



**Hochleistungs-Schmierstoffe für
die Industrie und den Bausektor**

**High Performance Lubricants for
Industry and Construction**

工業與建築高效能潤滑油



BECHEM Universal und Longlife EP-Fette
BECHEM Universal and Longlife EP-Greases

BECHEM 泛用長效型 EP-潤滑脂

HIGH-LUB L 2

用於潤滑普通和滾動軸承，在溫度和負載正常操作下可降低機械裝置的摩擦和磨損。可用於所有的工業部門。此產品吸收水分後，不會影響潤滑脂的抗腐蝕性或黏稠度。操作溫度：零下30°C到120°C（短期140°C）

To lubricate plain and roller bearings and to reduce friction and wear on mechanisms exposed to normal operating conditions with respect to temperature and load. For all industrial sectors. Water that is absorbed by the product will not affect the grease's protection or consistency. Service temperature: -30°C up to +120°C (short term +140°C)

HIGH-LUB L 2 EP

用於潤滑普通和滾動軸承，以及導管操作；操作溫度從零下20°C到120°C，可容許短期140°C、高負載和高速潤滑。除抗腐蝕力極佳和抗氧化添加劑外，此潤滑也含有EP添加劑，用來增進產品在高負載下的潤滑力。HIGH-LUB L 2 EP 適用於一般管子直徑的中央潤滑系統。

To lubricate plain and roller bearings and to reduce friction and wear on mechanisms exposed to normal operating conditions with respect to temperature and load. For all industrial sectors. Water that is absorbed by the product will not affect the grease's protection or consistency. Service temperature: -30°C up to +120°C (short term +140°C)

HIGH-LUB L 474

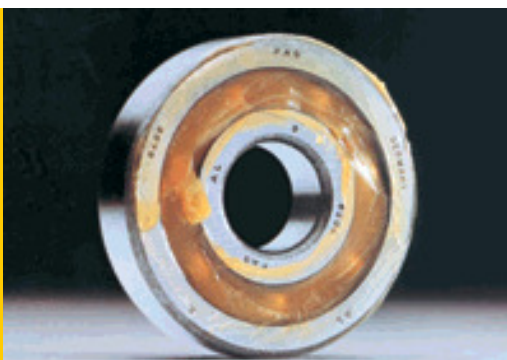
潤滑脂減少產品的號數。可作為所有工業領域的普通與滾造軸承的潤滑。HIGH-LUB L 474 即使在重負荷下也可以降低摩擦和磨損。當在有水的情況下，HIGH-LUB L 474 仍可提供抗腐蝕效能，並且有效地運作。可當作泛用型潤滑脂使用，對應不同的儲存情況用於所有的機械。操作溫度：零下20°C到120°C（短期最高140°C）

Grease to reduce number of products. Grease for the lubrication of plain and roller bearings in all industrial areas. HIGH-LUB L 474 reduces friction and wear even at heavy loads. When subjected to water, HIGH-LUB L 474 still provides corrosion protection and worked stability. Recommended as universal grease for complete machines with different storage conditions. Service temperature: - 20°C to +120°C (short term peak 140°C).

HIGH-LUB LFB 2000

潤滑普通和滾動軸承，並減少機械裝置在高負載下的摩擦和磨損。用於所有的工業部門。潤滑脂吸收水分後，不會影響其黏稠度或抗腐蝕能力。除了極佳的抗氧化特性和載重能力之外，HIGH-LUB LFB 2000 有很好的附著力，並且可以抗冷熱水。此潤滑油中的白色固體潤滑劑，可防止金屬與金屬在混合及邊界摩擦區接觸。它可以幫助降低摩擦係數，即使在高表面壓，也可減少磨損。他的高潤滑效能，可以幫助延長再潤滑的間隔。HIGH-LUB LFB 2000 不含鉛。操作溫度：零下20°C到120°C

To lubricate plain and roller bearings and to reduce friction and wear on mechanisms subjected to high load. For all industrial sectors. Water that has been absorbed by the grease will neither affect its consistency nor corrosion protection properties. In addition to its excellent ageing resistance and load carrying capacity, HIGH-LUB LFB 2000 has good adhesion and is resistant to hot and cold water. White solid lubricants in the coefficient of friction even at high surface pressure and results in less wear. Its high lubricating effectiveness helps prolong relubrication intervals. HIGH-LUB LFB 2000 is lead-free. Service temperature: - 20°C up to +120°C.



HIGH-LUB SW 2

用於潤滑摩擦條件下的普通與滾動軸承，並保護滑動的機械裝置 - 特別是鋼絲繩 - 免於腐蝕，或有腐蝕性的水與空氣之侵蝕。適用於所有的速度，油脂皆可提供潤滑。操作溫度：零下25°C到80°C

To lubricate plain and roller bearings exposed to mixed friction conditions and to protect sliding mechanisms - especially wire ropes - from corrosion and the corrosive attack of aggressive waters or gases. Suitable for all speeds that tolerate grease lubrication. Service temperature: -25°C up to +80°C.

BERUPLEX CS 2 EP

以醋酸鈣複合皂為基底的泛用型潤滑脂。非常適用於靜止或動力的高負載滾動和剎動軸承之潤滑或密封。此產品有極佳的熱穩定性、高磨損和腐蝕保護，在中央潤滑系統也有良好的操作溫度：零下25°C到140°C

Universal lubricating grease based on calcium-acetate complex soap. It is well suitable for the lubrication and sealing of statically and dynamically high-loaded roller and slide bearings. The product offers excellent thermal stability, high wear and corrosion protection as well as good pumpability in central lubrication systems. Service temperature: from -25°C to +140°C.

