Berco Product Line
The Widest Choice

The n. 1 in Undercarriage

- 5,000,000 Track Shoes
- 1,000,000 Rollers
- 150,000 Track Chains
- 250,000 Idlers and Sprockets
- 200,000 Tons of product
- 12,000 Containers of product
YOUR BEST UNDERCARRIAGE VALUE
Since 1920 Berco has offered an innovative, reliable and economical solution to any undercarriage need. Whether for the original equipment manufacturers (OEM) or the aftermarket, for a special machine or a mini-excavator, for a bulldozer or a mining excavator, Berco can offer you the right answer to your specific requirement.

Superior engineering, innovative technology, comprehensive know how and state-of-the-art manufacturing guarantee the total quality of the products and services offered to you.

"Original Equipment Quality, Aftermarket Value"

THE COMPETENT PARTNER YOU CAN RELY ON
Custom made solutions and project engineering support is available upon request. Our team of engineers can help you choose or design the most effective and efficient solution to your specific undercarriage need. They can help you reduce development and engineering time, tooling expenses and facility costs, while adding value to your business.

"Berco, The choice of the leading OEMs"
# THE WIDEST CHOICE
OF UNDERCARRIAGE COMPONENTS
AND SYSTEMS FOR TRACK TYPE MACHINES

**TRACK SHOES**
- More than 70 different profiles
- Hot rolled, cast and hot forged shoes
- More than 4,000 configurations
- Variable width, mud holes, clipped corners, chamfered holes

**IDLERS**
- Cast, forged and fabricated (double or single flange) types
- More than 500 configurations
- Ultra low temperature (-50°) version available

**ROLLERS**
- Single flange, double flange and inner flange rollers
- More than 1,500 configurations
- Ultra low temperature (-50°) version available

**TRACK CHAINS**
- Dry, greased, sealed & lubricated chains
- Heavy Duty version
- More than 11,000 configurations
- Suitable for XR, XL, LGP and TSK undercarriages

**SPROCKETS & SEGMENTS**
- Weld-on rim, bolt-on rim, full hub and segmented type
- 3, 4, 5 and 6 teeth segments
- More than 80 segment configurations
- More than 600 sprocket configurations

**SPECIAL APPLICATIONS**
- Undercarriage for special applications: large conveyor, pipeline handling, pavers, milling machines, logging equipment, directional drills, mining equipment, etc.
ADDITION VALUE TO YOUR BUSINESS

State-of-the-art 3D modeling, Finite Element Analysis (FEM) and Rapid Prototyping enables to design, optimize and evaluate a component before it is built.

Artificial Intelligence techniques are currently being developed to automatically inspect 100% of components. Reliability Test on components are carried out to determine life and performance in a variety of field applications.

Berco Metallurgy Laboratory employs advanced machines such as an electron microscope with microanalysis, a spectrophotometer, tribometers for wear tests, MTS presses for static and fatigue tests (also at extreme temperatures -70°C ÷ 250°C) on materials and components.

Huge efforts are also devoted to the development of New Materials and improvement of the Heat Treating Processes, to guarantee longer product life and superior products.

Photo-elasticity and Strain Gauge techniques are commonly used for stress and fatigue analysis on individual and assembled components.

Berco adds value not only to the products but also to Your Business.
STATE OF THE ART PRODUCTION

AUTOMATED PROCESSES AUTOMATIC QUALITY
The entire production process is fully automated and computer controlled via Computer Manufacturing Technology systems. This guarantees a highly reliable process and constant quality of the products.

THE RIGHT PRODUCT AT THE RIGHT TIME
A vast variety of raw materials and flexible manufacturing give the competitive advantage of short lead times while matching your specific need. That’s what we also call Customer Satisfaction.

