

MODERN LINEAR

TECHNOLOGY

All Modern Linear products incorporate the benefits of guide roller technology for customer applications:

QUIET

Linear guide rollers are very quiet as a result of the ball separation. Noise is magnified in recirculating guide systems when each ball collides with the one next to it in the ball path.



SMOOTH

Linear guide rollers are based on the design of radial ball bearings. The load carrying balls travel in a circular path and are retained and separated from one another. Current ball bushing and ball rail linear systems have a recirculation path that requires the balls to make a quick change in direction. Vibration occurs when the balls collide entering and leaving the load zone.



RUGGED

The radial bearings of Modern Linear guide rollers are offered with shields or rubber seals. The seal is superior to the wipers common in recirculating ball guides. Debris caught between the wheels and track is wiped away naturally. Ball bushings and ball rails use the shaft or rail as the inner race of the bearing making them susceptible to contamination failure.

440C stainless steel rollers and track are also available for corrosive environments.



FAST

Recirculation guides are limited by the sharp turn the balls must make as they enter and leave the load zone. Guide rollers are only limited by the rotary speed of the radial bearing. Maximum guide roller speeds are up to 2X faster than ball bushings or ball rails.



ECONOMICAL

Modern Linear guide rollers are simple to design, install and maintain. In operation, the guide system is compliant and forgiving to mis-alignment and machining inaccuracies. These features result in lower initial, installed and total cost.