

Turcite® B Slydway® Technical Data

Turcite B Physical Properties

Property	Units	Test Method	Value
Tensile Strength	PSI	ASTM D4894	2000 min
Tensile Elongation	%	ASTM D4894	170 min
Specific Gravity	-	ASTM D792	3.10
Hardness	Shore D	ASTM D2240	50-60



Turcite® B Slydway® Technical Data

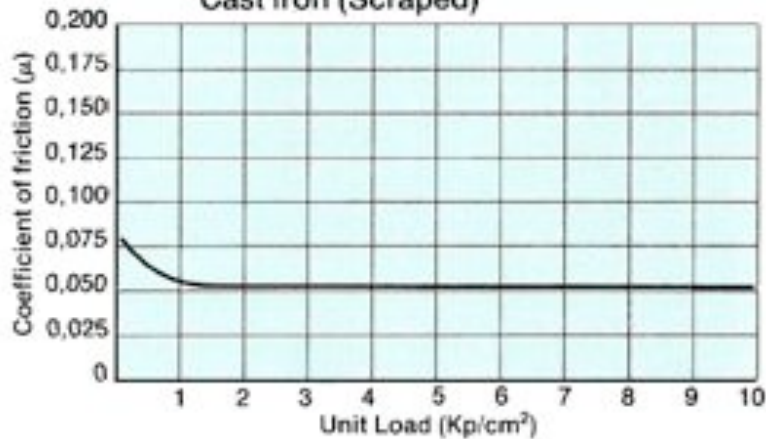
Coefficient of Friction

- ▼ Testing data from testing completed at Corporate R&D



Friction as function of unit load

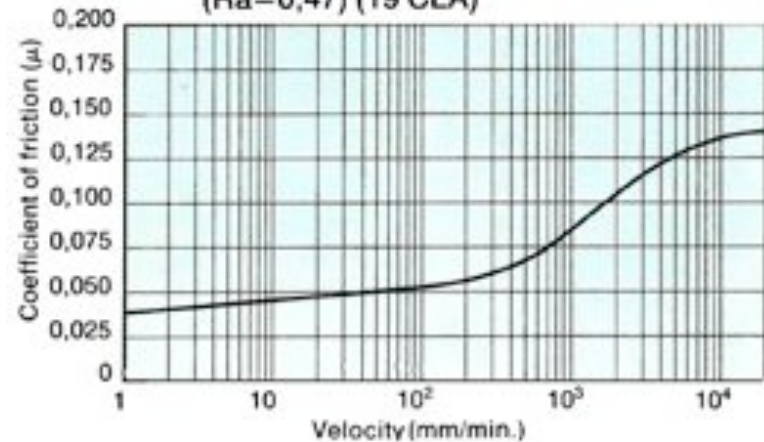
Lubricated friction - Velocity 2 m/min (6,6 ft/min.)
 Materials: Turcite B (Scraped)
 Cast iron (Scraped)



Friction as function of velocity

Dry friction - Loading 3,5 Kp/cm² (50 psi)

Materials: Turcite B (Fresh)
 Cast iron G.S. 55, 264H_B,
 (Ra=0,47) (19 CLA)



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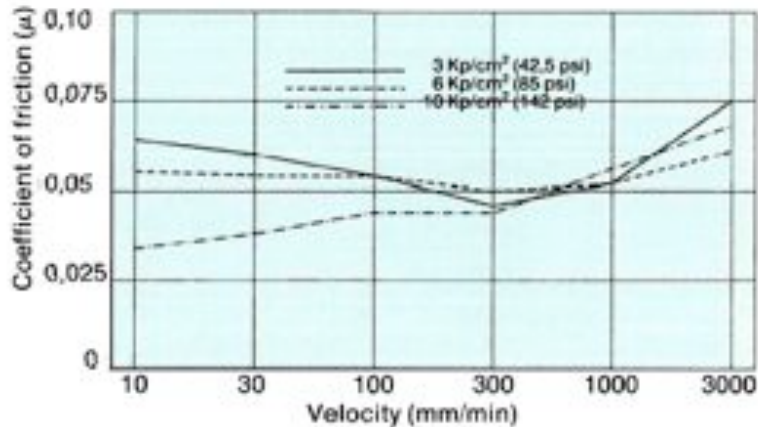
Coefficient of Friction

