

Ball Screws with Nut Cooling

Nut Cooling can simplify ball screw cooling to help make machine tools run faster and more precise. Cooling capacity greater or equal to existing hollow-shaft ball screws is achieved. No sliding seals or rotary joints are required. Dimensions for mounting area are identical for HMD nuts; therefore the nut cooling can be implemented without changing machine designs.

Product Features

- Highly effective cooling: Optimized nut cooling mechanism gives cooling capacity \geq than hollow-shaft ball screws
- Innovative internal design: Preload torque does not increase even if the nut is cooled
- Improved handling: Achieved by attaching piping to the outer periphery of the nut flange removes need for sliding seal & rotary joints

Benefits

- Low cost, compact design and simple cooling mechanism
- Equivalent or better compared to hollow shaft cooling
- Controlling heat by high speed is essential for machine tools requiring accuracy in microns
- Effective cooling of the ball screw, heat transfer to the table is blocked.
- Nut cooling can be implemented without changing machine designs for HMD nuts. For others nut designs please contact NSK engineers who can advise you.

Condition Description

- High Accuracy
- High Load
- High Speed
- High Temperature
- Low Noise

Industries

- Machine Tools
- Steel and Metals
- Woodworking

