



Applications | Case Studies

SPECIAL BEARING FOR SPECIAL NEEDS CYCLE

For children with special needs who can't pedal a conventional bicycle, the Step 'n Go from Treadle Power, Inc of Burlington, VT is the answer. Unlike a traditional bicycle, the three wheeled Step 'n Go eliminates the difficult pedaling motion and replaces it with a more natural up and down stepping motion. A further development was requested by a physical therapist on behalf of a patient with spina bifida, namely that the steering column be able to tilt backward and forward.

The bicycle's designers soon found the existing flanged nylon bearing was unsuitable for the added load created by the tilting steering column, it would fracture. They decided that in addition to looking for a Self-Aligning bearing they would also incorporate a bronze bearing impregnated with oil as this would also overcome a corrosion issue they had been experiencing.

The Spyraflo 0.750" diameter, Self-Clinching, Self-Aligning SAE 840 Bronze Bearing was selected and during the trials operated flawlessly. The ability to have the bearing permanently mounted without the risk vibrating loose became another key benefit. The Spyraflo FSB-750 bearing is now a standard feature on all Step 'n go bicycles giving the tilting steering column as a standard feature.

