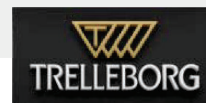
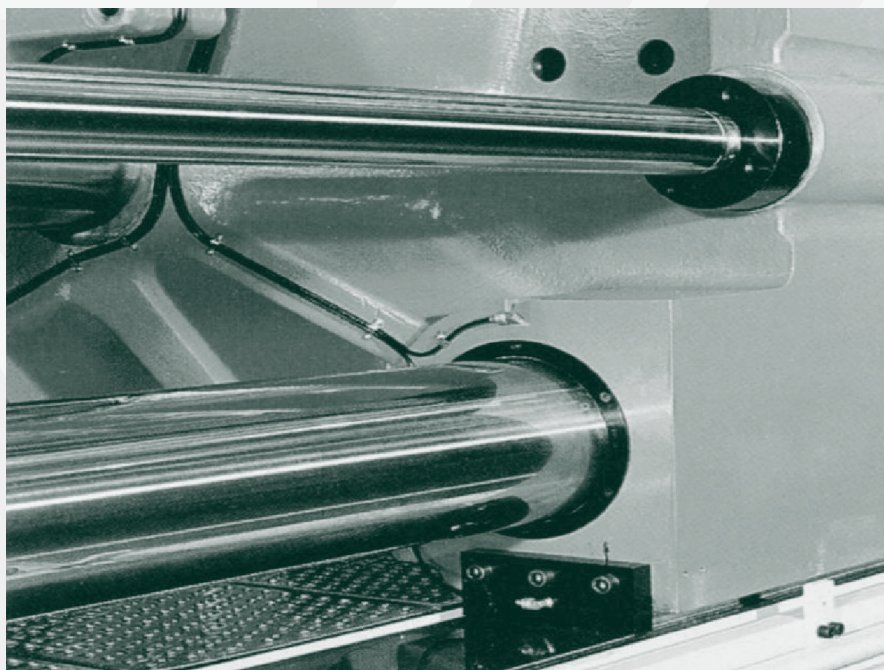


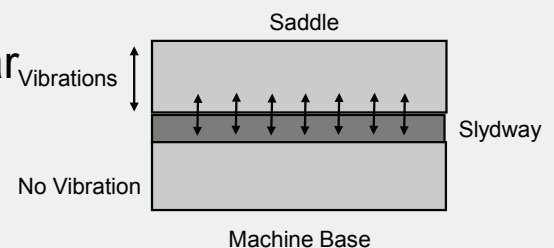
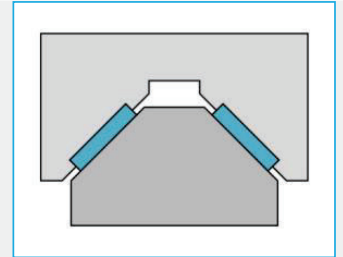
# Turcite® Slydway®



# Turcite® Slydway®

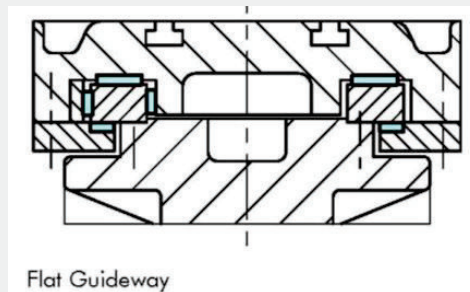
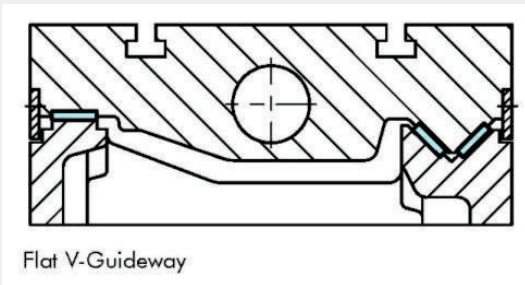
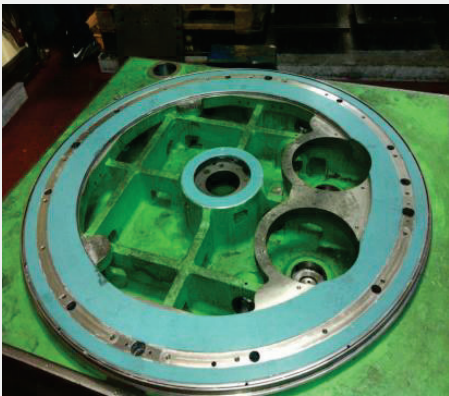
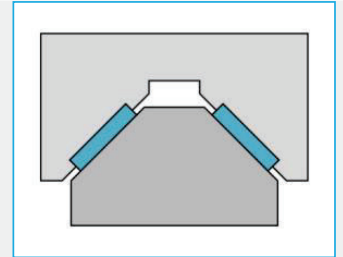
High performance material for use on linear bearing applications, such as machine tool guideways

