

Q: What is the FV value related to Resin Lead Screws?

FV value is the product of Axial Load (F) multiplied by Relative velocity of Screw surface (V). It is used as criterion that Resin Lead Screw would be usable or not.

Generally, PV value, which is the product of Contact pressure on Screw surface (P) multiplied by Relative velocity of Screw surface (V), is used, but KSS uses FV value for easy judgment.

Figure below is the FV value diagram, which is also described in KSS Master Catalogue (Vol.10.0).



Evaluation :

 $\ensuremath{\mathbb{O}}$  Stable operational conditions were maintained for the long term.

 $\bigcirc$  Operation were good, but some wears were seen on the Nuts.

 $\bigtriangleup$  Operations became difficult in a relatively short time.

imes Operations became difficult in the short time.

As you can see, in order to create this diagram, we need to conduct many durable test on the combination of Axial Load (F) and Relative velocity of Screw surface (V) for each model. This diagram shows the result of  $\phi$  8 × 5 Resin Lead Screw, but we consider this diagram can be used for other models as a reference.

KSS is going to conduct the same test for other models, and makes effort to offer highly reliable data to customer.