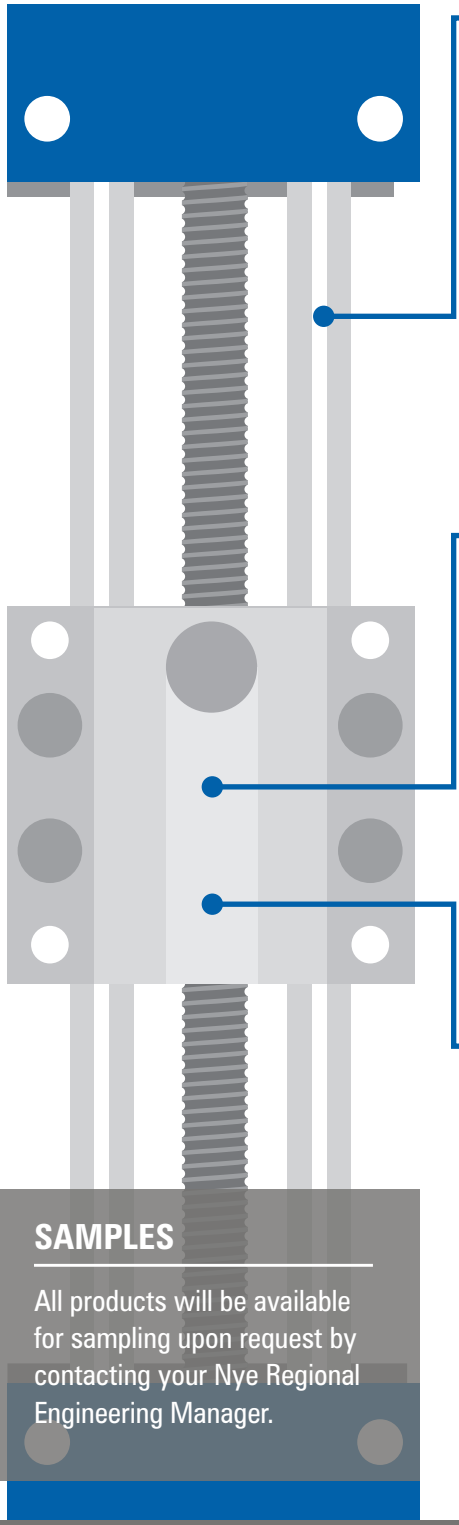
Semiconductor Linear Guides

NyeTorr® products are recommended to help reduce friction and wear in a linear guide system to maintain high running accuracy and repeatability. These products exhibit excellent vacuum stability.



GUIDE RAIL

The guide rail must be able to move side-to-side with a smooth, controlled motion. A NyeTorr® product will reduce friction and wear, while also inhibiting corrosion to ensure long operating life. These products are recommended for use in vacuum environments, as they exhibit low outgassing.

Product Name	Type	Temp. Range (°C)	SRV Coefficient of Friction & Wear (ASTM D-5707)		NLGI Grade	Ultrafiltration Cleanliness Levels* (FTM 791, 3005.3)
			CoF	Ball Scar		
NyeTorr® 5200	MAC	-45 to 150	0.114	0.44 mm	1	< 300 particles/cc <35 μm
NyeTorr® 6300	PFPE	-65 to 250	0.110	0.68 mm	2	< 300 particles/cc <35 μm

BALL SCREW

A ball screw will facilitate precise, shifting movements in the linear guide system. The addition of a NyeTorr® product will reduce friction and allow metal components to slide against each other, while also preventing "stick/slip" noise.

Product Name	Type	Temp. Range (°C)	SRV Coefficient of Friction & Wear (ASTM D-5707)		NLGI Grade	Ultrafiltration Cleanliness Levels* (FTM 791, 3005.3)
			CoF	Ball Scar		
NyeTorr® 5200	MAC	-45 to 150	0.114	0.44 mm	1	< 300 particles/cc <35 μm
NyeTorr® 6300	PFPE	-65 to 250	0.110	0.68 mm	2	< 300 particles/cc <35 μm

LEAD SCREW

A lead screw requires greater torque in the linear guide application, leading to higher friction levels and higher operating temperatures. The addition of PFPE based NyeTorr® product will extend the operating life of the lead screw.

Product Name	Type	Temp. Range (°C)	SRV Coefficient of Friction & Wear (ASTM D-5707)		NLGI Grade	Ultrafiltration Cleanliness Levels* (FTM 791, 3005.3)
			CoF	Ball Scar		
NyeTorr® 5300XP	PFPE	-65 to 200	0.113	0.58 mm	2	< 300 particles/cc <35 μm
NyeTorr® 5350	PFPE	-55 to 250	0.139	0.65 mm	2	< 250 particles/cc <35 μm

SAMPLES

All products will be available for sampling upon request by contacting your Nye Regional Engineering Manager.