

Q&A

Question: Is there any Standard of Ball Screws in JIS or ISO?
What kinds of items are prescribed?

Ball Screws are prescribed in JIS B 1192-1997 as Machine Element. You can also refer to “Machine Elements” in JIS Handbook.

This Standard, JIS B 1192-1997, was revised in 1997 in the purpose of correspondence to ISO. After that, there has not been made any revision over 10 years.

In the ISO, ISO-3408-1,2,3,4,5 are established as Standard of Ball Screws.

In the Japanese Industrial Standard (JIS B 1192-1997), the following items are prescribed about Ball Screws.

- Lead Accuracy (This is related to feed accuracy)
 - 1) Actual mean travel deviation
 - 2) Variation

- Run-out and location tolerances (This is related to mounting accuracy)
 - 1) Total Run-out in radial direction of Screw Shaft
 - 2) Radial Run-out of Bearing seat and Axial Run-out (Perpendicularity) of Bearing face
 - 3) Radial Run-out of Ball Nut location diameter and Axial Run-out (Perpendicularity) of Ball Nut location face

- Dynamic preload drag torque deviation
In detail, please refer to Master Catalogue of KSS Products or “Machine Elements” of JIS Handbook.

Several kinds of items are prescribed for Ball Screw!!