

## Product Overview

Ball screws are used when a rigid and precise linear driving with high efficiency and intensity is required. Depending on required force, speed and durability, different diameters and leads can be selected. As a ball screw is based on the same load carrying principles as a ball bearing, the life time is possible to calculate in similar ways. Within its life time, there are practically no wear or loss of precision.

The Rollco product range in this catalogue is based on rolled ball screws. Rolled ball screws offer the best price-performance for automation, handling and light machine tool needs.

### Rigidity

A ball screw is magnitudes more rigid than for example timing belts and chain drives. For optimal rigidity, a preloaded ball nut and end bearing unit should be used.

### Precision

Due to its rigidity in combination with the high lead accuracy, the precision of a ball screw drive is in the 1/10 to a 1/1000 of a millimetre depending on selected play or preload.

### Efficiency

Due to rolling friction between screw shaft and ball nut, the practical efficiency of a ball screw is between 80 – 90%. This saves energy and motor size. It also allows high intensity as the power losses (waste heat) is 5 to 10 times lower compared to trapezoidal screws.

### Durability

A correct selected and maintained ball screw have a very long and predictable service life. Compared to many other linear drive mechanisms, there is practically no gradual loss of performance or precision during the service life.

