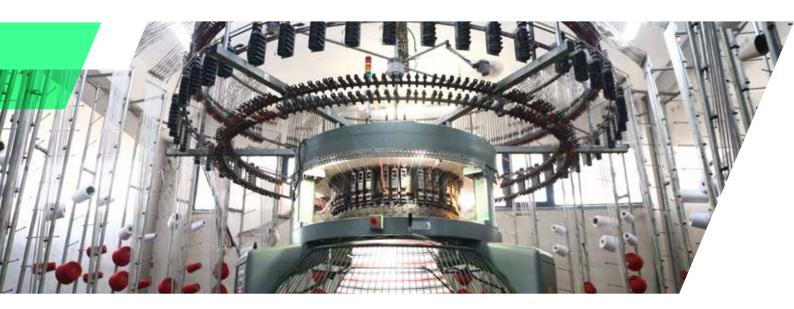


Textile Lubricant Range

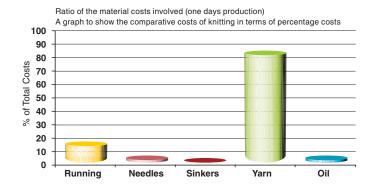
Knitting machine needle lubricants



Vickers Oils started trading in 1828 in Leeds, United Kingdom and have been supplying premium quality textile lubricants for over 170 years.

Manufactured in the UK, our complete range of highperformance textile lubricants have been approved by machine manufacturers (OEMs) across the globe and are recommended for various applications in textile manufacturing including knitting, carding, spinning, texturising, winding and cleaning processes.

Developed with advanced additives and in strict accordance with our Quality Control systems, it is ensured that each batch made meets the required specification in terms of both physical properties and scouring performance.



The needle oil is typically a relatively low contributor to the cost of consumable items used in knitting. In this illustration of 95% cotton/5% elastane fabric, the most important cost element is the yarn.

Key Requirements when selecting Needle Oil:

I) Machine/OEM Requirements

- To ensure that the needles and other knitting elements of the machine run smoothly providing maximum operating life under varied temperature and pressure conditions.
- Provide optimum machine life.

Modern knitting machines are engineered with close machine tolerances, including steep cam angles and high peripheral speeds and potentially operate 24 hours a day, all demanding a very high performance in terms of the anti-wear properties of the oil.

II) Finishing Process Requirements

- Ability to be scoured from the knitted fabrics to prevent fabric faults
- Maximises the efficient use of yarn
- Increases the quality of fabric

The operating profit of the knitting industry depends highly upon maximising the amount of first quality fabric.

Solution: An Intelligent, cost-effective balanced formula

Features of our needle lubricants

Our needle lubricants are beneficial for both machine lubrication, meeting machine manufacturers requirements and fabric finishing processes due to the following factors considered while formulating. Our needle oils: -

- Meet the viscosity* specification for the machine specified by the machine manufacturers (OEMs).
 *ISO 22 and 32 viscosity grades are the most widely specified for modern large diameter machines.
- Show good compatibility with electronic and plastic components, electrical cabling, elastomeric seals, and machine paints.
- Perform under extreme temperature and pressure conditions.

- Demonstrate improved anti-wear performance.
- Contain antioxidants that reduce the rate of oil deterioration and prevent the rapid formation of sticky or resinous deposits which may otherwise occur, thereby ensuring excellent corrosion and oxidation resistance.
- Have emulsifier systems that enable the oil to be readily scoured from different fabrics using the wide variety of detergent and scouring systems found in practice.

Benefits of our needle lubricants

Our Needle oils fulfil the key machine and finishing process requirements of:

1. Increased machine productivity

As machinery becomes increasingly sophisticated it is vital that the quality of lubrication is optimised.

Vickers needle lubricants are designed to offer maximum protection to the knitting machines by achieving the following benefits: -

- Increased life of machine parts including needle, sinker, cams etc.
- Reduced downtime and maintenance.
- Good distribution of the oil throughout the machine irrespective of the oiling system being used.
- No damage to electronic actuation systems
- No damage to machine paint and plastic components
- Non-corrosive
- Easy start up
- Resistant to high temperatures

2. Minimised faulty fabric

Vickers needle lubricants can increase the amount of marketable "first quality" finished fabric produced thereby reducing the reject or downgraded fabric.

This is achieved by:

- Easy removal of needle oil lines or stains from all fibre types
- Prevention of damage to elastane yarns in heat setting



The importance of a balanced formula



Importance Of Correct Viscosity

The correct viscosity ensures the oil has the appropriate "thickness" at normal machine operating temperature.

If the viscosity is too low the oil will drain from the machine surfaces too quickly and an oil film will not be maintained on the parts requiring lubrication. This could lead to premature wear of the knitting elements.

If the oil is too viscous, cold starting will be difficult and the oil may not flow sufficiently between the moving parts of the machine as clearances are reduced when the machine heats up and expands.

It can also result in the machine running at a higher than expected temperature possibly compromising the wear rate.

Importance Of Correct Oil Additive

The viscosity is of prime importance where hydrodynamic lubricating conditions exist (where there is no metal to metal contact). However, because of the mechanical nature of knitting machinery hydrodynamic conditions are only relevant part of the time and boundary lubricating conditions are largely relevant (where there is contact between the metal surfaces), and the additive system incorporated in the oil gains much greater significance.

Additives are used to:

- Modify the frictional properties of the oil
- Give improved anti-wear performance
- Give improved oxidation resistance and stability at high running temperatures
- Ensure corrosion resistance

A Balanced Formula

The specialised needle oils available from Vickers have been formulated not only to meet the exacting requirements of today's knitting machine technology, but also to be fully compatible with the yarns and the finishing routes through which the knitted fabrics are processed.