HEAT TREATED TO TREAT YOU EVEN BETTER
Quality materials and state-of-the-art manufacturing are not enough to guarantee the quality of the finished products. That’s why the heat treating processes are carried out making sure that all process parameters (temperature gradients, time, quenching temperature, etc.) are constantly monitored online. Hardening and tempering upgrade mechanical properties for superior wear resistance, stress relieving guarantees perfect geometry and excellent resistance for longer product life.
The Berco Mini Undercarriage program offers an innovative, reliable and economical set of mini undercarriage solutions, catering for mini excavators, horizontal drilling machines, small dozers or paving machines and providing you with the right answer to your specific requirements. Berco can supply a complete range of interchangeable components for rubber track belts or traditional steel track chains, guaranteeing the best possible value for money. Superior engineering, innovative technology (e.g. patented monoblock cast iron chains), comprehensive know-how and state-of-the-art manufacturing ensure the total quality of the products and services offered.

THE WIDEST CHOICE
• A complete line of undercarriage components for mini excavators and similar class machines ranging from 1 to 6 ton
• Track chains with 90-140 mm pitch (3.54"-5.51")
• Monobloc austempered cast iron track chains or traditional steel chains with welded or bolt-on shoes
• Interchangeability from steel to rubber and vice versa
• Clamp-on rubber pads or rubberized shoes available
• Complete and fully assembled undercarriage frames

BMU
MINI UNDERCARRIAGE

F25C - HEAVY DUTY TRACK CHAIN SPECIALLY DESIGNED FOR PAVING MACHINES
Sealed and greased track chain pitch 125 mm (4.92"), with w-shaped polyurethane seals, reinforced track link with shunt for extremely heavy-duty applications and heavy vehicles, four different shoes:
• Flat, hot forged, 300 mm (11.81")
• Rubberized (polyurethane) shoe, 300 mm
• Triple grouser shoe, 300 mm, open center upon request
• Single grouser shoe, 300 mm, open center upon request

CLASS T150
Pitch: 90 mm - 3.54"

CLASS T300
Pitch: 101.6 mm - 4"
**25C - FL4 MACHINE CLASS**

**AUSTEMPERED DUCTILE IRON SPROCKETS**

- For agricultural tractors: Fiat, Same-Lamborghini, Landini, etc...
- Made of Austempered Ductile Iron (ADI Berco Patent) for superior structural support and wear resistance
- Special heat treatment (austempering) to ensure correct hardness level and give lasting wear resistance and durability
- Optimized design to reduce stress concentration

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**TRACK CHAIN WITH WELDED SHOES**

- Chain pitch 101,6 mm (4”)
- Track welded on both sides
- Three possible chains widths: 70, 78 and 83 mm (23/4”, 3” and 31/4”)

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**TRACK CHAIN WITH BOLT-ON SHOES**

- Chain pitch 135 mm (5.31”)
- Track bolt-on both sides
- Three possible chains widths: 74, 82 and 85 mm (2.91”, 3.23” and 3.35”)

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### Undercarriage

<table>
<thead>
<tr>
<th>Undercarriage</th>
<th>Track chain Pitch (mm)</th>
<th>Teeth Number</th>
<th>Machine Power (HP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25C</td>
<td>125</td>
<td>25</td>
<td>55-60</td>
</tr>
<tr>
<td>FL4</td>
<td>140</td>
<td>25-27</td>
<td>60-85</td>
</tr>
</tbody>
</table>

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**CLASS F25C HD**

- Pitch: 125 mm - 4.92”

**CLASS T500**

- Pitch: 135 mm - 5.31”

**CLASS FL4**

- Pitch: 140 mm - 5.51”
The Berco Medium Range offers an innovative, reliable and economical set of solutions to your undercarriage needs, catering for Original Equipment Manufacturers (OEMs), the Aftermarket, bulldozers, excavators, old machines or special designs and providing you with the right answer to your specific requirements.

**THE WIDEST CHOICE**

- A complete line of undercarriage components for track-type machine classes ranging from 7 to 50 ton and 140-215.9 mm (5.51”-8½”) chain pitch
- Dry, greased, sealed or lubricated chain versions, heavy duty chains and extreme-wear resistant bushings available upon request, more than 11,000 configurations
- More than 70 profiles of track shoes, more than 4,000 configurations
- Cast, forged or fabricated idler types, more than 500 configurations
- Single flange, double flange or inner flange rollers, more than 1,500 configurations
- More than 600 configurations of sprockets and segments
- Arctic (-50°C) version and version for high-speed applications
- Undercarriage for special applications: conveyor, pipeline handling, milling machines, forest machines, etc...