BECHEM Universal und Longlife EP-Fette **BECHEM Universal and Longlife EP-Greases**

BECHEM 泛用長效型 EP-潤滑脂

HIGH-LUB PTFE

耐高溫潤滑脂，含有EP-添加劑。潤滑普通與滾動軸承，並降低高負載和腐蝕環境下，機械裝置的摩擦和磨損，操作溫度很廣。適用於所有速度的潤滑。即使在有水的情況下，也可以保護軸承免於磨蝕損害，並且有效潤滑。操作溫度：零下20°C到120°C（短期最高140°C）

High temperature resistant lubricating grease, contains EP additives. To lubricate plain and roller bearings and to reduce friction and wear on mechanisms which are subjected to high loads and a corrosive environment and operate in a wide temperature range. Suitable for all speeds that tolerate grease lubrication. Protects bearings from abrasive build-up and ensures lubrication even in the presence of water. Service temperature: -20°C up to +120°C (short term +140°C).

BERUPLEX KS 22

高效能潤滑劑，用於高負載普通與滾動軸承之長效潤滑，可作用於廣泛的溫度：零下30°C到150°C，如果再潤滑可達到180°C。

High performanve lubricant to be used for longlife and lifetime lubrication of high-loaded plain and roller bearings over a wide temperature range and for all speeds permitted for grease lubrication. Service temperature: -30°C up to +150°C, in case of relubrication up to 180°C.

HIGH-LUB LIC-000

半流動，平滑且可抽運的潤滑油脂。適用於中央潤滑系統。可防水，有抗腐蝕性並且可以降低磨損。操作溫度：零下30°C到80°C。

Semi-fluid, smooth and pumpable lubricating grease. Suitable for use in central lubrication systems. It is water resistant, offers corrosion and helps reduce wear. Service temperature: -30°C up to +80°C.





HIGH-LUB FA 50

用於潤滑普通與滾動軸承，並可降低重負載及超重負載下機械裝置的摩擦和磨損，作用於廣泛的溫度。適用於所有速度的潤滑。保護軸承免受腐蝕損害和腐蝕環境的影響。即使有水的情況下，有可以有效潤滑。應用：圓軌滾動軸承、齒輪軸、震動篩和壓碎機。操作溫度：零下20°C到120°C

To lubricate plain and roller bearings and to reduce friction and wear on mechanisms subjected to high and severely high load in a wide temperature range. Suitable for all speeds that permit grease lubrication. Protects bearings from abrasive build-up and corrosive environmental influences. Ensures lubrication even in the presence of water. Application: Roller bearings of circular tracks, pinion gear shafts, vibrating screens, crushers. Service temperature: -20°C up to +120°C.

Haftschmierstoffe – Adhesive Lubricants 黏性潤滑劑

BERULIT 400

高載齒狀齒輪潤滑劑，可用於低至中環速、高壓裝載，應用於自動噴灑系統。有適用在潤滑高負載鋼材轉動軸承、大直徑鏈條和閉合的鋼絲繩，潤滑滑軌和導墊的效果也一樣好。操作溫度：零下10°C到160°C

Service lubricant for high-loaded toothed gears at low and medium circumferential speeds and high pressure loads for application by automatic spray systems. Also suitable for the lubrication of high-loaded swivel bearings of steel, chains of large diameters and closed wire ropes, as well as for lubrication of slide ways and guide pads. Service temperature: -10°C up to +160°C.

BERULIT GA 400

潤滑大型開口齒輪傳動裝置，使其在重負荷及高環速下操作，應用於自動噴灑系統。確保齒輪傳動裝置的高度操作可靠性。也可用於滑軌、大直徑鏈條和閉合鋼絲繩的潤滑。操作溫度：零下20°C到180°C

Service lubricant for large open gear drives operating under heavy loads and high circumferential speeds to be applied by automatic spray systems. Ensures high operational reliability of gear drives. Also usable for the lubrication of slide ways, chains of large diameters and closed wire ropes. Service temperature: -20°C up to +180°C.

BERULIT 443

潤滑大型開口齒輪傳動裝置，使其在重負荷及低環速下操作，手動應用。在齒輪傳動裝置開始運轉之前，初次潤滑。也能用於滑軌和導軌墊的潤滑。操作溫度：零下20°C到180°C

Service lubricant for large open gear drives operating under heavy loads and low circumferential speeds to be applied by hand. Priming lubricant for gear drives before starting the running-in process. Also usable for the lubrication of slide ways and guide pads. Service temperature: -20°C to +180°C.

BERULIT GA 2500 / GA 2500 SPRAY

潤滑大型開口齒輪傳動裝置，使其在重負荷及高環速下操作，應用於自動噴灑系統。即使在逆向動力或熱狀況下，同樣可確保齒輪傳動裝置的高度操作可靠性，且再潤滑的間隔很長。也可用於滑軌、大直徑鏈條和閉合鋼絲繩的潤滑。此外，不允許離心潤滑的應用也可使用。操作溫度：5°C到200°C / 零下20°C到200°C

Service lubricant for large open gear drives operating under heavy loads and high circumferential speeds to be applied by automatic spray systems. Ensures high operation reliability of gear drives even under adverse dynamic or thermal conditions and long relubrication intervals. Also usable for the lubrication of slide ways, chains of large diameters and closed wire ropes. Moreover suitable for applications which do not allow centrifuging of lubricant. Service temperature: +5°C to +200°C / -20°C to +200°C.



