



A global leader





Across the globe.

NGF is a global business. As part of the NSG Group we manufacture in Japan, China, Europe and Canada and we serve customers all over the world.

We have achieved a world class position through our uncompromising approach to excellence in everything that we do, from research and development to manufacture and customer service.

Our recent developments in HTS glass cord technology have revolutionised the way engineers approach automotive design.

The new generation of combustion engines are 'greener' thanks to belts which are capable of running in oil, leading to lighter, more fuel efficient vehicles.

NGF's technologists work with customers to ensure that our value-added products meet the demands of the 21st century.

In 2014 NGF Europe, based in the United Kingdom, received the Queen's Award for Excellence: Innovation. The award recognised the expertise and commitment of our research team along with our manufacturing and customer support.

With the backing of the NSG group of companies, the future looks bright both for NGF and its clients across the globe.



Alistair Poole

Head of Functional Products, NSG Group

**NGF
Canada
Limited**



**NGF
Europe
Limited**



**NGF
Poland**



**Suzhou
NSG
Electronics
Company
Limited**

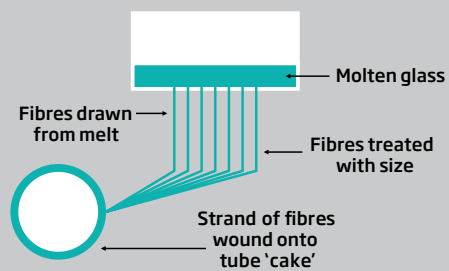


**Nippon
Sheet
Glass
Company
Limited**



NGF is a market leader in the manufacture, development and supply of glass cord.

HTS Filament Production

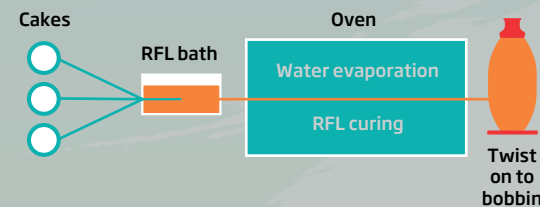


The cord is manufactured by first producing high tensile strength glass fibre filament.

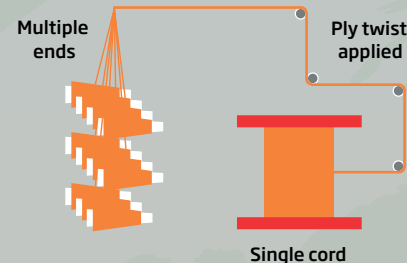
This filament is then coated in a bath of resorcinol formaldehyde latex (RFL) before being twisted and plied together to produce the single

cord. The cord is supplied in a wide range of coating treatments for compatibility with CR, EPDM, NBR, PU, HNBR and silicone compounds for high temperature applications and for thermoplastics and other specialised elastomers.

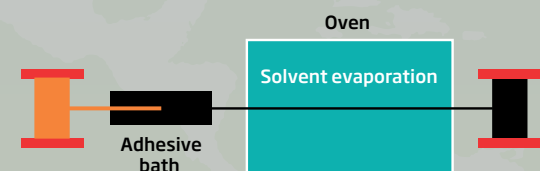
RFL Impregnation Process



Cord Plying



Adhesive Overcoat



Sustainability

We are an innovative, forward-thinking company built on many years of expertise.

Our global team is committed to developing and manufacturing products that meet the needs of current customers, and open up new markets through continuous research, development and innovation.

We are committed to sustainable development.

Working safely and ethically, we supply high-quality products that make an important contribution to the 21st century.



Use of Technology

Constantly looking for innovative solutions NGF has revolutionised the customer experience.

Using the latest technology, NGF Europe customers worldwide, access a bespoke quality control portal, containing up to the minute quality assurance information on every despatch.

This continued investment in technology emphasizes NGF's commitment to excellence from product development and manufacture to total customer service.

NGF in the UK is one of the first companies in the automotive sector to develop radio frequency identification technology (RFID) to the benefit of its global customers. The technology guarantees 100% accuracy on all customer deliveries.



Quality Management

NGF is committed to maintaining the highest quality and environmental management practises across all of its sites.

The following certification and systems are currently in operation:

UK

Quality Management Accreditation ISO/TS 16949:2009
Environmental Management: ISO 14001:2004

CANADA

Quality Management System ISO 9001:2008

JAPAN

Quality Management System ISO 9001:2008
Environmental Management: ISO 14001:2004

CHINA

Quality Management System ISO 9001:2008
Environmental Management: ISO 14001:2004



An increasingly wide range of applications are benefiting from glass cord technology.



EPAS

This Electronic Power Assisted Steering (EPAS) system, utilises glass cord from NGF in a synchronous belt which operates when the vehicle is manoeuvring saving fuel and energy in comparison to hydraulic systems.