**TRACK SHOES**

- Over 70 different profiles with Single, Double and Triple Grousers
- Cast steel shoes for special applications: swamp type (1), flat type (2), bent ends shoes, polyurethane track shoes (3) and more
- Through hardened and stress relieved to guarantee excellent wear, high strength and resistance to bending and breakage, resulting in longer life

Undercarriage for sugarcane harvester

Undercarriage for rice combine harvester

**CLASS D6M**

- Pitch: 190 mm - 7½”

**CLASS D5M**

- Pitch: 171.5 mm - 6½”

**CLASS D3 - D4 B/C**

- Pitch: 155.5 mm - 6½”
FORGED SPROCKETS
- Hot forged sprockets for 10-40 ton class excavators and for D3-D4 class dozers
- Nine chain pitch versions from 159.8 to 228.6 mm (6.29”-9”)
- Hot forging gives optimum internal grain flow and stronger core resistance
- Single shot induction hardened on entire tooth profile or with differential quenching for excellent resistance to wear and fatigue

GREASED TRACK CHAINS FOR EXCAVATORS AND HEAVY DUTY APPLICATIONS
A completely new sealing system, consisting of a W shape polyurethane seal, especially designed to keep grease in joints and abrasive particles out of them
- Internal pin & bushing wear reduction, with consequent life extension for 20% and more if compared with the standard sealed chains on the same application
- Reduction of sneaky tracks phenomenon, as result of more laterally stable chains, thus reducing wear of related parts, such as links, rollers, guides
- Improved rebuildability of the track chain
- Noise and maintenance costs reduction and less machine fuel consumption: improved travelling performances

FORGED IDLERS
- Hot forged idlers for 15-40 ton class excavators and for D6R class dozers
- Hot forging gives optimum internal grain flow and stronger core resistance
- Induction hardened rail surface for excellent resistance to wear and fatigue
- Heavier components for improved stability
- No “drum effect” noise resonance

BERCO HEAVY DUTY TRACK CHAINS FOR D4-D7 CLASS MACHINES
Heavy duty, sealed & lubricated track chains have been specifically designed for increased pin & bushing retention. Track link incorporates greater pin-to-link and bushing-to-link contact areas while additional link wear material increases component life. D5 and D6 heavy duty chains are also available in the version with Extreme Wear Resistance Bushings for maximum life in high abrasion environment.

CLASS D6R
Pitch: 203.2 mm - 8"

CLASS D7N/R
Pitch: 215.9 mm - 8½”

CLASS D8N/R
Pitch: 215.9 mm - 8½”
Berco Mining Products offers an efficient, reliable and economical range of solutions for mining operations, catering for the undercarriage needs of open pit mining, quarrying or earthmoving in large-scale land reclamation.

Superior engineering and technology, comprehensive know-how and state-of-the-art manufacturing ensure the total quality of the products and services offered. Our team of engineers is available to help you choose or design the most effective and efficient solution to your specific undercarriage needs.

THE WIDEST CHOICE

• A complete line of undercarriage components for track-type machine classes ranging from 50 to 300 ton and 215.9-350 mm (81/2”-13.78”) chain pitch
• Dry, greased, sealed & lubricated chain versions.
• Arctic (-50°C) version and track chains with lifetime seal groups upon request
• Forged shoes for heavy duty applications
• Track chains for special applications: large conveyor systems, pipeline handling, etc.