- ▼ Testing data from testing completed at Corporate R&D

Friction as function of velocity after 0 Km travel

Lubricated with oil 5°E

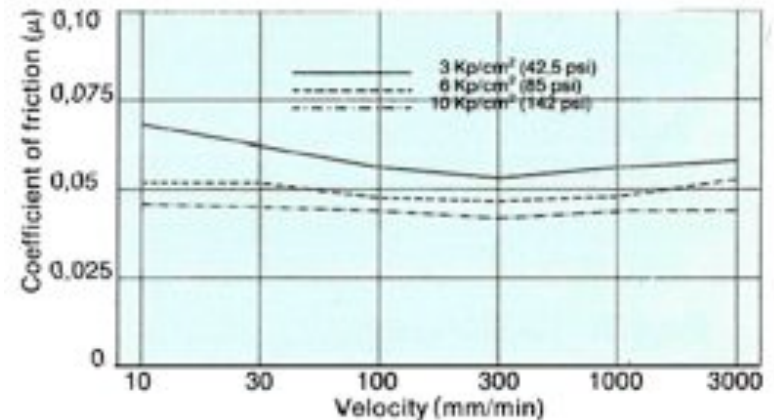
Materials: Turcite B (Scraped)
Cast iron G26 (Ra=0,8) (32 CLA)



Friction as function of velocity after 40 Km travel

Lubricated with oil 5°E

Materials: Turcite B (Scraped)
Cast iron G26 (Ra=0,8) (32 CLA)

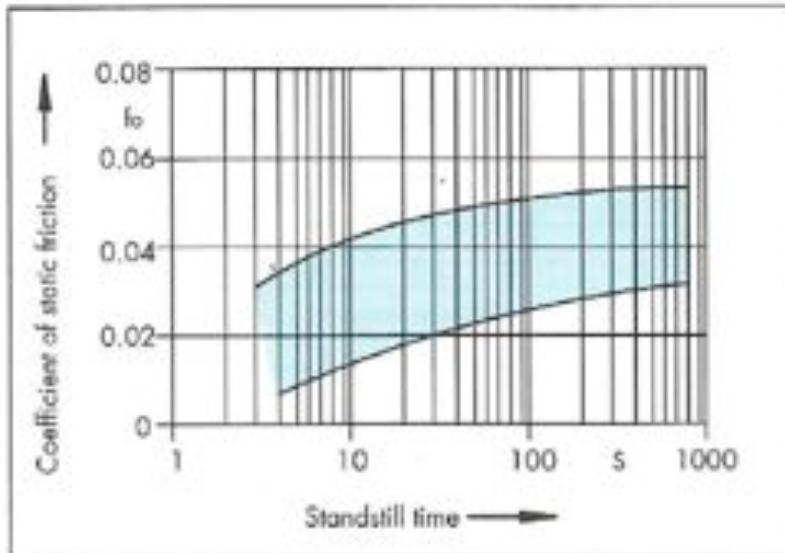


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Coefficient of Friction

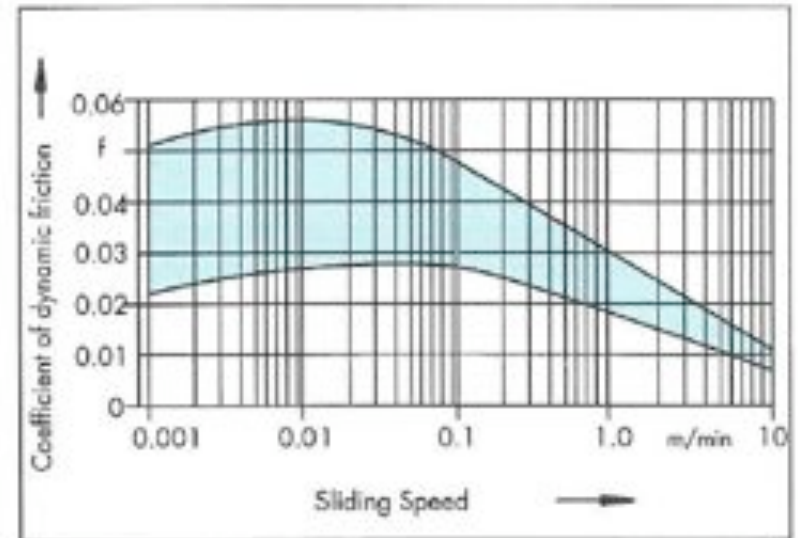
- ▼ In the application, Slydway displays only a slight difference between static and dynamic friction, thus eliminating any presence of stick slip