Hochtemperaturfette – High Temperature Greases 高溫潤滑油脂

HIGH-LUB HTA

潤滑普通與滾動軸承，在高溫和所有的速度下皆可降低摩擦和磨損。保護軸承免受磨蝕損害，即使在高負載也可確保潤滑。鋁的複合潤滑脂，用於焦油混砂機、離合器推力軸承和熱空氣風扇...等。
 操作溫度：零下25°C到190°C (短期200°C)

Lubrication of plain and roller bearings to reduce friction and wear at high temperature and all speeds permitted for grease lubrication. Protects bearings from abrasive build-up and ensures lubrication even at high loads. Aluminium complex grease for tar mixing machines, clutch thrust bearings, hot air fans, etc.
 Service temperature: -25°C up to +190°C (short term +200°C)

BERUTOX M 21 KN

潤滑普通與滾動軸承，防止機械裝置接觸高溫 and 腐蝕環境時，造成摩擦或磨損。在所有的速度都可有效潤滑。即使在有水的情況下，也可保護軸承免受磨蝕損害，並且確保潤滑。潤滑在熔爐、旋轉爐和排氣風扇中的強裝載軸承，使其維持滑順的狀態，不會形成硬的沉澱物。
 操作溫度：零下10°C到180°C

To lubricate plain and roller bearings and to prevent friction and wear on mechanisms exposed to high temperature and corrosive environments. Suitable for all speeds that permit grease lubrication. It protects bearings from abrasive build-up and ensures lubrication even in the presence of water. To lubricate extremely loaded bearings at furnaces, rotary kilns, exhaust gas fans for aggressive media; maintains its smooth condition without forming hard deposits.
 Service temperature: -10°C up to +180°C

BERUTOX M 21 PLUS

潤滑普通與滾動齒輪，以及在高溫和突加負載情況下的導路。再潤滑間隔與再潤滑總數，視操作情況而定。降低機械裝置的摩擦和磨損，特別是在混合摩擦的區域。保護軸承免於磨蝕損害，在有水的情況下也可防止腐蝕。長效潤滑脂，使用於指定溫度範圍內。
 操作溫度：零下10°C到160°C

To lubricate roller and plain as well as guideways subjected to high temperature and shock load conditions. Relubrication intervals and amounts of relubrication depend on operating conditions. To reduce friction and wear on mechanisms especially in the area of mixed friction. To protect bearings from abrasive build-up and to prevent corrosion also in the presence of water. Longlife grease to be used in indicated temperature range.
 Service temperature: -10°C up to +160°C

BERUTOX M 21 EPK

BERUTOX M 21 EPK 是一特製潤滑劑，特別為接觸腐蝕環境的機械裝置設計，可用於高溫和/或高負載及突加負載情況。
 BERUTOX M 21 EPK 抗水和水蒸氣性非常好。由於它的黏著性良好，也可防止水或灰塵進入機械裝置中。用於所有遇水的應用，例如液壓、控制要素、洗滌和裝填機械。
 操作溫度：零下10°C到160°C

BERUTOX M 21 EPK is a speciality lubricant specifically designed for the lubrication of mechanisms exposed to corrosive environments, high temperatures and/or high load or shock load conditions.
 BERUTOX M 21 EPK has a very good resistance to water and water vapours and thanks to its good adhesion, also prevents water or dust from entering mechanisms. For all applications which are subjected to water, such as water hydraulics, control elements, washing, filling machines.
 Service temperature: -10°C up to +160°C



BERUTOX FH 28 KN

潤滑普通與滾動軸承，在高溫和所有的速度下皆可降低摩擦和磨損。保護軸承免受磨蝕損害，即使在高負載也可確保潤滑。鋁的複合潤滑脂，用於焦油混砂機、離合器推力軸承和熱空氣風扇...等。
操作溫度：零下25°C到190°C (短期200°C)

Lubrication of plain and roller bearings to reduce friction and wear at high temperature and all speeds permitted for grease lubrication. Protects bearings from abrasive build-up and ensures lubrication even at high loads. Aluminium complex grease for tar mixing machines, clutch thrust bearings, hot air fans, etc.
Service temperature: -25°C up to +190°C (short term +200°C)

BERULUB HIGH-TEMP MEISSELCOMPOUND

黏性鑿子膏，用於液壓或氣動錘，可避免冷焊、機器不正確運行或插入式工具和絕緣過度磨耗。BERULUB HIGH-TEMP MEISSELCOMPOUND 以化學中性成分為基底，並且配有特殊添加劑，還有銅和石墨等固體潤滑劑。
操作溫度：零下20°C到1100°C

Adhesive chisel paste for hydraulic and pneumatic hammers to avoid cold welding, improper functioning or unwanted and premature wear of plug-in tools and bushing such as used in hydraulic or pneumatic hammers.
BERULUB HIGH-TEMP MEISSELCOMPOUND is based on chemically neutral components and is equipped with special additives as well as solid lubricants such as copper and graphite.
Service temperature: -20°C up to +1100°C

BERUTOX VPT 64-2

合成高溫長效潤滑脂。潤滑普通與滾動軸承，使機械裝置接觸高溫、真空、輻射、溶劑或腐蝕性化學物質時，皆可降低摩擦和磨損。所有速度皆可有效潤滑。
操作溫度：零下20°C到260°C
註：BERUTOX VPT 64-2/-1 不能與礦物基礎潤滑油，或任何其他合成產品混合

Synthetic longlife high temperature grease. To lubricate plain and roller bearings and to reduce friction and wear on mechanisms exposed to high temperature, vacuum, radiation, solvents or aggressive chemical substances. Suitable for speeds that permit grease lubrication.
Service temperature: -20°C up to +260°C
Note: BERUTOX VPT 64-2/-1 cannot be mixed with mineral oil based lubricants or any other synthetic products.