FORGED SHOES

Forged shoes for extreme applications, where greatest mechanical and wear resistance properties are needed

RH 120C

• Greased unsealed track chain
• Chain pitch 350 mm (13.78”)
• Double grouser forged shoe, width 800 mm (311/2”)
• Track roller assembly, single flange, with oil fill plug on collars and locking pins, reinforced shaft dimensions

THE WIDEST CHOICE OF UNDERCARRIAGE FOR EXCAVATORS

• Components for: CAT345, 350, 375, E650, 5080; Demag H65, H85, H95, H121; Case CX800; Hitachi EX550, EX600, EX700, EX750, EX800, EX1000, EX1100, EX1800; Komatsu PC650, PC710, PC750, PC800, PC1100, PC1800; Liebherr R954, R964, R974, R984; Link Belt LS7400; Terex O&K RH50, RH40, RH60, RH90, RH120C; Poclain 500, 400, 600, 1000; Sumitomo SH800 and other machines
• Chain pitch from 215.9 to 350 mm (81/2”-13.78”)
**THE WIDEST CHOICE OF UNDERCARRIAGE FOR DOZERS**

- Components for: CAT D8, D9, D10, D11 classes; Dresser TD25, TD40; Fiatallis FD30, FD40, FD50; Deere 1050C; Komatsu D135, D155, D275, D355, D375, D455, D475; Liebherr PK751, PK752 and other machines
- Chain pitch from 215.9 to 317.5 mm (8 1/2" - 12 1/2")
- Track links are forged, quenched and tempered, rail surface induction hardened to increase the wear resistance (HRC>45)
- Extreme service single grouser shoes available

**TRACK CHAINS WITH BPR**

- For D9L, D9N, D9R, D10N, D11R, D11N, D11R, D275, D375, D455 and D475 machines
- Lubricated track chains with **snap rings** in all joints (BPR)
- BPR - Berco Pin Retention - improves operating life of components. The snap rings on the pin ends provide a perfect sealability of the track chains. Side loads can be partially supported by this device
- D10 and D11 are available with **lifetime seal groups**, for applications in which the life of the seal becomes the critical factor for the life of the chain

**LIEBHERR R984C**

- Track group, greased, sealed, chain pitch 280 mm (11")
- Double grouser shoes, open center, dipped corner, shoe width 750 mm (29 1/2")
- Track roller assembly, single flange
- Bolt-on 12 teeth sprocket rim, diameter 1131 mm (44 1/2")

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**CLASS D11N/R - D475**
Pitch 317.5 mm - 12 1/2"

**300 TON CLASS EXCAVATOR**
Pitch 350 mm - 13.78"
Berco Rubberized Products offers a complete, reliable and economical range of solutions for rubber undercarriages, catering for the undercarriage needs of skid steers, crawler-driven harvesters, agricultural tractors and paving machines.

Superior engineering and technology, comprehensive know-how and state-of-the-art manufacturing ensure the total quality of the products and services offered. Our team of engineers is available to help you choose or design the most effective and efficient solution to your specific undercarriage needs.

THE WIDEST CHOICE

• A complete line of undercarriage systems - track frames, rubber tracks, rollers, sprockets and tensioning devices - for track type skid steer loaders and rubber tracked agricultural tractors
• Retrofitting kit for converting skid steer loaders from wheeled to tracked version
• Traditional steel undercarriage for skid steers available upon request
• Polyurethane and rubberized shoes for paving machines, small dozers, etc
• Complete track frames with tensioning device for agricultural tractors
• The widest choice of undercarriage components for the aftermarket, all major brands

UNDERCARRIAGE FOR RUBBER TRACKED AGRICULTURAL TRACTORS

• Designed for agricultural tractors
• Solutions for a complete range of machines
• Better track-on-ground pressure distribution
• Reduction of deep terrain compaction which means increased crop yield
• Sliding reduction, higher traction
• High speed, up to 40 Km/h (25 mph)
• High technology and comfort combined with superior traction, flotation and reliability

RUBBERIZED ROLLERS

1. Case Quadtrack
2. JD 9000T series
3. JD 8000T series
4. JD 8000T series wide track
5. Challenger MT700 - MT800

Complete Undercarriage for JD8000T
COMPLETE UNDERCARRIAGE SYSTEMS FOR TRACK-TYPE SKID STEER LOADERS