Figure shows the range of static friction when using different oils. The values were determined on a scraped Turcite®-B sliding surface with a surface contact pressure of 35 N/cm² and a surface roughness of the guide of $R_a = 0.6 \mu\text{m}$.



Range of the coefficient of static friction (f_0) as a function of the standstill time when using different lubricants

Figure shows the least differences at the transition to the hydrodynamic range. With higher surface pressures of up to 200 N/m², the sliding behaviour changes only insignificantly. Good lubrication is of paramount importance in order to achieve a controlled level of dynamic friction.



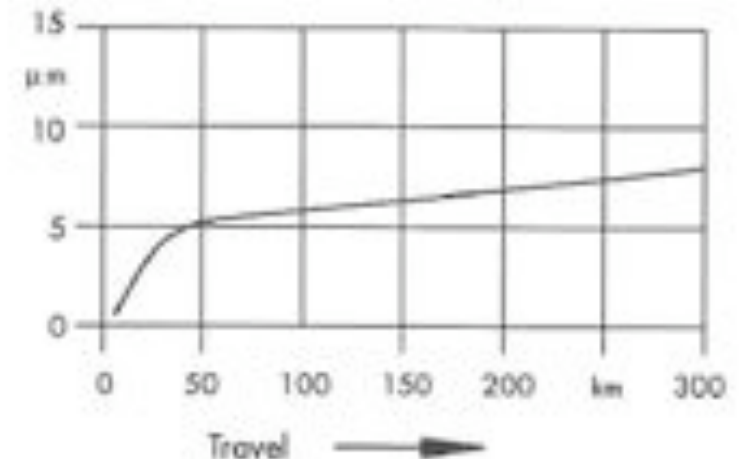
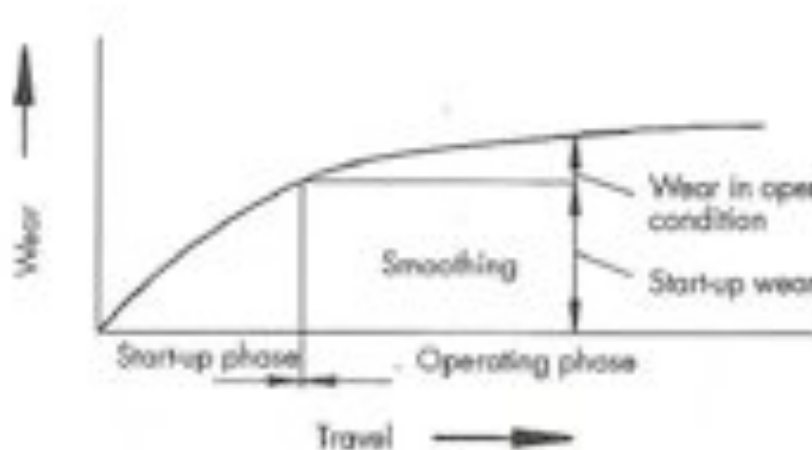
Range of the coefficient of dynamic friction (f) as a function of the sliding speed when using different lubricants



Turcite® B Slydway® Technical Data

Wear

- ▼ Testing data from testing completed at Corporate R&D
- ▼ Turcite B Slydway should always be well lubricated during the start-up phase. Very fine particles of the Turcite B Slydway are transferred to the mating surface during the start-up phase.
 - ▼ This leads to the slight shading of the metallic mating surface.
 - ▼ The start-up phase is concluded with the smoothing phase.
- ▼ After the smoothing phase, Turcite B Slydway will experience a low level of both the wear and friction, thus essentially remaining constant.

