

14. Precautions on Using the Ball Screw

Handling

- (1) Disassembling components may cause dust to enter the system or degrade mounting accuracy of parts. Do not disassemble the product.
- (2) Tilting the screw shaft and the ball screw nut may cause them to fall by their self-weights.
- (3) Dropping or hitting the Ball Screw may damage the ball circulation section, which may cause functional loss. Giving an impact to the product could also cause damage to its function even if the product looks intact.

Lubrication

- (1) Thoroughly remove anti-corrosion oil and feed lubricant before using the product.
- (2) Do not mix lubricants of different physical properties.
- (3) In locations exposed to constant vibrations or in special environments such as clean rooms, vacuum and low/high temperature, normal lubricants may not be used. Contact **THK** for details.
- (4) When planning to use a special lubricant, contact **THK** before using it.
- (5) Lubrication interval varies according to the service conditions. Contact **THK** for details.

Precautions on Use

- (1) Do not remove the ball screw nut from the ball screw shaft. Doing so may cause the balls or the nut to fall off.
- (2) Entrance of foreign matter to the ball screw nut may cause damage to the ball circulating path or functional loss. Prevent foreign matter, such as dust or cutting chips, from entering the system.
- (3) If foreign matter adheres to the product, replenish the lubricant after cleaning the product.
- (4) When planning to use the product in an environment where the coolant penetrates the spline nut, it may cause trouble to product functions depending on the type of the coolant. Contact **THK** for details.
- (5) Do not use the product at temperature of 80°C or higher. When desiring to use the system at temperature of 80°C or higher, contact **THK** in advance.
- (6) If using the product with vertical mount, the ball screw nut may fall by its self-weight. Attach a mechanism to prevent it from falling.
- (7) Using the product at speed exceeding the permissible rotation speed may cause breakage of a component or accident. Be sure to use the product within the specification range designated by **THK**.
- (8) Forcibly driving in the ball screw shaft or the ball screw nut may cause an indentation on the raceway. Use care when mounting components.
- (9) If an offset or skewing occurs with the ball screw shaft support and the ball screw nut, it may substantially shorten the service life. Pay much attention to components to be mounted and to the mounting accuracy.
- (10) When using the product in locations exposed to constant vibrations or in special environments such as clean rooms, vacuum and low/high temperature, contact **THK** in advance.
- (11) Letting the ball screw nut overrun will cause balls to fall off or the ball-circulating component to be damaged. Be sure not to let it overrun.

Storage

When storing the Ball Screw, enclose it in a package designated by **THK** and store it in a horizontal orientation while avoiding high temperature, low temperature and high humidity.