



MA Material Trading - hirner technical products

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- Lubrication Block
- Adhesive Block
- Molytrop
- Tribological Lacquer
- Cable Lubrication

As much as you need, but less as possible!

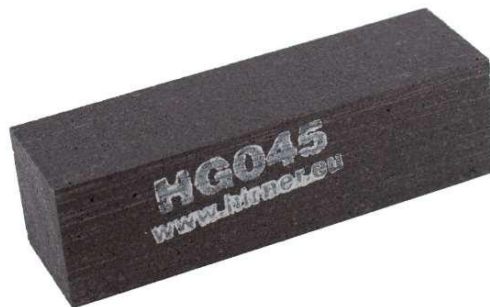
- **Wear Protection with Lubrication Block**
- A simple, but effective wear protection with the use of blocks for surface conditioning.
- To protect the gliding surface against wear, you have to place the blocks in a way to use the force of an spring with pressure onto the block. (comparable with Elektric carbon brush)
- Continuous protection layer
- Applied parts will get incorporated into the metal- and plastic surface

Technical details

- Friction Coefficient 0,015
- Protective Layer thickness 0,001 – 0,005mm
- Wear Protection Block TYPE 10036 with high percentage of molybdenum disulphide (MoS₂)
- Wear Protection Block TYPE HGxxx with high percentage of graphie
- Wear Protection Block with boron nitride as lubrication agent

Tailor made DRY LUBRICATION SOLUTION!

Shape



Characteristics

- **dry and dust- repellent**
- **for high tangential speeds**
- **high temperature resistant**
- **low maintenance**
- **eco-friendly and not subject to labelling**
- **water resistant**
- **very low friction coefficients**
- **preventing wear and corrosion**

Application:



- Roll
- Ring
- Verschiebeanlagen
 - Elevator
- High bay warehouse
 - Crane
 - Drums
 - Guides
- Asphalt Mixers
- Concrete Mixers



- **Wear Protection with Adhesive Blocks**
- A simple, but effective wear protection with the use of blocks for surface conditioning.
- To protect the gliding surface against wear, you have to place the blocks in a way to use the force of a spring with pressure onto the block. (comparable with Electric carbon brush)
- Continuous protection layer of 0,001-0,005 mm
- Applied parts will get incorporated into the metal- and plastic surface

Technical Details

- Friction Coefficient 0,3 – 0,7
- Protective Layer thickness 0,001 – 0,005mm
- Wear Protection Block TYPE 10035
- Due to an own innovation and production, we are able to produce tailor made Adhesive Blocks with different friction coefficient

Tailor made SOLUTION!

Shape



Characteristics

- **dry and dust- repellent**
- **for high tangential speeds**
- **high temperature resistant**
- **low maintenance**
- **eco-friendly and not subject to labelling**
- **water resistant**

Application

- The adhesive blocks are used where slippage leads to abrasive wear. Through an increase in friction coefficients. By increasing the friction coefficient, wear- and slip-free operations are possible.
- Drive Rollers
- Drive Wheels
- Friction Wheel applications

Application

- Adhesive blocks are used where slippage leads to abrasive wear. Through an increase in friction coefficients. By increasing the friction coefficient, wear- and slip-free operations are possible.



Fixation of Lubrication- and Adhesive Blocks

- Clamping Bracket in different variations
- with or without consumption display
- different shapes of Clamping Brackets
- Fast refill Bracket with insertion

Fixation of Lubrication- and Adhesive Blocks



Dry lubricant fluid – MOLYTROP!!!

- MOLYTROP® is made of MoS_2 with organic and inorganic components, which control the stability and flow characteristics
- substrate transports the MoS_2 components to the dedicated lubrication point



Applications with adhesive blocks



Drive wheel railway engine



Asphalt dryer friction drive



Friction drive asphalt drum





Charging wagon



Crane rail



On storage rail



on friction drive



Crane Rail



Friction drive asphalt dryer

- Due to movement between 2 surfaces (lubrication point)
Molybdenum –Disulphide / MoS_2 will get incorporated in the surface
 - drying completely
 - highly stressable
 - wear resistant
 - dry gliding surface out of MoS_2

- **Advantages of Molytrop**

- Mineral oil FREE
- Possibility to fill into EURO- cartridges (DIN1284)
- Automatic application: Sucked out of bigger containers by lubrication pumps directly to the lubrication point
- Automatic cartridges provide a continuous flow of lubricant over time which can be adjusted.

→ **EXCHANGEABILITY**

Every kind of application of lubricants which can be used for oil and grease, can also be used for MOLYTROP®.

MATERIAL TRADING Tribological Lacquer **hirner** technical products

- A monoconstituent lacquer for tribological surface coatings
- It consists of a fast-drying lacquer with a careful emulsified high-purity-electrographite.