- Alternative to roller bearing guides
- Low friction, zero to minimal stick-slip at different velocities
- Chemically etched on one side to accept adhesive for bonding to surface
- Good vibration damping behavior to minimize chatter
- Resistant to coolants and lubricants. Low wear in poor lubrication



# Turcite® Slydway®

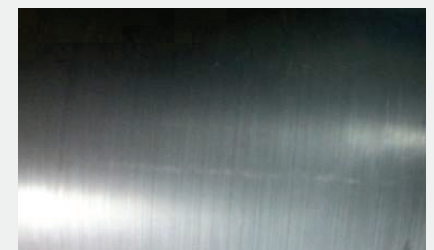
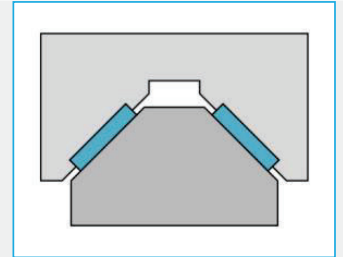
Common Application Examples – Machine Tools



# Turcite® Slydway®

## Slydway® Materials

- Turcite® V
  - Value for price sensitive applications
  - Machine rebuilds
  - Bronze filled
- Turcite® B
  - Industry standard for over 40 years
  - Bronze filled
- Turcite® LF
  - Reduced sliding friction over Turcite® B
  - Premium performance material for new machines
  - Proprietary blend



# Turcite® Slydway® LF

## Key Development

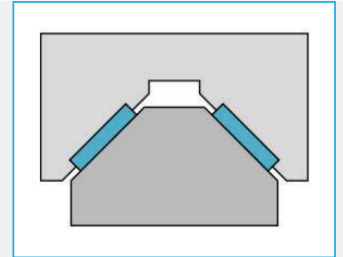
- Achieved up to 50% reduction in friction
- Elimination of stick slip
- Reduced energy consumption
- Improved machine efficiency
- Maintains comparable performance in other features



# Turcite® Slydway®

**Slydway® Information – Available at TSS FW  
Prod. Eng . Sharepoint Site**

- Ordering – Material Codes
  - Turcite® B = TB
  - Turcite® LF = TLF
  - Turcite® V = TV
  
- Adhesive – Waylock® II
  - Two part epoxy
  - Only approved adhesive for Slydway®
  
- Key Recommendations
  - Load Pressure = 2.0-20 kgf/cm<sup>2</sup> (20-200 N/cm<sup>2</sup>)
  - Thickness = New <1.2 mm, Rebuild 1.5 mm to 3.0 mm
  - Oil grooves



# Turcite® Slydway® : Typical Properties

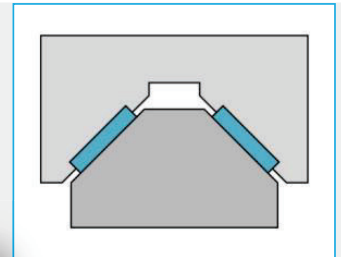
Mechanical Properties	Test Method	Metric Units	Turcite B	Turcite LF
Specific Gravity	ASTM D792	-	2.0 - 2.4	2.0 - 2.4
Tensile Strength	ASTM D4745	MPa	13.8	15
Tensile Elongation at Break	ASTM D4745	%	100	200
Hardness	ASTM D2240	Type D	50 - 60	55 - 65
Peel Strength (bonded to metal substrate using Waylock® II)	TSS Internal	N/mm	178	180
<b>Compressive Strength</b>				
0.2% Offset	ASTM D695	Mpa	7.6	8.2
1% Strain		Mpa	6.1	5.8
5% Strain		Mpa	13.2	13.9
Youngs Modulus		Mpa	722	653
<b>Deformation Under Load</b>				
2 kg/cm <sup>2</sup> @ 0.203 mm/min	TSS Internal	mm	0.016	0.015
4 kg/cm <sup>2</sup> @ 0.203 mm/min		mm	0.030	0.029
6 kg/cm <sup>2</sup> @ 0.203 mm/min		mm	0.043	0.042
<b>Thermal Properties</b>				
<b>Coefficient of Linear Thermal Expansion</b>				
25°C to 100°C	ASTM E831	µm/m°C	103.5	138.4
100°C to 150°C		µm/m°C	135.7	173.3
Thermal Conductivity @ 23°C	TCi Thermal Analyzer	W/m-K	0.36	0.28
<b>Tribological Properties</b>				
Wear Factor, K: Lubricated, Tonna V68 Way Oil	TSS Internal	E-08 mm <sup>3</sup> /Nm	2.5	7.7
Friction Coefficient: Lubricated, Tonna V68 Way Oil	TSS Internal		0.034	0.020



# Turcite® Slydway®

Think Outside the Box...

Pivot point on irrigation systems



Hydrokinetic Turbines

...not just for machine guideways

