

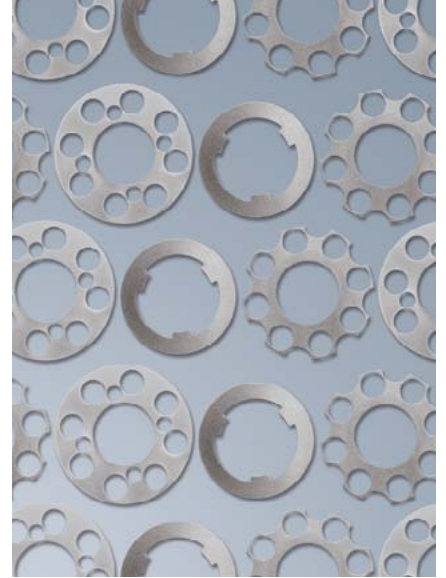


EKagrip® FRICTION SHIMS

Shims with friction-enhancing coating based on electroless nickel with embedded hard particles.



Surface structure of EKagrip® friction shim



EKagrip® friction shim geometries according to customer specification

Product data

- Greatly increased coefficient of static friction
- Function of EKagrip® friction shims is not affected by an oil film
- Can be easily retrofitted
- Prevents fretting
- Highly reproducible
- Good corrosion resistance
- Color option for distinctive appearance
- Shim geometries according to customer specification

Application

- Frictional joints
- Flange joints
- Joints with central bolt
- Bolt connections
- Fastener systems
- Shaft-to-collar connections

Storage

Dry storage recommended.

Additional information

Relevant patents:

EP 0961038 B1

US 6347905 B1

JP 3547645 B2

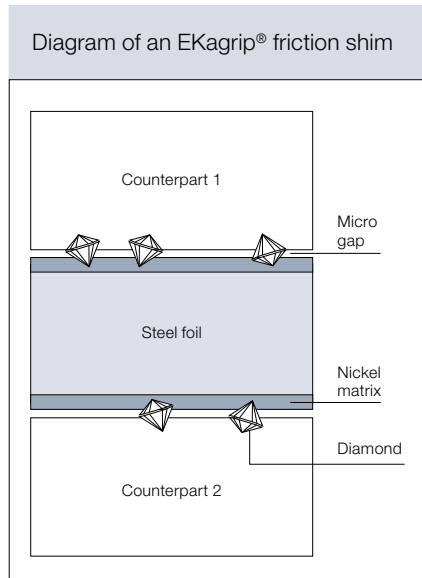


Fig. 1: Tribosystem with EKagrip® friction enhancing shim

Variables influencing the coefficient of static friction	
Counterpart	<ul style="list-style-type: none"> • Surface roughness • Surface topography • Material properties
Coating	<ul style="list-style-type: none"> • Diamond grain size • Diamond concentration • Foil/direct coating
Load	<ul style="list-style-type: none"> • Type of load • Static/dynamic
Environment	<ul style="list-style-type: none"> • Dry/lubricated • Additional adhesive
Assembly	<ul style="list-style-type: none"> • Surface pressure • Reassembly after slippage

Processing

When EKagrip® friction shims are used please note:

- Contamination may impair the correct function of the shim.
- Folding the shim will damage it.
- For maximum performance the mating surfaces must have roughness values Rz as given in the technical data sheet.
- Contact pressure of at least 50 MPa is recommended.
- When designing the joint ensure that the counterparts to be joined are in full contact.

- The coefficient of static friction depends on a large number of different parameters. It is therefore always advisable to carry out application tests with assistance from ESK.