Vickers Oils contribute to the efficient running of the machinery and to the maximisation of needle, sinker and cam life.



Anti-wear



Anti-splash



Resistance to oxidation



High temperature



Low temperature



Low residue



Non-corrosive



Application Types	SPOTLESS CN	SPOTLESS NX	VICKERLUBE LC 22	JENILUBE	CIRNEDOL SE	CIRNEDOL	VICKERLUBE SOCK	9873 FLUSHING C	8008 DIL FLUSHING OIL
Large Diameter Circular Knitting Machines	(needles, sinkers and cams)	(needles, sinkers and cams)	~	~				V	V
Flat Bed Knitting Machines		(needles, sinkers and cams)						~	✓
Panti-Hose Knitting Machines					V	V		V	V
Seam Free Body Knitting Machines					/			/	V
Sock Knitting Machines							~	V	V
Application Method	SPOTLESS CN	SPOTLESS NX	VICKERLUBE LC 22	JENILUBE	CIRNEDOL SE	CIRNEDOL	VICKERLUBE SOCK		8008 DIL FLUSHING OIL
All types of automatic oiling units commonly fitted to the knitting machines	✓	✓	✓		~	~			
Manual oiling methods	V	V	V				V		
Automatic Lubricator (drip feed/spray)				/					
Oil Can				V					
Brushing				/					
Circulatory oil systems							✓		
Mist or spray systems							V		
As supplied								V	V
Range of Lubricants	Attribute								ISO VISCOSITY
SPOTLESS CN	Reduces to 4. Good cold		ormance	netic blends					15,22,32
SPOTLESS NX	1. High level of scourability 2. Compatible with plastic & electronic components 3. Compatible with elastane where there's heat setting before washing 4. Tested and approved for use with Lycra® 5. Good cold starting performance 6. Compliant with Eco Labels							15,22,32,46	
JENILUBE	1. For pre dyed yarns requiring no scour 15 & 22						15 & 22		
VICKERLUBE LC 22	 Compatible with knitted elastane yarns and where there's heat setting without an initial scour. Designed to partially volatilise from the fabric during heat setting. 								
CIRNEDOL SE	1. Self-emulsifiable 2. Scours readily from panti-hose in combined scour/dye systems 3. Avoids finishing problems in the production of seam free garments 4. Reduced misting in the knitting room 5. Compatible with modern machine parts including plastics and elastomeric seals 6. Tested and approved for use with Lycra® 7. Compliant with Eco Labels							22 & 32	
CIRNEDOL	High lubrication Compliant	city t with Eco Lab	els						22 & 32
VICKERLUBE SOCK	1. Compatible with modern machine parts including plastics and elastomer seals 2. Highly scourable 3. Tested and approved for use with Lycra® 4. Used by major sock manufacturers 5. Compliant with Eco Labels							32,46	
FLUSHING OIL	2. Very Low		e for routine clea els	ining and mai	ntenance of al	l large diamete	er machines		

Vickers Oils Textile Lubricants

Fibre lubricants



Vickers Oils started trading in 1828 in Leeds, United Kingdom and have been supplying premium quality textile lubricants for over 170 years.

LAINASPIN and YARNOL Range Carding & Spinning Lubricants

The name of Vickers is synonymous with lubricants of the highest quality for carding and spinning. Our woollen spinning lubricants are used for processing of knitwear, weaving or carpet yarns.

The TEXTUROL Range and CONYL DK2

Coning/ Texturing Lubricants

From the early days of the texturing industry, Vickers have enjoyed a close relationship with those engaged in the production of textured, continuous filament nylon and polyester.

Our TEXTUROL range can be used as a fibre lubricant for:

- High speed texturing of fine denier, polyester & nylon yarns or cone winding.
- Suitable for applications to dyed and undyed yarns intended for weaving.
- Air-Jet texturing of polyester and nylon.

CONYL DK2

A mineral based fibre lubricant used for lubrication of synthetic nylon & polyester continuous filament yarns especially textured yarn intended for knitting but also for flat yarns.





Our range of mineral and synthetic oil based fibre lubricants are available for various fibre processing applications including carding, texturising / winding and as spin finishes.

Range of Lubricants	Applications		Remarks
TEXTUROL	Coning /winding and texturing of polyester & nylon	Mineral based	Good antistatic performance Reduction of fibre / fibre and fibre/ metal friction Good off winding performance Reduced risk of oil dripping
CONYL DK2	Coning of synthetic nylon & polyester continuous filament yarns	Mineral based	Imparts low yarn friction Anti-static Readily removed
LAINASPIN	Carding and spinning of wool, lambs' wool and cashmere blends on the woollen system	Synthetic based	Water Soluble Excellent anti-static properties
YARNOL	Carding and spinning of wool, lambs' wool and cashmere blends on the woollen system	Mineral based	Good spinning performance with high yields and level yarns Clean carding Good yarn lubrication Readily removed Excellent anti-static properties
ELECTOL	Anti-static agent for application to textile fibres during carding & spinning	Synthetic based	Provides antistatic control to the fibres Anti-static additive for addition to spinning oil emulsions or as a separate additive



Trusted for Generations



Service & Support

30% of our workforce are employed in the technical team, focusing on Quality Control, R&D, OEM liaison and Technical Service allowing us to provide one-on-one dedicated customer support by our team of highly qualified experts.



Support



Lubrication Surveys and Recommendations



Equipment Reports and Analysis



Lubricant **Analysis**



Training

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