

## 1.7 High-Speed Operation

Even under high-speed operating conditions, the LM Guide does not chip or experience similar problems like those commonly found in ordinary sliding guides.

The LM Guide thus offers superior performance at high speeds. The table below lists sample applications.

Table 4 Examples of High-Speed Applications

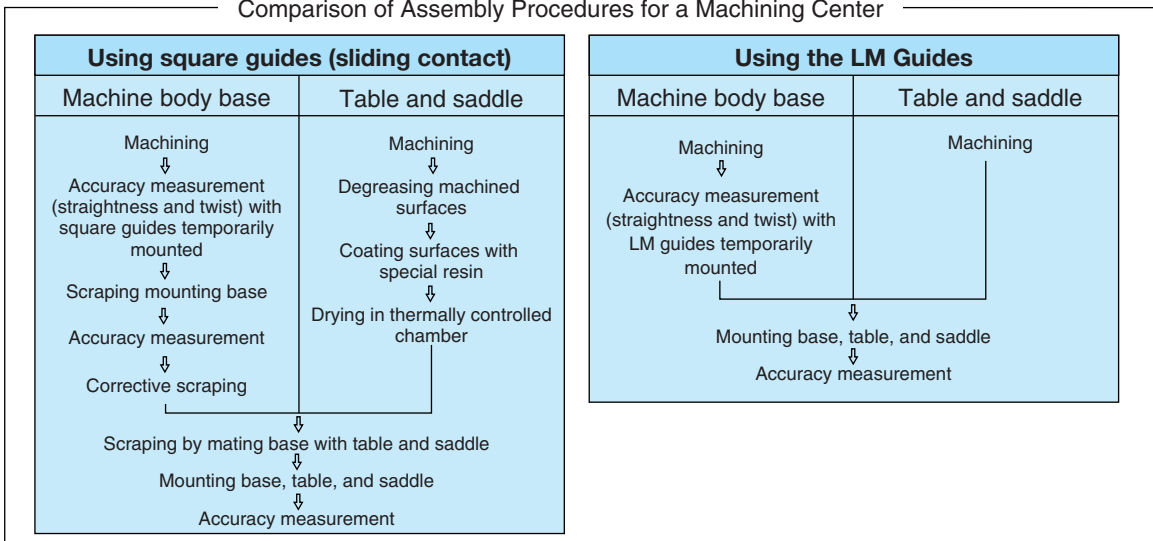
Applicable machines	Location of use	Velocity (m/s)	Applicable model numbers
Durability tester	X-axis	5.0	SSR25W
Pick-up robot	X-axis	2.0	SSR25W
	Z-axis	3.0	SSR15W
Injection molding machine	Automatic unloading unit	2.2	HSR30LR
Glass cutter	Cutter slideway	3.7	HSR25B
Inspection equipment	Work transfer unit	5.0	HRW27CA
Transfer robot	Work transfer unit	4.2	HSR25R
XY table	X- and Y-axes	2.3	RSR15WV

## 1.8 Low Total Cost

Compared with a sliding guide, the LM Guide is easier to assemble and does not require highly skilled technicians to perform the adjustment work. Thus, the assembly man-hours for the LM Guide are reduced, and machines and systems incorporating the LM Guide can be produced at lower cost. Shown below is the case of a machining center wherein changing the guide from the sliding type to the LM Guide gives rise to a different assembly procedure.

Normally, if the guide used is not an LM Guide, the surface on which the guide is installed must be given a very smooth finish by grinding. Yet the LM Guide can offer high precision even if the surface is worked by milling or planing. Using the LM Guide thus cuts down on machining man-hours, and machining costs as a whole are lower.

Comparison of Assembly Procedures for a Machining Center



When extremely high precision is not needed (i.e. running precision), the LM Guide can be attached to

the steel plate even if the black scale on it is not removed.