we intend to contribute to the betterment of the lives of the under-privileged members of our community with a particular focus on education.







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