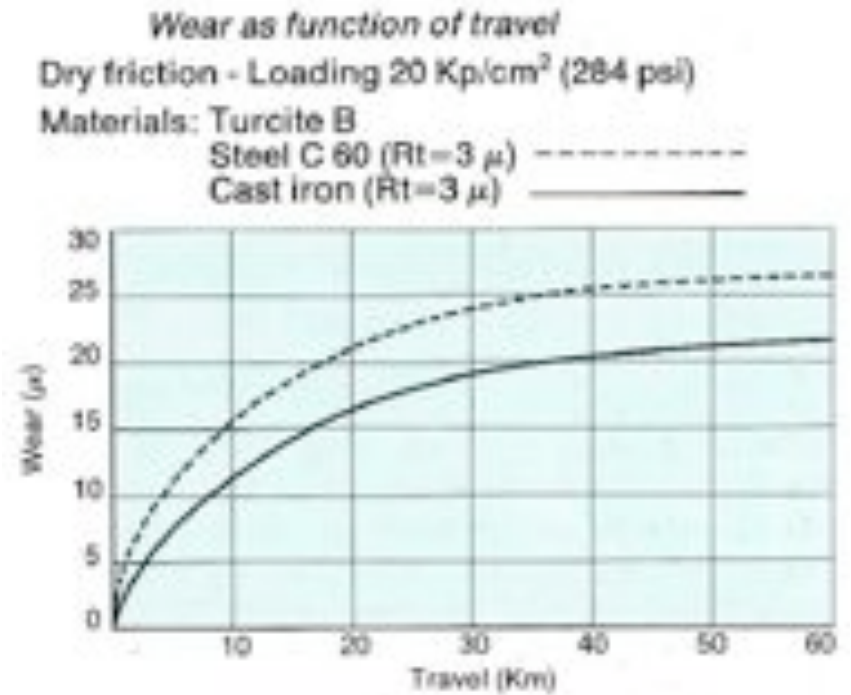
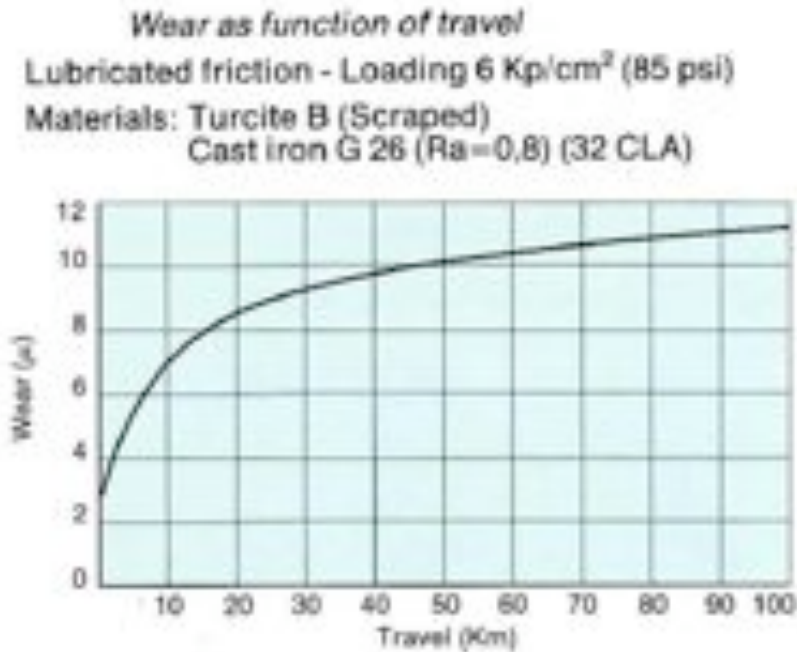