Hydraulikflüssigkeiten – Hydraulic Fluids 液壓油

BEICHEM STAROIL

動力驅動傳動裝置的液體，用於熱負荷或有水進入可能會造成腐蝕的流體靜力液壓機械設備。適合液壓幫浦或馬達，因為他們的設計或操作條件需要抗磨耗添加劑處理，在混合摩擦區域可以保護機械裝置。和礦物油一樣適合非鐵金屬，可防焊接材料和機械塗料。容易過濾和離心。
操作溫度：零下35°C到80°C & 零下15°C到110°C

Power transmission fluids for above all hydro-statically operated hydraulic plants subjected to thermal load, water ingress and possibly also corrosion. Appropriate for hydraulic pumps or motors which because of their design or operating conditions require antiwear additive-treated oils to protect mechanisms in the mixed friction area. Compatible with non-ferrous metals as well as mineral oil resistant seal materials and machine paints. Easy to be filtered or centrifuged.
Service temperature: betw. -35°C to +80°C and -15°C to +110°C



**BECEM
HYDROSTAR 46 D**

作為動力驅動傳動裝置的液體，用於高熱負荷或會遭水腐蝕的傳動裝置液壓系統。對幫浦或液壓馬達非常有幫助，因為其設計和操作條件需要含有抗磨耗添加劑的油，此產品可幫助降低機械裝置在混合摩擦區域的摩擦。HYDROSTAR 46 D 是高度精煉礦物油和添加劑的混合物，可以增進抗腐蝕和抗氧化效能。可以幫助降低混合摩擦條件下機械裝置的磨損，並且可以消散腐蝕性水。
操作溫度：零下20°C到110°C

To be used as a power transmission fluid for hydraulic systems with hydrostatic drives subjected to high thermal load and the corrosive attack by water. Very beneficial to pumps or hydraulic motors which for reasons of design or operating conditions require oils which are equipped with antiwear additives and help reduce friction on mechanisms in the area of mixed friction. HYDROSTAR 46 D is a combination of highly refined mineral oils plus additives to improve corrosion protection and aging resistance. It helps reduce wear on mechanisms subjected to mixed friction conditions and is capable of dispersing corrosive waters.
Service temperature: -20°C up to +110°C

**BECEM
HYDROSTAR HEP 46**

使用於對任何環境的最大限度相容性和必要地高效能特性 例如 使用於區域環境新鮮水貯存槽的移動式液壓系統，針對隧道工作、冷藏、林業&滑雪道保養運輸工具、市區停車場、易受到火災危險的廠房、食品工業、液壓工程、新鮮水再利用、近海裝備、漂浮採撈船、水位維護輪船、門道。
操作溫度：零下30°C到90°C(短期+120°C)

To be used wherever a maximum of environmental compatibility along with high performance is required e.g. mobile hydraulic system used in areas surrounding fresh water reservoirs, for tunnelwork, cold storage, forestry, vehicles for ski racing maintenance, municipal car park, plants subjected to danger of fire, food industry, hydraulic engineering, fresh water recovery, off-shore equipment, floating dredgers, boats for water maintenance, lock gates.
Service temperature: -30°C to 90°C, short term +120°C

Hydraulikflüssigkeiten – Hydraulic Fluids 液壓油

**BECEM
HYDROSTAR
HEES 46 LONGLIFE**

針對非常高的機械與動力荷載的所有液壓系統 如對於老化穩定性並結合最理想的環境相容性有非常高地要求。這產品擁有非常佳的水解穩定特性。HEES 46已在KEF專業領域測試裡被成功地證實 - 由政府單位推起的一項工程 - 設定最大限度荷載與人為增加操作溫度的條件。HEES 46 已成功通過 德國 O & K Dortmund 軸活塞且設定最大限度荷載條件下的測試。
生物毒物學：符合 UZ 79 "Blanuer Engel" 與 達到VDMA 24 568的規定

For all hydraulic systems with very high mechanic and dynamic loads such as very high requirements with regard to ageing stability in combination with optimal environmental compatibility. The product excels by very good hydrolytic stability. HEES 46 has proven successful in the KWF field test - a project sponsored by the government - under extreme loads and artificially increased service temperature. HEES 46 was tested and retested under extreme loads on the axial piston test bench by O & K Dortmund, Germany.
Ecotoxicology: Meets with the requirements UZ 79 "Blanuer Engel". Fulfills VDMA 24 568.



Industrieöle – Industrial Gear Oils 工業齒輪油

BEICHEM STAROIL G

高效能齒輪循環油 - 針對重負荷軸承或齒輪箱。非常有效於開放常溫條件和對使用壽命、水和常溫釋放量有著更高需求的機械裝置。不會侵蝕礦物油抗密封材質或機台塗料。操作溫度：零下20°C到100°C 和 零下10°C到130°C。

High performance gear and circulation oils for heavily loaded bearings or gearboxes. Very beneficial to mechanisms at open air conditions with higher requirements concerning life time, water and air release capacity. Will not attack mineral oil resistant seal materials or machine paints.
Service temperature: betw. -20°C to +100°C and -10°C to +130°C

BERUSYNTH EP

高效能齒輪循環油 - 用於高機械裝置或熱負載之軸承或齒輪箱運轉。非常有效於高滑道摩擦的活塞的機械裝置 例如 渦輪齒輪。FKM密封相容性，對其他礦物油抗密封材質相容性應再確認。DD、環氧化物和窯爐珐瑯相容性、單一機台塗料可能會被侵蝕。定不能與礦物油相混合、含有礦物油的封閉性齒輪領域在開關之前必須先清洗和沖洗。操作溫度：零下30°C到140°C 和 零下25°C到180°C。

High performance gear and circulation oils for bearings or gearboxes running under high mechanical or thermal loads. Very beneficial to mechanisms with a high portion of sliding friction such as worm gears. Compatible with FKM seals, for other mineral oil resistant seal materials the compatibility should be checked. Compatible with DD, epoxy and stoving enamels, simple machine paints may possibly be attacked. Must not be mixed with mineral oils, closed gears filled with mineral oils must be cleaned and flushed prior to switching over.
Service temperature: betw. -30°C to +140°C and -25°C to +180°C

Druckluftöle – Pneumatic Oils 空壓機油

BERULIT S 5

BERULIT S 5 是一高效和生物可分解油適用於空氣壓縮器具。非常有效於各種類型空氣壓縮設備及所有噪音吸收外殼空壓放電器具。
操作溫度：零下40°C以下。

BERULIT S 5 is a highly efficient and biodegradable oil for pneumatic tools. Very beneficial for all kinds of pneumatic equipment, above all for pneumatic striking tools with noise absorption jackets. Service temperature: down to -40°C.