MA Material Trading

Characteristic:

- Surface: darkgrey
- Density: approx. 1,05 g/cm³
- Drying: Depending on the layer thickness, dry to touch after 3 h, completely dry after 24 h at 20 °C, 60% relative humidity
- Theoretical spreading rate: 1L depending on the application type and layer thickness is enough for 8-10 m² per coating
- Storage: store frost- proof
- Storage duration: in closed containers, max. 6 month
- Pretreatment: All surfaces have to be free of rust, contamination and grease

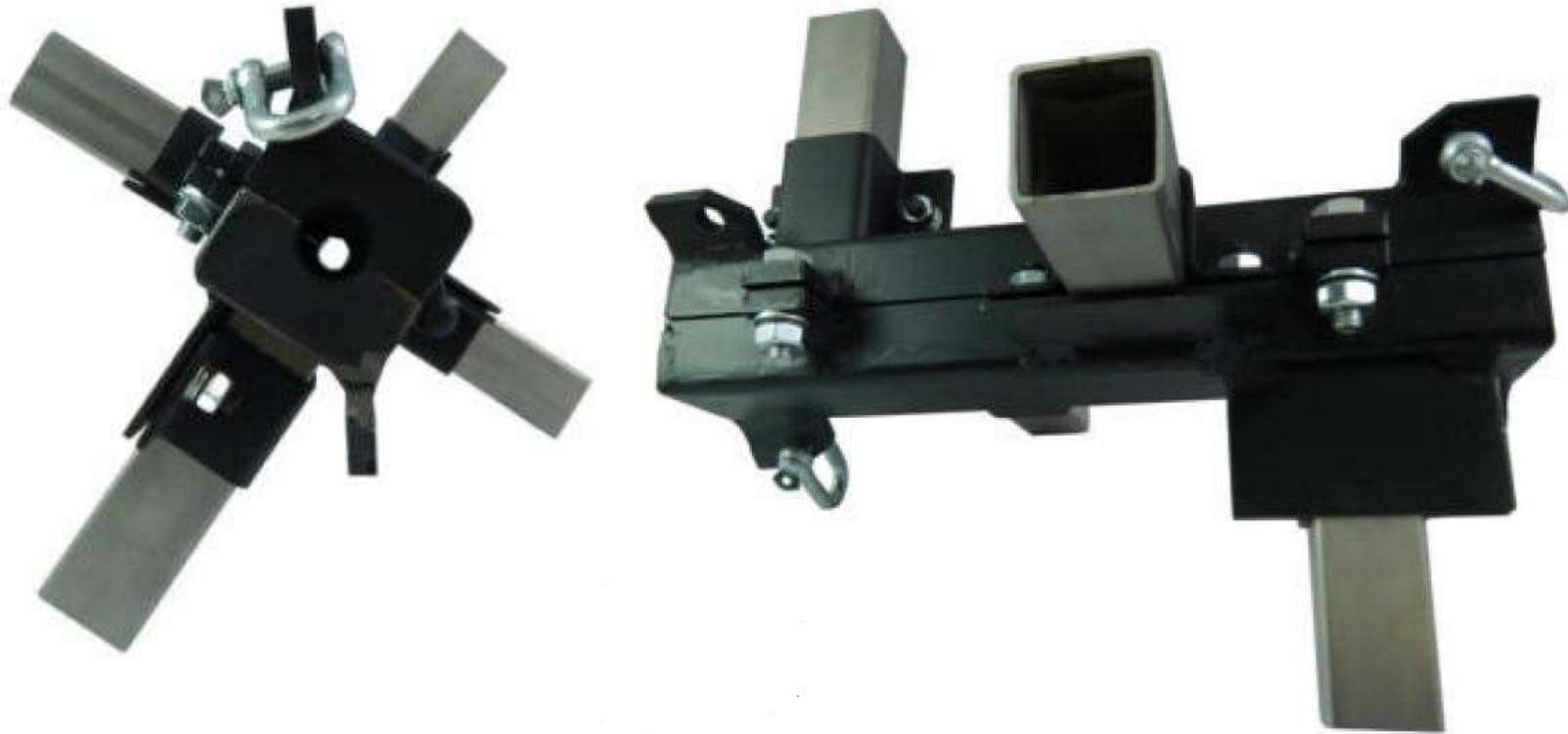
Coating

- You can coat the surfaces by brushing, spraying or dipping

Application

- For all surfaces where a permanent coating is needed. For low load-alternation rates.

As much as you need, but less as possible!



Mounting – Application

- The cable lubrication unit is put around the cable and mostly fastened by chains to any fixed object in the surrounding area
- Re-lubrication of cables is done by dry-lubricant blocks which are pressed against the cables by springs
- The cable moves relatively to the cable lubrication system
- The cable lubrication system embraces the cable and therefor lubricates it from all sides at once

Application

- Reducing friction forces within cables between strands which occur when bending it is important.
- No contamination of the cable through dust and particles by dust binding oil and grease
- Highly increased bearable bending cycles in the lifetime of a cable and highly reduced friction within a cable can be observed



Thank you for your attention!