



# Next Generation Lubricants for the Textile Industry





# Intelligent lubricants to cut down maintenance costs and improve productivity

## BECHEM's Legacy





Established in the year 1834, BECHEM pioneered manufacturing of high performance specialty lubricants. Backed by a strong research base, the company has been the forerunner in developing new generation specialty lubricants for critical industrial applications. Headquartered in Hagen, Germany, BECHEM has its operations spread across the world through its subsidiaries and joint ventures.

BECHEM India is a 100% subsidiary of BECHEM Germany with its plant and corporate office located in Bangalore. The Indian subsidiary with a dedicated sales team and distribution network spread across the country, caters to various industrial segments like Cement, Steel, Automotive, Textile and Metal Working processes.









BECHEM believes in the philosophy of delivering exceptional value to customers through high quality products and outstanding service. BECHEM India is ISO / TS / 16949 : 2009 certified and has its state of the art production facility located in Bidadi to manufacture high quality specialty lubricants.

## PICTOGRAMS

### APPLICATIONS

- Roller bearings 
- Plain bearings 
- Chains 
- Closed gears 

### PROPERTIES

- Corrosion protection 
- Low temperatures 
- High temperatures 
- High speed 
- High loads 
- Resistant to water 
- Good pumpability 
- Low residue level 
















# Lubricating greases for the Textile Industry

Modern day textile production involves high degree of automation to control high speed precision processes.

Quality of textile output depends on efficient and precise working of multitude of moving parts involving bearings and sliding elements, drive and control chains and complex gear mechanisms. These mechanical parts are exposed to severe forces and demanding conditions. In order to provide effective lubrication for textile machinery, the lubricant needs to absorb high speed vibrations, control temperature variations, be resistant to chemicals and contaminants. Extended lubricant service life with minimal maintenance is of utmost importance. Considering the numerous lubricating points in a typical textile machinery, lubricants with extended service life, help reduce labor costs and shop floor productivity loss significantly.

BECHEM high-performance lubricants for textile processes have exceeded established performance standards of the past and set new benchmarks. BECHEM products have been recommended by leading textile machine manufacturers for its role in reducing maintenance down time and enhancing machine reliability.

	PRODUCT	PRODUCT					Properties
		Base oil	Thickener	NLGI-grade	Base oil viscosity (mm <sup>2</sup> /s) at 40 °C / 100 °C	Service temperature range [°C] <sup>1)</sup>	
Textile spinning	<b>Berulub FR 43 Spray</b> 	Polyalphaolefin (PAO)	Special lithium soap	2	32 6	-50 +140	Special lubricant for locking mechanisms of bobbin holders in suspended flyers of simplex machines (OEM approval), provides long-life lubrication and surface protection of steel springs and pins 
	<b>Berulub KR-EP Tex 2</b> 	Synthetic oil combination	Lithium soap	2	15 4	-50 +120	To lubricate end bushes of draw frames, drum shaft bearings of autoconers and other high-speed bearings, special synthetic oil for efficient lubrication, contains extreme pressure additives for excellent wear protection
	<b>BECHEM High-Lub Textile Super</b> 	Mineral oil	Lithium soap	2	180 15	-20 +140	To lubricate neck bearings of fluted rollers (bottom rolls), bearings in ring frames, jockey pulley and tin roll shaft bearings, excellent sealing properties guarantee reduced contamination of needle bearings by ingress of fluffs, long-life lubrication, corrosion protection
	<b>Berutemp FB 38</b> 	Polyalphaolefin (PAO)	Barium complex soap	1	160 20	-40 +180	Low and high-temperature lubricating grease for roller and plain bearings subjected to high loads, e.g. top arm bearings, does hardly form any residues even after long periods of use, reliable corrosion and wear protection
	<b>Beruplex LI-EP 2</b> 	Mineral oil	Lithium complex soap	2	180 16	-30 +150	For long-life lubrication of main motor bearings and fluted rollers of ring frames, detaching rollers of high speed combers (OEM approval), ability to withstand high loads, vibrations and shock loads, very good corrosion and wear protection at elevated temperatures
	<b>Berutox M 21 EPK</b> 	Mineral oil	Polyurea	1-2	490 32	-20 +160	For long-life lubrication of top arm bearings and variator assembly in ring frames, good high temperature properties, high load carrying capacity
	<b>Beruplex HTA</b> 	Mineral oil	Aluminium complex soap	2	230 15	-25 +190 +200	Multipurpose, long-life high-temperature grease to lubricate dust collection motor bearings, reliable protection of components even in dusty environments, reliable corrosion protection
	<b>BECHEM High-Lub LT 2 EP</b> 	Mineral oil	Lithium soap	2	180 15	-30 +140	Multipurpose high-performance EP lubricating grease (OEM approval), allows extended re-lubrication intervals, very good corrosion and wear protection
Textile weaving	<b>BECHEM Premium 0</b> 	Mineral oil	Lithium-/calcium soap	0	90 10	-30 +130	For central lubrication systems of looms, allows extended re-lubrication intervals, good corrosion protection
Textile sizing	<b>Berutox FH 28 KN</b> 	Polyalphaolefin (PAO)	Polyurea	1-2	400 40	-30 +180 +200	Synthetic high-temperature grease to lubricate bearings of drying cylinders, well resistant to chemicals and water, good oxidation resistance and corrosion protection properties
	<b>Berutox M 21 KN</b> 	Mineral oil	Polyurea	1-2	490 32	-20 +180	Long-life lubricating grease for bearings exposed to water and moisture, very good corrosion and wear protection, high mechanical stability over the whole temperature range
Textile processing	<b>Beruplex HTA</b> 	Mineral oil	Aluminium complex soap	2	230 15	-25 +190 +200	High-temperature grease for long-term lubrication of hot air blower fans of stenters, allows extended re-lubrication intervals

All indications and values correspond to latest knowledge and do not represent any product specification. <sup>1)</sup>Value marked in grey indicates short term maximum temperature.