Tyres

Glass cord reinforcement gives improved heat dissipation, greater tensile strength, increased tread life and a smoother ride when woven into a fabric, or used on its own, in high performance pneumatic tyres.

Rubber impregnated chopped strands (RICS) strengthen solid rubber tyres, preventing chipping when used on rugged terrain.

Profiles

NGF produces a range of treated glass cords for the reinforcement of rubber and thermoplastic extruded profiles used in automotive and building applications.



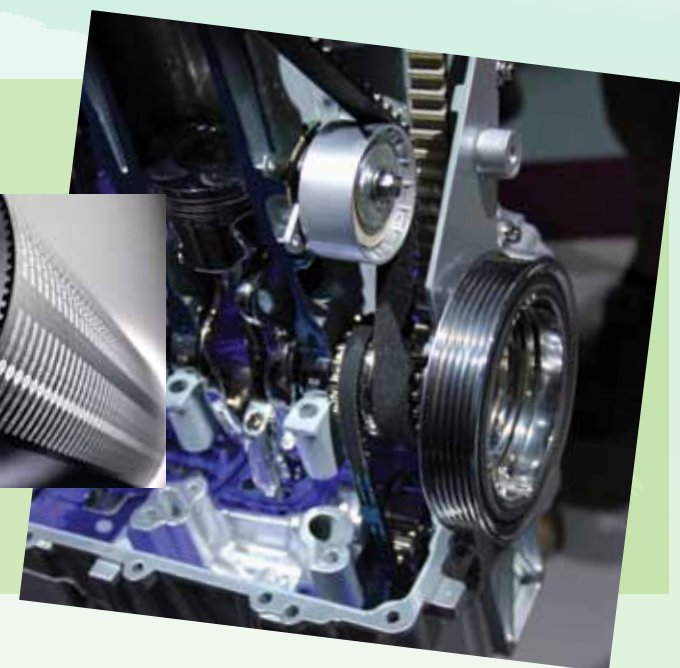
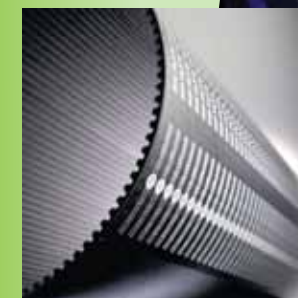
High load, high torque industrial belts

Specialist carbon fibre/glass hybrid, value added cords from NGF are becoming increasingly popular for use in high load, high torque industrial belts. These hybrid reinforced belts (far left) are capable of withstanding the stress and strain required to propel a state-of-the-art bicycle. Cords made from 100% carbon fibre, Aramid and HTS glass are also available for these high load applications and are compatible with a wide range of elastomers including Polyurethane.



Transmission belts which run in oil

NGF offers a complete range of rubber impregnated glass cords for the reinforcement of rubber drive belts in automotive, industrial and household applications. Innovative patented glass cord reinforcements manufactured by NGF use the unique properties of glass fibre and a novel chemical dipping process. This cord gives dimensional stability to drive belts where there is a critical need for synchronous transfer of power. The new generation of small filament diameter glass cords are uniquely oil resistant and so capable of reinforcing timing belts which run in oil. In 2014, NGF Europe based in the UK, was awarded the Queen's Award for Enterprise: Innovation in recognition of its patented technology.



V belt technology

A new generation of raw edge V belts have a narrow cross-section. Cords reinforced with glass maximise load bearing and stability across a range of temperatures.



Woven Fabrics

Fabrics woven with glass cord give stability to complex moulded products such as escalator handrails. The excellent adhesive quality of rubber impregnated glass fabric gives added strength to the handrail composites, preventing delamination and damage in use. Woven fabrics including glass cord are also used in dryer felts and conveyor belts.



Contacts

NGF Canada Limited



255 York Road
Guelph, Ontario
N1E 3G4
Canada

Telephone #: 519-836-9228

Main Contact: Jason Martin

Direct Dial: 226-706-8885

Email: Jason.Martin@ngfcanada.com

Nippon Sheet Glass Co., Ltd.



4902 Komori cho
Takachaya
Tsu City
Mie Prefecture
514-0817
Japan

Telephone #: 0081-59-238-1169

Main Contact: Kenji Saito

Email: Kenji.Saito@nsg.com

NGF Europe Limited



Lea Green Road
St Helens
Merseyside
England
WA9 4PR

Telephone 01744 853065

Main Contact: Colin Hamand

Direct Dial: 01744 853012

Email: colin.hamand@nsg.com

Suzhou NSG Electronics Co., Ltd.



No. 121 Hongxi Road
New district
Suzhou
China

Telephone #: 0512-66160200

Main Contact: Gu Xuefei

Email: Setsuhi.Ko@nsg.com

NGF Poland



Miedniewice 75F
Skierniewice
96-100
Poland