BERULIT 75

BERULIT 75 是一高效能礦物油基產品用於空氣壓縮器具或所有種類或空壓組件。
BERULIT 75 可採取添加注入或直接應用於空氣膨脹軟管使用。

BERULIT 75 is a very efficient mineral oil based product for pneumatic tools or all kinds or pneumatic units. BERULIT 75 is used by means of superposed oiler or directly applied into the air-inflated hose.



Motorenöle – Engine Oils 引擎油

STAROIL SYNERGIE ALPHA 5 W 40

STAROIL SYNERGIE ALPHA 為一合成低摩擦馬達油。這優良品質超過汽車製造商最新的需求，特別是在城市交通方面、停止與前進動作和長距離時一樣好可展現出其優勢。非常適用於催化的汽車。

STAROIL SYNERGIE ALPHA is a synthetic low friction motor oil. This quality exceeds the latest requirements of the car manufacturers and shows its advantages especially in city traffic, stop and go as well as for long distances. Well suitable for catalytic cars.

STAROIL MULTIGRADE LL SAE 10 W-40

STAROIL MULTIGRADE LL SAE 10 W-40 是適用於所有季節的低摩擦油特別是為商用車輛所設計。這現代超高效能馬達油被發展用於高負載柴油引擎包含或無渦輪增壓進料器。可應用於所有的汽油和柴油汽車引擎。這產品與一般馬達油相比較其可節省2~3%以上的燃料，這取決於操作溫度。

STAROIL MULTIGRADELL SAE 10 W-40 is an all-season low friction oil especially designed for commercial vehicles. This modern super high-performance motor oil was developed for high-loaded diesel engines with or without turbo charger. Application in all petrol and diesel car engines. Offers saving of up to 2-3% compared to conventional motor oils and depending on service conditions.

STAROIL SUPER HPD PLUS SAE 15 W-40

STAROIL SUPER HPD PLUS SAE 15 W 40 是一支泛用型油品用於重負荷卡車且具有高效能長效特性可去延長柴油內燃機油換檔間距。針對高負載和裝有渦輪增壓器柴油內燃機引擎，但也可用於輸送機和個人運輸工具和裝有或無渦輪增壓器之汽油引擎。使用所有季節使用最高性能與最佳里程數和服務壽命。針對建築、農業與林業工業所用的重商業載貨汽車和公車。也最適用於生物柴油。油換檔間距是縮短二分之一（請參考汽車製造商的操作指南）。

STAROIL SUPER HPD PLUS SAE 15 W 40 is a multipurpose oil for heavy duty trucks with a high performance level and longlife properties to extend oil changing intervals for diesel engines. For high-loaded and turbo-charged diesel engines, but also for transporter and personal vehicles with diesel and petrol engines with or without turbo charger. For all-season use with highest performance and optimal km-service life. For heavy commercial vehicles in the construction industry, agriculture and forestry, as well as for buses. Also best suitable for bio-diesel. Oil changing intervals are cut in half (please observe instructions of the car manufacturer).

STAROIL MULTIGRADE S 3 HD SAE 15 W-40

一般性馬達油用於混雜的停車場、極端裝載柴油和石油引擎裝有或無裝有渦輪增壓器。這高合金，所有季節適用地泛用型油品可提供長距離時最佳地性能。避免在高和低操作溫度條件下形成泥。

Universal motor oil for mixed car park, for extremely loaded diesel and petrol engines with or without turbo charger. This high-alloy, all-season multipurpose oil offers best performance for long distances. Mud formation is avoided under high as well as under low service temperature conditions.





Korrosionsschutzmittel und Kettenschmierstoffe Corrosion Protection and Chain Lubricants

腐蝕防護鏈條潤滑劑

BERULIT ZAHNFIT SPRAY

作為機械工件的潤滑和防腐蝕使用。BERULIT ZAHNFIT SPRAY 是礦物油基和油裡瀝青穩定分解。非常黏著的覆蓋表面和擁有非常佳的水置換潤滑膜。

To be used for the lubrication and preservation of machine parts. BERULIT ZAHNFIT SPRAY has a mineral oil base with bitumen stably dissolved in the oil. It covers surfaces with a very adhesive and extremely water repellent lubricating film.

BECHEM MULTIPROTECT SPRAY

BECHEM MULTIPROTECT SPRAY 是一腐蝕防護劑屬於長效型金屬表面的保護。測試展現-假設使用這產品目的是預計作為儲存使用，耐久性 - 於開放條件下 - 最少1-2年。當使用於室內：3-4年。對預計出口轉運的防護這產品可有效地作為材料上的腐蝕防護劑使用。

BECHEM MULTIPROTECT SPRAY is a corrosion protection agent to be used for longterm conservation of metal surface. Tests have shown that if the product is stored and used for the purpose for which it is intended, its durability - under open air condition - is at least 1-2 years. When used indoors: 3-4 years. It is therefore very beneficial as a corrosion protection agent to materials intended for overseas transport.

HIGH-LUB SW 2 SPRAY

一般潤滑，特別適用於鹽水，優異地熱水和冷水密封性能。針對普通與滾造軸承暴露於參雜摩擦條件與去防護滑道機械裝置的潤滑 - 特別是在抽線繩 - 來自於銹蝕與水或潤滑油脂的侵入銹蝕。

Universal lubricant, especially suitable in case of salt water, excellent hot and cold water sealing performance. To lubricate plain and roller bearings exposed to mixed friction conditions and to protect sliding mechanisms - especially wire ropes - from corrosion and the corrosive attack of aggressive waters or greases. Suitable for all speeds that tolerate grease lubrication.