» Outstanding success worldwide –  
BECHEM products for the Textile Industry. «

# Lubricating oils for the Textile Industry

BECHEM's range of mineral and synthetic oil based products developed with advanced additives have been approved by machine manufacturers across the globe. These high performance products are recommended for the critical applications in spinning, thread or fabric manufacturing as well as conveyor chains. BECHEM's range also includes solid lubricant containing pastes and anti-friction coatings for extreme high temperature applications.

## For Spinning

- Carding machine
- Comber draw frame
- Speed frame
- Ring frame
- Autoconer
- Two-For-One Twister (TFO)
- Open-end spinning machine

## For Weaving

- Woven label looms
- Warping
- Sizing
- Looms
- Knitting

## For Processing

- Singeing
- Mercerising
- Stenter
- Dyeing Machine

## For man-made textiles

- POY: Partially Oriented Yarn
- PSF: Polyester Staple Fiber
- FDY: Fully Drawn Yarn
- Winder
- Texturising

	PRODUCT	Base oil	Viscosity (mm <sup>2</sup> /s) at 40 °C		Pour point (°C)	Flash point (°C)	Specification	Type	Properties
				Viscosity index					
Textile spinning	<b>Berusynth GP 150</b> 🔧 ⚙️ ⚙️ ⚙️	Polyalphaolefin (PAO)	143	155	-45	≥265	DIN 51517-3	CLP HC	Synthetic service lubricant for high-speed combers and gears (OEM approval), reduces temperature and power loss, resistant to ageing
	<b>Berugear GS 220 BM</b> 🔧 ⚙️ ⚙️ ⚙️	Mineral oil	233	100	-26	≥250	DIN 51517-3	CLP	Running-in lubricant for high-speed combers (OEM approval), PD additive technology supports the improvement of the contact area and increases the resistance to micro pitting by the formation of reactive surface layers
	<b>BECHEM LC Spindle Oil</b> 🔧	Mineral oil	10	95	-24	≥150	DIN 51757	HLP 10	Long collar oil for simplex machines, allows extended re-lubrication intervals, reduces the coefficient of friction
	<b>Beruspain Highgrade 10</b> 🔧	Mineral oil	10	95	-24	≥150	DIN 51757	HLP 10	For ring frame spindle application (OEM approval), excellent oxidation stability, provides good corrosion protection, allows extended re-lubrication intervals
Textile weaving	<b>Berusynth EP 100 → 150</b> 🔧 ⚙️ ⚙️ ⚙️	Polyglycol	100 150	203 196	-42 -39	≥240 ≥240	DIN 51517-3	CLP PG	Recommended for central lubrication systems of looms (OEM approval), increased sump life, reduced friction coefficient, lower temperature and power loss
Textile weaving & sizing	<b>Berusynth GP 150</b> 🔧 ⚙️ ⚙️ ⚙️	Polyalphaolefin (PAO)	143	155	-45	≥265	DIN 51517-3	CLP HC	Synthetic oil for gear boxes, extended re-lubricating intervals, reduced temperature and power loss
	<b>BECHEM Staroil G 150 → 220</b> 🔧 ⚙️ ⚙️ ⚙️	Mineral oil	150 220	95 100	-27 -26	≥230 ≥230	DIN 51517-3	CLP	Special gear oil for let off and take up gear boxes, outstanding load-carrying capacity, provides wear protection, allows extended oil changing intervals
	<b>BECHEM Staroil G 320</b> 🔧 ⚙️ ⚙️ ⚙️	Mineral oil	320	95	-18	≥230	DIN 51517-3	CLP	Special gear oil for cam box, high load-carrying capacity, good wear protection
Textile processing	<b>Berusynth CU 250</b> 🔧 ⚙️ ⚙️ ⚙️	Ester	250	120	-45	≥250			High-temperature chain oil for oil lubricated stenters, hardly forms any residues, excellent temperature-viscosity behaviour, combines high adhesive power on chain surfaces with good penetration properties, low evaporation loss

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# Lubrication Solutions for Industry



## **CARL BECHEM LUBRICANTS (INDIA) PVT LTD**

28D, Bidadi Industrial Area, Bidadi - Harohalli Road, Bangalore 562109, India

Phone +91 80 66900800/01/02 · Fax +91 80 66900803 · [info@bechemindia.com](mailto:info@bechemindia.com) · [www.bechemindia.com](http://www.bechemindia.com)

## **CARL BECHEM GMBH**

Weststr. 120 · 58089 Hagen · Germany · Phone +49 2331 935-0 · Fax +49 2331 935-1199 · [bechem@bechem.de](mailto:bechem@bechem.de) · [www.bechem.com](http://www.bechem.com)