THREE SYSTEMS, SIX VERSIONS
- The Hi-Drive configuration preserves the gearbox from shock loads and protects the engagement between the rubber track and the sprocket teeth
- Sprocket with high teeth number for longer lifetime of the components
- Metal embedded rubber track reinforced with steel cords
- Front & rear idlers designed to assure minimum winding angle for rubber track and best specific pressure distribution, which increase rubber lifetime and machine stability
- Rollers and idlers with bimetallic bushings and heavy duty seal group
- Special sliding frame (Berco Patent) which gives a smoother ride and increased machine stability during loading
- Available also with steel track chain

RUBBER TRACK VERSION

<table>
<thead>
<tr>
<th>System</th>
<th>Version</th>
<th>Pitch</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSK50</td>
<td>5 roller</td>
<td>86 mm - 3 1/8&quot;</td>
</tr>
<tr>
<td>BSK40</td>
<td>4 roller</td>
<td>86 mm - 3 1/8&quot;</td>
</tr>
<tr>
<td>BSK30</td>
<td>3 roller</td>
<td>86 mm - 3 1/8&quot;</td>
</tr>
</tbody>
</table>

STEEL CHAIN VERSION

<table>
<thead>
<tr>
<th>System</th>
<th>Version</th>
<th>Pitch</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSK50</td>
<td>5 roller</td>
<td>140 mm - 5.51&quot;</td>
</tr>
<tr>
<td>BSK40</td>
<td>4 roller</td>
<td>140 mm - 5.51&quot;</td>
</tr>
<tr>
<td>BSK30</td>
<td>3 roller</td>
<td>140 mm - 5.51&quot;</td>
</tr>
</tbody>
</table>

Undercarriage System for Skid Steer
- BSK50 5 rollers, steel version
- BSK40 4 rollers, rubber version
- BSK30 3 rollers, rubber version
The Berco Service Division offers a complete solution to your undercarriage maintenance needs, with a range of specific operations including pin & bushing turning, roller lubrication, track shoe fastening or on-site machine servicing. Superior engineering and technology, comprehensive know-how and state-of-the-art manufacturing ensure the total quality of the equipment offered.

Berco offers turnkey solutions, custom-made design and supply of complete workshop and repair facilities, training and technical support.

THE WIDEST CHOICE
• PT350 stationary hydraulic press for the assembly/disassembly of medium and large-size track chains (e.g. Komatsu D575, O&K RH120C, Liebherr R994B and Caterpillar D11 track chains)
• PT250 stationary hydraulic press for medium and small-size chains
• PP50 and PP100 portable presses powerful and versatile tools for assembly and disassembly of track chains, sprockets, rollers, shafts, transmission components, etc.,
• Complete line of tools for servicing various undercarriage sizes, available upon request
• DCL and DCL-D track control and lubricating devices for checking the vacuum in oil seals and injecting oil into lubricated chains, rollers and idlers (DCL-D model)
• CEM7000 electromechanical track shoe wrench for screwing and unscrewing the shoe bolts on tracked vehicle chains, both large and small. The electronic “torque-turn” control ensures highly reliable and consistent bolt torquing results. The high torque developed facilitates bolt removal even in the most difficult situations (e.g. rust)
• The ACC track winder is designed for winding medium and small-size chains, whereas the ACC/S is specifically designed for the larger sizes

<table>
<thead>
<tr>
<th>DCL/DCL-D Lubrication Device</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPERATING SPECS</strong></td>
</tr>
<tr>
<td>Max. vacuum</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Vacuum pump capacity</td>
</tr>
<tr>
<td>at atm. pressure</td>
</tr>
<tr>
<td>Oil pump max. delivery</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Pressure setting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Oil tank capacity</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CEM7000 Electromechanical Wrench</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPERATING SPECS</strong></td>
</tr>
<tr>
<td>Max. torque on socket shaft</td>
</tr>
<tr>
<td>Max. final tightening angle</td>
</tr>
<tr>
<td>Socket shaft rotation speeds</td>
</tr>
<tr>
<td>at 2-speed, in either direction</td>
</tr>
<tr>
<td>Socket shaft motor power</td>
</tr>
<tr>
<td>Socket chain + shoes</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Max. admitted width</td>
</tr>
<tr>
<td>track chain + shoes</td>
</tr>
</tbody>
</table>
### ACC-ACC/S Track Winders