BECHEM SEILSTAR

淺色與高度地液體抗腐蝕劑使用於抽線索與索傳動裝置的保護。BECHEM SEILSTAR能用於刷塗、噴霧或浸漬應用。操作溫度：零下20°C到100°C。

Light-coloured and highly fluid anticorrosive agent to be used for the conservation of wire ropes and rope drives. BECHEM SEILSTAR can be applied by brush, spraying or dipping. Service temperature: -20°C up to +100°C.

BERUMOLY P 80

BERUMOLY P 80是溶劑基鏈條油，在溶劑蒸發後，其擁有優異地黏著特性並且可延長再潤滑的間隔時間。
BERUMOLY P 80 含有二硫化鉬成份，因此擁有良好的潤滑性和緊急運轉特性。他不產生副產物且提供磨損降低和噪音阻尼特性。
這產品擁有優異地蠕變作用和滲透鏈條或潤滑點。
操作溫度：零下15°C至150°C。

BERUMOLY P 80 is a solvent containing chain lubricant which has excellent adhesion properties after evaporation of the solvent and which allows extended relubrication intervals.
BERUMOLY P 80 has good lubricating and emergency running properties due to the MoS2 content. It does not spin off and offers wear reducing and noise damping properties. It has an excellent creeping effect and penetrates the chain or lubricating point.
Service temperature: -15°C up to +150°C.



GELSEROL SUPER SPRAY

GELSEROL SUPER SPRAY 是泛用型油品用於廣泛應用 例如汽車、工業和貿易、維護、家用和園藝、運動、野營...等。
 GELSEROIL SUPER SPRAY 能作為除銹劑、接觸噴霧、潤滑劑、抗腐蝕噴霧或清潔劑使用。

GELSEROL SUPER SPRAY is multifunctional oil for various applications such as for automobiles, industry and trade, maintenance, household and gardening, sports, camping etc. GELSEROIL SUPER SPRAY can be used as a rust solvent, contact spray, lubricant, anticorrosive spray or cleaner.

Universal Kaltreiniger – Universal Cold Cleaner 一般清潔劑

BECEHM UNICLEAN NEU

BECEHM UNICLEAN 是一般型且非常效地冷水清潔劑。清除所有種類的油污和油脂、油碳、蠟、樹脂、焦油、瀝青和塗漆和亮漆只要這些不完全乾燥。
 BECEHM UNICLEAN 是一非常強而有力地石蠟碳氫化合物基的清潔劑產品。

BECEHM UNICLEAN is a universal and very efficient cold cleaner. Removes all kinds of oils and greases, oil carbon, waxes, resins, tar, bitumen as well as paint and lacquers as long as these have not completely dried. BECEHM UNICLEAN is a powerful cleaner with a paraffinic hydrocarbon base.





Schmierstoffe für Mobilkrane - Teleskopausleger **移動式起重機潤滑油 - 伸縮臂** Lubricants for Mobile Cranes - Telescopic Arms

BERULUB PAL-FLUID L

BERULUB PAL-FLUID L 是特別適用於高負載擠壓和滑軌襯墊的常效潤滑且避免伸縮移動式起重機臂的黏滯。BECEM 重視保養技術人員的需求且目前供應 BERULUB PAL-FLUID L 錫罐是供給一特殊閥允許高架噴霧。這高架噴霧可提供一狹窄與平直噴霧型態且是用非可燃性液體來稀釋為了最好的應用與薄膜結構。

BERULUB PAL-FLUID L is especially suitable for longlife lubrication of high-loaded pressure and guide pads and avoids stick-slip of telescopic mobile crane arms. BECEM followed the requested for maintenance technicians and now supplies BERULUB PAL-FLUID L in tins which are provided with a special valve which allows overhead spraying. The spray head offers a narrow and straight spray pattern and is diluted with a non-inflammable solvent for better application and film formation.

BERULUB PAL

全合成泛用型膏含有 PTFE 作為固體潤滑劑用途。改善 非鐵金屬/非鐵金屬或金屬/金屬 和 塑膠/塑膠 接觸滑道特性。適用於使用食品飲料工業。為了減輕這聲音傳導通過聚合物材質工件的實心與震動。特別是適用於高負載擠壓與滑道墊的常效潤滑用於望遠鏡的伸縮起重機臂。
操作溫度：零下20°C至150°C。

Fully synthetic multipurpose paste containing PTFE as solid lubricant. Improves the sliding ability of non-ferrous metal/non-ferrous metal or metal/metal and plastics/plastics contacts. Suitable for use in the food and beverage industry. To dampen the sound conducted through solids and vibrations of parts made of polymers. Especially suitable for longlife lubrication of high-loaded pressure and guide pads for telescopic mobile crane arms. Service temperature: -20°C up to +150°C.

BERULUB VPN 13

BERULUB VPN 13 是一般螺桿複合物含有固體潤滑劑適用於暴露於嚴苛地高溫 and / 或受到腐蝕影響的所有種類螺栓銜接。選擇一固體潤滑劑與 BERULUB VPN 13 裡相結合可幫助達到最理想變緊轉矩和預防過度伸張或螺桿的不充足地預加應力。VPN 13 內含極微細銅顆粒將在螺栓銜接處的適當表面上形成金屬薄膜因此可預防咬住與氧化，特別是當使用高合金鋼。
其他可利用的包裝規格：BERULUB VPN 13 Spray (500ml 噴霧罐)

BERULUB VPN 13 is a universal screw compound containing solid suitable for all kinds of bolted connections exposed to severely high temperature and/or corrosive influences. A selected solid lubricants combination in BERULUB VPN 13 helps achieve an optimal tightening torque and prevents overstretching or insufficient pre-stressing of screws. Finest copper particles contained in VPN 13 will form metal films on the fitting surfaces of the bolted connection and thus prevent seizure and oxidation, especially when using high-alloy steels. Also available: BERULUB VPN 13 Spray (500ml spray can).

