

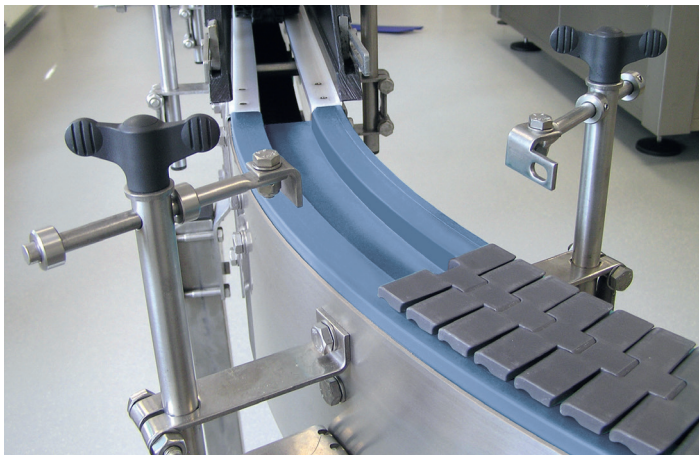
## Save Energy in Conveying Systems by Using High-Performance LubX® Materials

Röchling Industrial North America offers two high-performance materials specially formulated for the material handling and conveying industry. With outstanding dry-running properties and lower coefficient of friction than standard UHMW-PE, **LubX® C** and **LubX® CV** reduce energy needs and all but eliminate slip-stick (backsliding).

### LubX® C:

The original high-performing material

- Outstanding dry-running properties and up to 75% lower coefficient of friction than standard UHMW-PE means less energy is needed to run conveyor systems
- Designed for increased efficiency when sliding against POM and stainless steel/steel materials
- **LubX® C** reduces noise levels in factory environments, increasing overall safety for workers
- FDA compliant for use in food grade applications
- Reduced chances of slip-stick and backsliding
- Increase process efficiency and stability



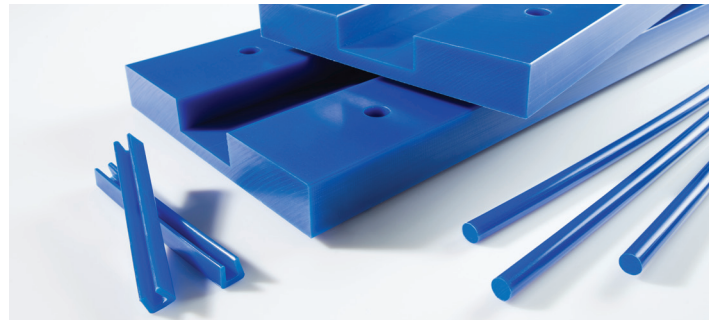
### LubX® C and LubX® CV application possibilities:

- Straight and curved chain tracks
- Gears
- Sorter push blocks
- Under-chain wear strips
- Wear strips
- Sprockets
- Rollers
- Belt guides
- Guide rails
- Lane dividers

### LubX® CV:

Designed for higher speeds and productivity

- **LubX® CV** has been developed with the same excellent sliding properties as **LubX® C**, but with the added benefit of lower temperature production for use in systems operating at higher speeds and pressure loads
- Excellent dry-running properties with a significantly lower coefficient of friction than UHMW-PE
- Uses less energy in high velocity conveyor systems
- High wear resistance and shorter run-in phase for longer maintenance intervals
- Easily machinable for use in complex parts
- **LubX® CV** reduces noise levels in factory environments, increasing overall safety for workers
- FDA compliant for use in food grade applications



### LubX® C and LubX® CV are available in the following:

- Extruded profiles and rods
- Sheets in thicknesses up to 4"
- Standard colors:
  - LubX® C: Blue-grey
  - LubX® CV: Blue

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[www.roechling.com/us/industrial](http://www.roechling.com/us/industrial)

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## LubX® – The Energy Savers

### Tribological Systems

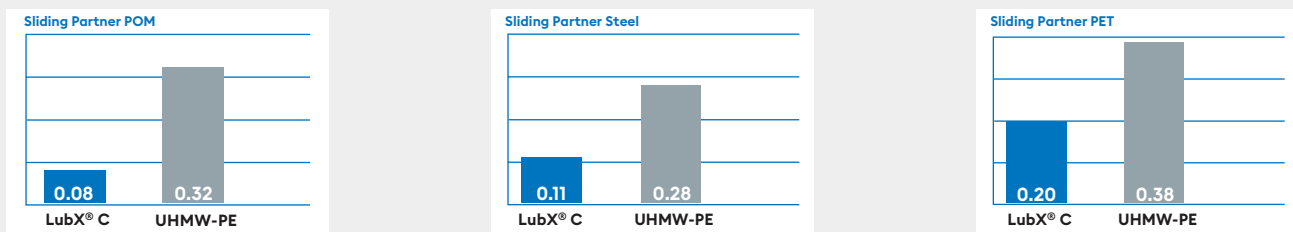
In the development of LubX® products, great care has been taken not only to minimize the coefficient of friction of the sliding materials, but also to consider the tribological system of the sliding partners in an integrated manner and especially aligned to the particular specific requirement concerned.