<table>
<thead>
<tr>
<th>OPERATING SPECS</th>
<th>ACC</th>
<th>ACC/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max output torque</td>
<td>6,600 N•m</td>
<td>9,100 N•m</td>
</tr>
<tr>
<td></td>
<td>4,850 lb•ft</td>
<td>6,700 lb•ft</td>
</tr>
<tr>
<td>Motor rating</td>
<td>4 HP</td>
<td>4 HP</td>
</tr>
<tr>
<td></td>
<td>3 kW</td>
<td>3 kW</td>
</tr>
<tr>
<td>Max. mass admitted</td>
<td>3,950 kg</td>
<td>6,000 kg</td>
</tr>
<tr>
<td>onto spindle</td>
<td>7,936 lb</td>
<td>13,228 lb</td>
</tr>
<tr>
<td>Max track shoe width admitted</td>
<td>762 (1,000) mm</td>
<td>1,460 mm</td>
</tr>
<tr>
<td>(with optional device)</td>
<td>30 (40)”</td>
<td>57 1/2”</td>
</tr>
</tbody>
</table>

### PT250-PT350 Hydraulic Track Presses

<table>
<thead>
<tr>
<th>OPERATING SPECS</th>
<th>PT250</th>
<th>PT350</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max ram force</td>
<td>1,803 kN (184 tf)</td>
<td>3,185 kN (325 tf)</td>
</tr>
<tr>
<td></td>
<td>203 sh ton</td>
<td>358 sh ton</td>
</tr>
<tr>
<td>Max traction of rams</td>
<td>713.4 kN (73 tf)</td>
<td>323.4 kN (33 tf)</td>
</tr>
<tr>
<td></td>
<td>80.6 sh ton</td>
<td>36.3 sh ton</td>
</tr>
<tr>
<td>Max. operating pressure</td>
<td>70 Mpa (700 bar)</td>
<td>70 Mpa (700 bar)</td>
</tr>
<tr>
<td></td>
<td>10,000 lb/in²</td>
<td>10,000 lb/in²</td>
</tr>
<tr>
<td>Max. ram stroke</td>
<td>350 mm</td>
<td>280 mm</td>
</tr>
<tr>
<td></td>
<td>13 1/4”</td>
<td>11”</td>
</tr>
<tr>
<td>Oil capacity</td>
<td>4.64 dm³</td>
<td>2 dm³</td>
</tr>
<tr>
<td></td>
<td>283 in³</td>
<td>123 in³</td>
</tr>
</tbody>
</table>

### PP100-PP50 Portable Hydraulic Track Presses

<table>
<thead>
<tr>
<th>OPERATING SPECS</th>
<th>PP100</th>
<th>PP50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. ram force</td>
<td>911.4 kN (93 tf)</td>
<td>490 kN (50 tf)</td>
</tr>
<tr>
<td></td>
<td>102.4 sh ton</td>
<td>54.7 sh ton</td>
</tr>
<tr>
<td>Max. traction of rams</td>
<td>713.4 kN (73 tf)</td>
<td>323.4 kN (33 tf)</td>
</tr>
<tr>
<td></td>
<td>80.6 sh ton</td>
<td>36.3 sh ton</td>
</tr>
<tr>
<td>Max. operating pressure</td>
<td>70 Mpa (700 bar)</td>
<td>70 Mpa (700 bar)</td>
</tr>
<tr>
<td></td>
<td>10,000 lb/in²</td>
<td>10,000 lb/in²</td>
</tr>
<tr>
<td>Max. ram stroke</td>
<td>350 mm</td>
<td>280 mm</td>
</tr>
<tr>
<td></td>
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<tr>
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