BERULUB VPN 13 RINGLUBE

合成潤滑劑包含一高量固體潤滑劑作用於高溫嚴苛負載接觸。可作為液體潤滑劑使用可達+200°C以上，當受到更高溫這合成媒介揮發和固體潤滑劑結合形成乾燥抗磨損薄膜。

Synthetic lubricant containing a high amount of solid lubricants for heavily loaded contact subjected to high temperature. To be used as fluid lubricant up to approximately +200°C, when subjected to higher temperature the synthetic carrier fluid evaporates and the combination of solids form a dry wear protecting film.



Trennmittel – Release Agents 脫膜劑

BELLONA MS 135

環境安全混凝土脫膜劑。BERULUB MS 135 為一環境安全混凝土脫膜劑擁有水置換特性，因而提供優異地腐蝕保護。這特別去發展防護混凝土攪拌機、混凝土泵浦、機器和機器工件預防污物的形成和混凝土殘渣。這脫膜劑使用BECEHM噴霧裝置噴霧水且透過良好地黏附特性形成優越地薄均勻脫膜薄膜。考慮到化學性與物理性脫膜效果擁有雙倍的活性和容許容易混凝土的移動。如果發生符合一般準則的應用它不留下任何具體的殘渣在噴霧表面上。

Environmentally safe concrete release agent. BELLONA MS 135 is an environmentally safe concrete release agent which has water displacing properties and thus offers excellent corrosion protection. It has especially been developed to protect concrete mixers, concrete pumps, machines and machine parts against the formation of dirt and concrete residues. The release agent is applied by the BECEHM spraying unit spray mist and forms a thin uniform release film which excels by good adhesion properties. In view of its chemical and physical release effect it is double-active and allows easy removal of the concrete. In case of correct application it does not leave any concrete residues on sprayed surfaces.

BECEHM PRIMUS VPN 65-3

BECEHM PRIMUS VPN 65-3為雙動的由於化學-物理釋放作用且易於脫膜。一旦正確應用BECEHM PRIMUS VPN 65-3 無留下混凝土殘渣且可提供最佳的混凝土表面無細孔或斑漬形成。

BECEHM PRIMUS VPN 65-3 is double-active thanks to its chemical-physical release effect and allows easy demoulding. In case of correct application BECEHM PRIMUS VPN 65-3 leaves no concrete residues and allows perfect concrete surfaces without pore or spot formation.

BECEHM PRIMUS VPN 90

BECEHM PRIMUS VPN 90為雙動的由於化學-物理釋放作用且易於脫膜。一旦正確應用BECEHM PRIMUS VPN 90 無留下混凝土殘渣且可提供最佳的混凝土表面無細孔或斑漬形成。

BECEHM PRIMUS VPN 90 is double-active thanks to its chemical-physical release and allows easy demoulding. In case of application BECEHM PRIMUS VPN 90 leaves no concrete residues and allows perfect concrete surfaces without pore or spot formation.

BECEHM PRIMUS VPN 93

隧道建造脫膜劑。這種脫膜劑發展用於一致性收縮孔和無碎屑表面。最好的結果是達到量約1 l/50m³。對照其他傳統脫膜劑BECEHM PRIMUS VPN 93 是一兼具化學性與物理性反應產品。他特別發展用於隧道建造與在添加劑與凝固的鈣矽酸鹽之間提供化學反應。這將不會導致水非乳化鈣皂。一旦正確應用BECEHM PRIMUS VPN 93 將不會留下任何混凝土殘渣，是容易可被生物所分解且提供最好地植物群與動物群環境相容性。

Release agent for tunnel construction. This release agent has been developed for uniform shrinkhole and chipping free surfaces. Best results are achieved with a quantity of approx. 1l/50m³. Compared to other conventional release agents BECEHM PRIMUS VPN 93 is a chemically and physically reacting product. It has especially been developed for tunnel construction and its formulation allows the chemical reaction between the additives and the calcium silicates of the concrete. This will not lead to the formation of water non-soluble calcium soaps. In case of correct application BECEHM PRIMUS VPN 93 does not leave any concrete residues, is easily biodegradable and offers best environmental compatibility with flora and fauna.



Trennmittel – Release Agents 脫膜劑

BECHEM HEXENSPUCKE

BECEHM HEXENSPUCKE 為液體濃縮液用於脫離器具上的混凝土和水泥殘渣 如柄勺、抹刀、螺絲鉗、支撐器與鑄模材料、攪拌器...等等。
BECEHM HEXENSPUCKE 可分解鐵鏽且在鐵金屬上形成磷酸鹽保護層。
BECEHM HEXENSPUCKE 不含鹽酸且不侵蝕大多數的塑料材質 如橡膠、木頭和塗漆。

BECEHM HEXENSPUCKE is a liquid concentrate for removing concrete and cement residues from tools such as ladles, spatula, clamps, supporting and moulding material, mixers, etc. BECEHM HEXENSPUCKE dissolves rust and forms a protective phosphate layer on ferrous metals. BECEHM HEXENSPUCKE is free from hydrochloric acid and does not attack most plastic materials, such as rubber, wood and paints.