The individual motion and transport segments of different conveying systems were analyzed, and the relative movements of the elements and the friction forces arising at the points of contact examined. These frictional forces have a decisive impact on the performance of the conveying system.

### Energy Efficiency

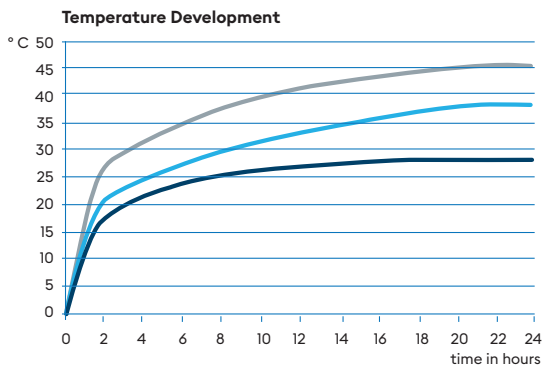
When utilizing components with optimized sliding properties in conveying processes, the conveying power required – and thus the energy applied – may be reduced to a minimum. The performance and efficiency of the plant can thus be considerably enhanced.

### Comparison of Sliding Properties



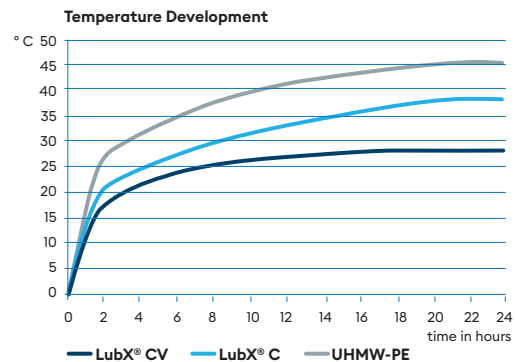
Coefficients of sliding friction under dry conditions | Validated on the application-related Roechling tribology test stand | Speed: 0.25 m/s / Surface pressure: 0.25 MPa / Test time: 24 h

### Low Temperature Development



Coefficient of sliding friction under dry conditions, validated on Roechling application-level tribology test apparatus, speed: 0.5 m/s, surface pressure 0.5 MPa, test time 24 hours

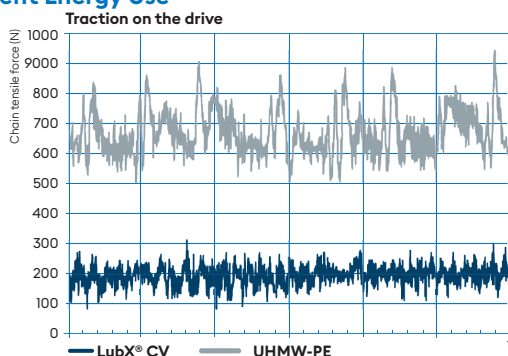
### Low Temperature Development



Temperature development under dry conditions, validated on Roechling application-level tribology test apparatus, speed: 0.5 m/s, surface pressure 0.5 MPa, test time 24 hours

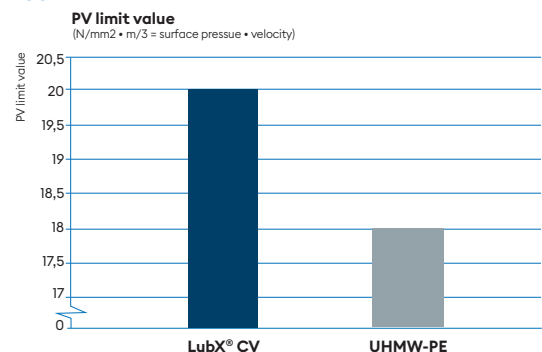
## LubX® CV – For Higher Speed and Better Productivity

### Efficient Energy Use



Traction on the drive during a complete chain run: Speed 0.68 m/s, Chemnitz University of Technology, Institute for Material Handling and Plastics

### Less Wear



Pin-On-disc test conducted by the University of Erlangen/Institute of Polymer Engineering, steel disc: 100 Cr6, Rz 1.0 microns, surface pressure: p = 4.0 N/mm<sup>2</sup>, ambient temperature: Ta = 23° C, ambient medium: technically dry