Mean load of 50 N/cm² with adequate lubrication

Turcite® B Slydway® Technical Data

Wear

- Testing data from testing completed at Corporate R&D



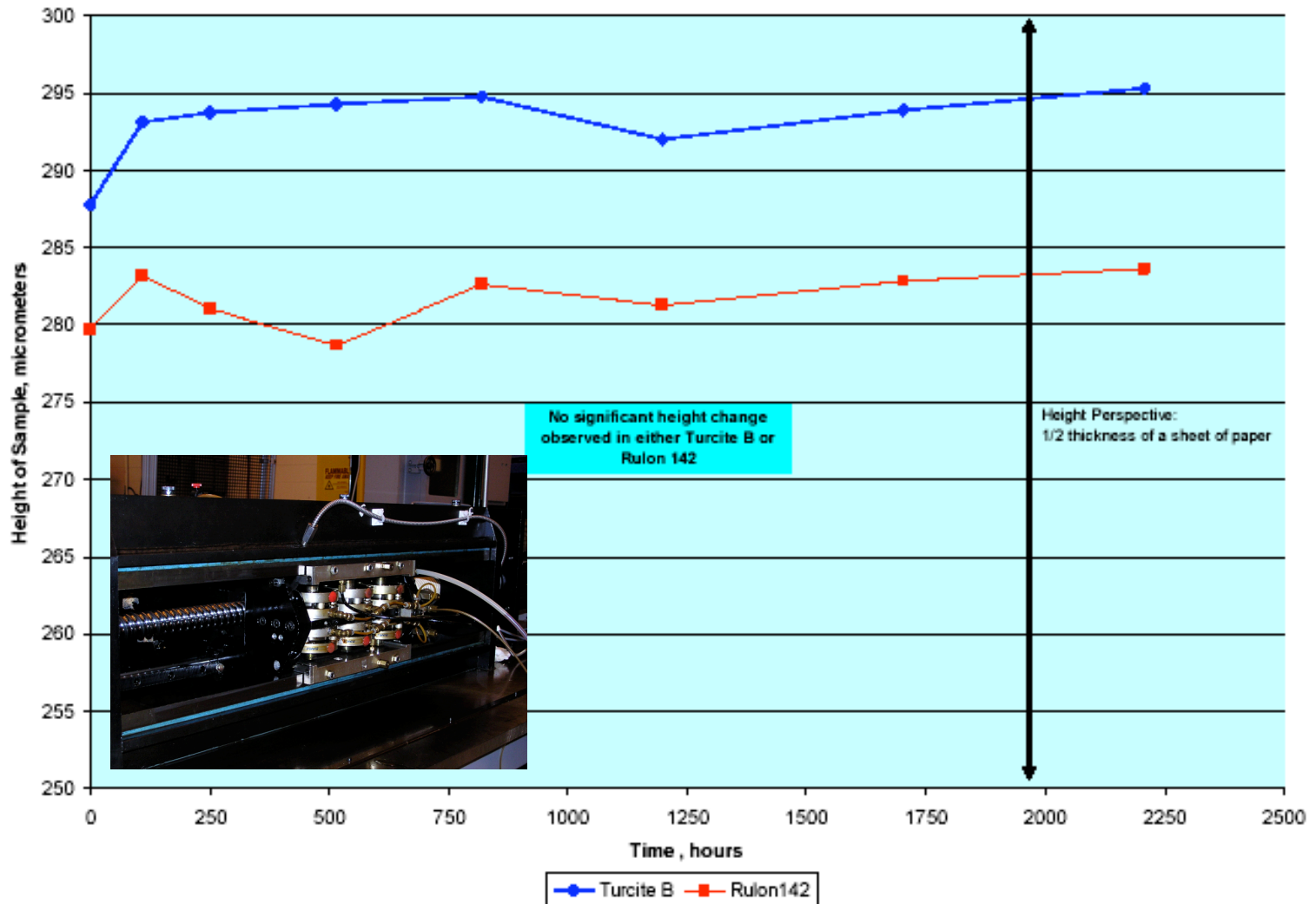
Turcite[®] B Slydway[®] Technical Data

Wear – Comparison between Turcite B Slydway & Rulon 142

Height of Rulon 142 and Turcite B Samples During Lubricated Test

50psi, WayLube Oil

Reciprocating Test but Specimens change Speed and Direction (Velocity) Multiple Times per Cycle



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Peel Strength Comparison between Turcite B Slydway & Rulon 142

Peel Tests on Turcite B Bonded with Waylock II, and Rulon 142 bonded with CE211
Material Strip Pulled at 2"/minute