BERUSIL FO 22 F

Bridge置換 高效能潤滑油。
BERUSIL FO 22 F 為發展作為Bridge置換與同時置換作業滑道潤滑油。由於無法避免不好的天氣變化和氣候條件下幸虧其擁有優異地防水性與抵抗處於極低和高溫(-5°C to +180°C)條件下度過停工期。

High performance lubricant for bridge displacements.
BERUSIL FO 22 F was developed as sliding lubricant for bridge displacements and synchronized displacement operations. Downtime due to bad weather and climatic conditions is not necessary thanks to the excellent water resistance and temperature resistance at extremely low and high temperature (-5°C to +180°C).



Umweltverträgliche Schmierstoffe – Environmental Lubricants 環境潤滑油

HIGH-LUB UWS LFB SUPER

針對潤滑平坦和滾動軸承且去降低機械裝置上的摩擦與磨耗 - 甚至上衝撞軸承 - 使用在全部工業範圍。HIGH-LUB UWS SUPER 擁有高負載荷重、良好的黏著性並且主要是防水性。特別是用於需要可生物分解的產品應用。操作溫度：-20°C ~ +120°C。

To lubricate plain and roller bearings and to reduce friction and wear on mechanisms - even at shock loads - used in all kinds of industrial areas. HIGH-LUB UWS LFB SUPER has a high load carrying capacity, good adhesion and is largely water resistant. Especially used for applications which require biodegradable products. Service temperature: -20°C up to +120°C.

HIGH-LUB UWS MULTIGREASE VR 1-2

潤滑平坦與滾造軸承並且降低機械裝置的摩擦和磨損在全部工業範圍中一般作業條件。HIGH-LUB UWS MULTIGREASES VR 1-2 為一植物油基和對生態環境無害的潤滑油脂並擁有良好的潤滑性和抗腐蝕特性。不含礦物油,能與環境相容且可被生物所分解。當在指示地操作溫度範圍內使用時, HIGH-LUB MULTIGREASE VR 1-2主要是對老化有抵抗力,保證於溫度升高時可連續地再潤滑。操作溫度:-20°C ~ +100°C (瞬間+120°C)

To lubricate plain and roller bearings and to reduce friction and wear on mechanisms exposed to normal operating conditions in all industrial areas. HIGH-LUB UWS MULTIGREASE VR 1-2 is a vegetable oil based and environmentally friendly grease with very good lubricating and corrosion protection properties. Being mineral oil free it is environmentally compatible and biodegradable. When used in the indicated service temperature range HIGH-LUB MULTIGREASE VR 1-2 is largely resistant to aging, at elevated temperature continuous re-lubrication must be ensured. Service temperature:-20°C up to +100°C (short term +120°C)

BERUGEAR UWS FG 34

重負荷與高週邊轉速應用透過自動裝置噴霧系統之大型開放齒輪傳動裝置的操作潤滑。保證高操作齒輪傳動裝置的信賴度。也適用於側邊滑道、大直徑鍊條和封閉抽線的潤滑。操作溫度:-20°C ~+80°C。

Service lubricant for large open gear drives operating under heavy loads and high circumferential speeds to be applied by automatic spray systems. Ensures high operational reliability of gear drives. Also usable for lubrication of slide ways, chains of large diameters and closed wire ropes. Service temperature: -20°C to +80°C.

BERULUB GREEN GD 40

BERULUB GREEN GD 40 可被生物所逐漸分解,潤滑與抗腐蝕油。他可分解銹蝕也能作為清潔劑(焦油清除)使用,另也可作為不銹鋼的保養維護產品。這產品無毒且能與植物與動物環境相容。他擁有水置換特性和滲入最小的裂口。

BERULUB GREEN GD 40 is a biodegradable creeping, lubricating and corrosion protection oil. It dissolves rust and is also well suitable as cleaning agent (tar remover), but also as maintenance product for stainless steel. The product is not toxic and environmentally compatible with flora and fauna. It has water displacing properties and penetrates into smallest gaps.





Special Lubricants Made by BECHEM



Spezialschmierstoffe

Hoch- und Tieftemperaturschmierstoffe
Langzeit- und Grenzschmierstoffe
Kunststoff-Schmierung
Elektrokontakt-Schmierstoffe
Lebensmittelschmierstoffe
Armaturenschmierstoffe

Special Lubricants

Lubricants for high and low temperature
Lubricants for lifetime
Lubricants for plastics
Lubricants for electrical contacts
Lubricants for the food industry
Valve lubricants



Industrieschmierstoffe

Hochleistungs-Mehrweckfette
Spezial EP-Schmierstoffe
Hydrauliköle
Getriebeschmierstoffe (Open Gear)
Umweltfreundliche Schmierstoffe
Schalungstrennmittel

Lubricants for the Industry

High performance multipurpose greases
Special EP-greases
Hydraulic oils
Gear lubricants (Open Gear)
Biodegradable lubricants
Release agents



Metallbearbeitungsmedien

Kühlschmierstoffe
Schneidöle
Tiefbohröle
Korrosionsschutzöle
Reinigungsmedien

Metal Working Mediums

Coolants
Cutting oils
Deep drilling oils
Anti corrosion oils
Cleaning fluids



Umformtechnik

Kaltfließpreßöle
Halbwarm- und Warmumformung
Drahtzugmedien
Tiefziehmedien
Rohrzug

Metal Forming Fluids

Cold forging oils
Release agents for semi-hot and hot forging
Wire drawing lubricants
Deep drawing oils
Tube drawing

CARL BECHEM GMBH

Weststraße 120
D-58089 Hagen

Tel. +49 (0) 23 31 935-0
Fax +49 (0) 23 31 935-1199

e-mail: bechem@bechem.de
<http://www.bechem.com>

台灣快密刀科技有限公司

台中縣大里市中投西路3段979號

TEL:+886 04-24180000 上海 TEL:+86 021-63170669
FAX:+886 04-24180888 上海 FAX:+86 021-63171318

e-mail: fimitech@boton.com.tw
<http://www.boton.com.tw>